

CENTRAL ASIA HUMAN DEVELOPMENT REPORT

Bringing down barriers:

Regional cooperation for human development and human security

The report was prepared by a team of experts under the guidance of the UNDP Regional Bureau for Europe and the CIS, in collaboration with the Asian Development Bank and the World Bank, and with financial assistance from the UN Human Security Trust Fund and the UN Foundation.

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Foreword

Central Asia—Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan—is home to almost 60 million people. Located at the center of the vast Eurasian continental space, the countries of this region are today the focus of intense international attention because of their geopolitical and economic importance, their natural and human resources, their transit potential for transcontinental trade and transport, and their unsettled political situation.

Given its landlocked geography, Central Asia is heavily dependent on its immediate neighbours and the international community for access to the rest of the world, for its security, and for support for its economic and social development.

The people of Central Asia and their governments have been remarkably successful in meeting the very difficult problems that they faced following the break up of the Soviet Union. However, much remains to be done to reduce cross-border barriers, to facilitate better use of regional resources, and to ensure that the people of the region benefit from improved links among their countries, with their neighbours and with the rest of the world.

The purpose of this Central Asia Human Development Report is to support the countries in Central Asia, their neighbors and their international partners in working towards greater regional cooperation and integration as a means for achieving sustained human development and human security for the people of Central Asia.

The report draws together evidence on how people in Central Asia are affected by limited regional cooperation and integration, on the benefits from cooperation, and on what is already being done to promote cooperation and the lessons learned. Where possible, the impacts have been quantified, in terms of economic losses and gains, and the number of people involved.

The report argues that increased cooperation among the Central Asian republics will produce large gains by reducing trade costs, increasing remittances from migrant workers, and improving water and energy use. As we have seen from other parts of the world, regional cooperation will especially help the poor in the region, who will on balance gain more from cooperation. By the same token, the cost of non-cooperation will affect them most.

Demonstrating that human and economic costs of non-cooperation in dealing with threats of health epidemics, natural disasters and environmental destruction would be large, the report also maps how closer cooperation could make Central Asia's

economy much larger and better off in 10 years. It makes the case, however, that opening borders or reducing trade costs is not enough. Much will also depend on the business climate and the quality of financial services in each country. International experience confirms that reforms also require measures to combat corruption, improve the civil service, and enhance the transparency and accountability of governments.

Since the break up of the Soviet Union, many books, reports and publications have appeared about the historical and contemporary challenges facing Central Asia. Among them was UNDP's 1999 Human Development Report *Central Asia 2010: Prospects for Human Development*.¹ This new Human Development Report builds on the earlier edition by taking a comprehensive and integrated approach. It weaves together many disparate strands of analysis, policy advice and technical support that have so far been provided in many separate areas (trade and transport, water, energy, environment, health, education, etc.), at many different levels (regional, national, sub-national, community) and by many distinct entities (multilateral institutions; bilateral official donors and partners; regional, national and local authorities; and international and local civil society organizations).

I am extremely pleased that this publication represents a collaborative effort with two key institutions working in Central Asia, the Asian Development Bank and the World Bank, which were directly involved in its preparation.

Developing a consensus and implementing follow-up action for regional cooperation and integration cannot happen overnight. In view of the many obstacles of history, current politics and institutional weaknesses, and bearing in mind the slow progress with similar efforts elsewhere in the world, one must realistically expect that serious progress with regional cooperation and integration will take years, and even decades. However, the hope is that the evidence presented in this report, its recommendations and the follow-up actions it envisages will help foster increased regional cooperation and eventual integration in Central Asia, and so contribute to opening up the region as a more peaceful, prosperous and stable core of an increasingly integrated continental Eurasian economic space.



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Administrator, UNDP

¹ UNDP, *Central Asia 2010: Prospects for Human Development*. Regional Bureau for Europe and the CIS. September 1999. This report compiles the contributions of participants at a conference on Central Asian Human Development organized by UNDP in 1999. This conference did not deal explicitly with the issues of regional cooperation and integration.

Preface

Few parts of the world are as interdependent as the five Central Asian landlocked countries. The five former Soviet republics—Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan—are more distant from the nearest seaports than any other countries in the world. Especially for the smaller states, land transit routes represent irreplaceable economic lifelines. The Central Asian republics are also bound together by their water and energy endowments, with upstream countries holding some of the world's largest freshwater reserves, and downstream countries containing important fossil fuel resources. While the latter depend upon their upstream neighbours for irrigating water-intensive cotton production, the upstream countries depend equally on their downstream neighbours for their energy needs.

The Fergana Valley perhaps best illustrates the need for cooperation. Those who have had the privilege of travelling in this fertile and populated region will notice how often enclaves of one country jut into the territory of another—the result of borders that carve up the region like a jigsaw puzzle. Recent events in Kyrgyzstan and Uzbekistan have shown the downside of this interconnectedness: instability in one country can easily spill over into another. More than perhaps any other region, Central Asia needs close cooperation at both government and grass-roots levels to function peacefully.

Among the most important benefits of cooperation, ones that would touch every country, could be those that come from harmonized trade and customs regulations, open borders, and enhanced cooperation on energy production and natural resource use. Central Asia could become an attractive location for foreign direct investment if neighbours treat one another as trading partners, improve transport links, lift formal and informal tariff barriers, and bring their institutional and political capabilities to bear in creating win-win situations for the benefit of their citizens.

It is also clear that a country's ability to cooperate fully with its neighbours depends on the nature of its internal institutions, regulatory system and governance culture. A nation with sophisticated market institutions is better able to engage in regional economic integration. A country with a more open, pluralistic and democratic culture can build stronger cross-border ties than one with a less open, more autocratic political culture and institutions.

Central Asia faced formidable tests when the Soviet Union disintegrated. Overall, it has made enormous progress in opening up to the world, creating market institutions, and building more inclusive, more democratic political processes. However, daunting challenges remain, as is reflected in the region's relatively low economic and human development indicators. As in other regions, these challenges, though uniquely Central Asian in their historical roots, pose potential threats to human security and stability in the region and beyond. UNDP was one of the first international organizations to establish offices in Central Asia 12 years ago, and since then has approached the development of the region with patience, humility, and sensitivity to the distinctive cultures and social dynamics of these five countries.

This report reflects UNDP's effort to enhance cooperation in Central Asia. Commissioned by UNDP, it offers policy makers in the region an independent analysis of the benefits of regional integration. It also provides an examination of how regional cooperation can support human development and human security in Central Asia.

The report quantifies and measures (to the extent possible) the economic and social implications of regional cooperation and integration for the people of the region. It considers obstacles and constraints, even where the benefits of cooperation and the costs of non-cooperation may be abundantly clear.

Rooted in national analytical and institutional expertise, the report was drafted through an extensive process of consultation designed to promote Central Asian ownership. Expert individuals and institutions throughout Central Asia were involved in developing the final outline, preparing country background papers, drafting the text and reviewing each draft as it emerged.

The report aims to contribute to the development agenda in Central Asia in four ways. First, it will inform national policy makers in the region, and will promote dialogue among stakeholders on the benefits of regional cooperation and integration for human development and human security. Second, it will assist in the deliberations and strengthening of regional institutions. Third, the report will provide a common platform for the international community to advocate and support regional cooperation and integration. Fourth—and perhaps most importantly—it is hoped that there will be follow-up discussion and action in response to the report's analysis and recommendations by Central Asian governmental and non-governmental institutions, the private sector, regional organizations and the international community.

I am grateful to Johannes Linn, the lead author, for his excellent stewardship of this report as well as for his intellectual skill in shaping our thinking on this important issue. I would like to thank the UNDP Core Team for their dedication, hard work and support in the report's production. I owe special thanks to the Advisory Group for its valuable insights and advice throughout several drafts. The report also benefited greatly from the valuable inputs provided by many colleagues from the five Central Asian countries and institutes. I would like to thank the UN Human Security Trust Fund and the UN Foundation for their gracious financial support as well as the advice provided during the report's preparation. Finally, I would like to express my great appreciation for our inspired partnership with the Asian Development Bank and the World Bank throughout this process.

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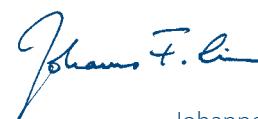
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Contents of Central Asia Human Development Report

Executive summary.....	1
The challenges and opportunities of regional cooperation and integration in Central Asia.....	2
Regional cooperation in trade and investment.....	3
Regional cooperation on water, energy and the environment.....	5
Regional solutions for threats from national disasters, drugs, crime and terrorism	8
Regional cooperation in meeting social development challenges.....	10
Political and institutional constraints to regional cooperation.....	12
Regional cooperation in Central Asia in a broader international framework.....	15
Summary of overall findings and implications	16
Chapter 1	
Introduction—framing the issues.....	19
Central Asia—a pivotal region in Eurasia	20
The challenges and opportunities of regional cooperation and integration.....	22
Defining regional boundaries	22
Choosing an approach	23
Choosing key regional links	25
Regional human development and human security challenges and opportunities.....	28
Human development and human security.....	28
The Millennium Declaration and the Millennium Development Goals.....	29
Human development, human security and regional cooperation.....	29
Political and institutional dimensions of regional cooperation and integration	30
Outline of the report	31
Chapter 2	
Central Asia and its challenges in a regional context.....	33
A brief history until 1990	34
Fallout from the Soviet break up	37
Human development trends since 1990	39
A heterogeneous region	39
Human development indicators	40
Demographics and standard of living	41
Economic trends.....	43
The challenge of integration.....	45
Chapter 3	
Regional cooperation to promote trade and investment.....	49
The role of trade and investment in landlocked countries.....	50
Trade patterns and potential in Central Asia.....	51
Recent patterns	51
Potential trade.....	52
A human side of trade: shuttle trade	53
Trade policies, regional trading agreements and accession to the World Trade Organization	53
Trade policies and barriers.....	53
Regional trade agreements	56
Accession to the WTO and cooperation within a multilateral framework.....	58
Transport, border management and transit barriers	60
Transport infrastructure	60
Transport services	62
Border management and customs administration	63
Transit systems.....	64
Transport costs and times	65
Regional approaches to improvements	66

Behind-the-border improvements: the business climate, finance and investment	67
The business environment and investment climate	68
Access to finance	69
FDI and small- and medium-enterprise development	71
A regional approach to an improved environment for business, finance and investment.....	73
Measuring the potential benefits of improved regional cooperation in promoting trade and investment.....	74
Case studies.....	74
Partial equilibrium analysis of cross-border price differentials	75
General equilibrium analysis of reduced trade costs in Kazakhstan and Kyrgyzstan	76
Conclusions and recommendations.....	78
Conclusions	78
Recommendations.....	80

Chapter 4**The natural resource lifeline for Central Asia: water, energy and the environment.....83**

A brief history and the current situation	84
Managing Central Asia's water resources.....	85
Linkages in regional water management.....	85
Trans-boundary water infrastructure as a regional public good.....	86
The water-energy nexus.....	88
Challenges outside the region	91
Regional approaches to national water policy challenges.....	92
Managing Central Asia's energy issues	93
Regional energy endowments and linkages.....	93
Oil and gas.....	94
Electricity.....	94
Constraints and risks in regional energy market management.....	97
Environmental challenges and opportunities	99
Key issues	99
Environmental hot spots.....	102
Institutional development and external assistance for regional water, energy and environmental development	105
The role of regional institutions and external assistance in water and energy	105
The institutional challenge of environmental management	106
Conclusions and recommendations.....	108
Conclusions	108
Recommendations.....	110

Chapter 5**Cooperation for dealing with regional threats: natural disasters,
drugs, crime and terrorism** 113

Protection from regional threats: an imperative for cooperation	114
Natural disasters—priorities for regional cooperation	114
Potential human and economic costs	114
Man-made aggravation of natural disaster risks.....	117
Developing the capacity to intervene: national and regional institutions	118
Illicit drugs—a regional threat to human development and human security	120
Dimensions of a booming trade	120
Causes of the regional drug problem	121
Economic and human costs and implications for regional cooperation.....	122
Addressing the problems of illicit drugs.....	124
Terrorism and trans-border crime: new phenomena	126
Trends and actors	126
A complex web of causes	127
Opportunities for regional cooperation in combating terrorism and cross-border criminality	130
Conclusions and recommendations.....	133

Conclusions	133
Recommendations.....	136
Chapter 6	
The social development challenge	139
Cross-border migration	140
Migration patterns	140
Economic and social 'push' and 'pull' factors	141
Costs and benefits for countries and communities	142
Barriers to labour migration.....	142
Migration policy for 'borders with a human face'.....	143
Challenges to regional health and health care	144
The threat of communicable diseases.....	145
Regional approaches to health	148
Education, knowledge and communication	149
The crisis of education	149
Knowledge, research and communication	153
Regional approaches to building modern knowledge and information societies.....	157
Gender: regional challenges and cooperation.....	158
Issues of inequality.....	158
Progress with regional gender initiatives.....	161
Conclusions and recommendations.....	162
Conclusions	162
Recommendations.....	164
Chapter 7	
Political and institutional constraints and opportunities	165
Setting the stage: an overview of political trends	166
Sources of political and institutional constraints	166
From Soviet integration to independence and nation-building	166
Security concerns as political challenge and opportunity	168
Successes of the post-Soviet period in shoring up regional stability.....	169
Political actors and interests: the political economy of regional cooperation.....	170
The role of the presidency	170
The rise of powerful interest groups.....	172
The rise of political/economic interest groups during the transition	173
The role of good governance and institutions.....	176
Political transformation and governance.....	176
Economic transformation, corruption and governance.....	179
The consequences of vested interests and poor governance.....	181
Conclusions and recommendations.....	182
Conclusions	182
Recommendations.....	183
Chapter 8	
Regional and international cooperation with neighbours and partners	185
Central Asia's position in a broader international context	186
Central Asia's relations with its near neighbours	187
Russia	187
China.....	189
Afghanistan	191
Iran.....	192
Other regional players: Turkey, India and Pakistan	193
Central Asia's partnerships with the major industrialized countries	195
Enhancing economic competitiveness	195
Improving natural resource management.....	196
Preventing regional threats	196

Assisting with social development	197
Meeting governance challenges	197
Support for regional cooperation.....	197
Multilateral donors' contributions to human development and human security	198
Enhancing economic competitiveness	198
Improving natural resource management	199
Multilateral support in other areas.....	199
Support for regional cooperation—CAREC	200
Conclusions and recommendations	200
Conclusions	200
Recommendations.....	203

Chapter 9**Overall conclusions and recommendations..... 205**

Findings and implications.....	206
Recommendations.....	209

Notes..... 213**References..... 227****Annexes..... 239**

Annex 1 Country data.....	239
Annex 2 Selected regional organizations, initiatives and programmes in Central Asia	244

Boxes

Box 1.1 Can Central Asia follow the path of European integration?	
Box 1.2 The Stability Pact for South-Eastern Europe	
Box 1.3 Regional public goods and the Millennium Development Goals	
Box 2.1 The Silk Road	
Box 2.2 Bukhara: heart of ancient culture, arts and human development	
Box 2.3 The creation of borders and the potential for conflict	
Box 2.4 The collapse of the Bishkek Hay Baler Company	
Box 2.5 Community conflicts across borders	
Box 2.6 Disappointed expectations in Kyrgyzstan	
Box 2.7 Assessing human development in Central Asia: statistical challenges	
Box 2.8 The shock of rising poverty in Tajikistan	
Box 2.9 How people in Central Asia feel about life: results of a survey	
Box 3.1 Interviews with shuttle traders in Uzbekistan	
Box 3.2 An Uzbek view of regional organizations in Central Asia	
Box 3.3 Potential regional cooperation within the WTO: the case of cotton	
Box 3.4 An Uzbek proposal for a Central Asian common market	
Box 3.5 At the Tajik-Uzbek border	
Box 3.6 Participation of Central Asian countries in major international transport infrastructure projects	
Box 3.7 Air transport in Central Asia	
Box 3.8 Central Asian borders need a more 'human face'	
Box 3.9 Border management and drug action programmes	
Box 3.10 How foreign investors perceive the business environment in Kyrgyzstan	
Box 3.11 Donor support to regional microfinance initiatives	
Box 3.12 The Investment Compact for South-East Europe	
Box 3.13 A Kazakhstani view of the outlook for regional cooperation	
Box 4.1 Community-level impacts of water, energy and land shortages	
Box 4.2 Averting regional disasters from high-risk dams—the case of Lake Sarez	
Box 4.3 Intergovernmental disagreement over the Karshi Pumps—a risk to the human security of millions	
Box 4.4 The water-energy nexus in the Amu Darya basin	

- Box 4.5 Turkmenistan's gas export issues and options
- Box 4.6 Hydropower generation potential in Tajikistan
- Box 4.7 Chingiz Aitmatov on the environmental threats facing Central Asia
- Box 4.8 Environmental pollution from TADAZ
- Box 4.9 The Aral Sea disaster
- Box 4.10 The Golden Century Lake—a regional environmental disaster in the making?
- Box 4.11 The Central Asian Regional Environmental Centre
- Box 4.12 External assistance to combat land degradation
- Box 5.1 At Lake Sarez, disaster-risk mitigation involves communities
- Box 5.2 Timeline of major incidences of political violence in Central Asia since 1999
- Box 5.3 Public perceptions about security and conflict in Central Asia
- Box 5.4 The source of radical Islamic movements in Tajikistan
- Box 6.1 Stories of young Tajik migrants
- Box 6.2 Organizing a trip for migrants from Tajikistan to Russia
- Box 6.3 Fighting HIV/AIDS in Kazakhstan
- Box 6.4 Multi-donor support of a CACO regional project to combat HIV/AIDS
- Box 6.5 The risk of losing Russian as a lingua franca
- Box 6.6 School dropouts among girls in Tajikistan
- Box 6.7 MDG targets: how can they serve as regional benchmarks for gender policies?
- Box 7.1 Preventing ethnic and resource conflict: the Preventive Development Programme
- Box 7.2 A view from Kyrgyzstan on the political economy of cooperation
- Box 8.1 Benefits for neighbours and partners from regional integration in Central Asia: an Uzbek view
- Box 8.2 Russian companies invest in Central Asia's energy sector
- Box 8.3 China's economic engagement in Kazakhstan
- Box 8.4 China Daily reports on the Uzbek president's visit to Beijing, 25 May 2005
- Box 8.5 Afghanistan-Central Asian cooperation: a UNDP-sponsored implementation plan
- Box 8.6 Iran's economic engagement in Central Asia
- Box 8.7 India's engagement in Central Asia
- Box 8.8 The 'rectangle of concern' and the Aga Khan Development Network

Figures

- Figure 1.1 Central Asia: the core of Eurasia
- Figure 1.2 Regional groupings used in this report
- Figure 1.3 Policy dimensions of the main regional issues
- Figure 1.4 Links among regional policy issues, the Millennium Declaration, the MDGs, and human development and human security
- Figure 2.1 Map of the Fergana Valley
- Figure 2.2 Life expectancy at birth (years)
- Figure 2.3 GDP growth (annual %)
- Figure 2.4 Selected regional organizations to which Central Asian countries belong
- Figure 2.5 Popular attitudes to regional partners in Central Asia
- Figure 3.1 The spaghetti bowl effect of regional and bilateral trade agreements involving Central Asian countries (as of August 2005)
- Figure 3.2 Public opinions on the effect of borders in Central Asia
- Figure 3.3 Transport costs and transport times for shipments by road within Central Asia (Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan) and between Central Asia and selected countries (first quarter 2005)
- Figure 3.4 Transport costs and transport times for shipments by rail between Central Asia (Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan) and selected countries (first quarter of 2005)
- Figure 3.5 Ratio of bank deposits to GDP for selected countries (in %)
- Figure 3.6 Net annual FDI in Central Asian countries (millions of \$)
- Figure 3.7 Estimated effect of a combined 50 per cent reduction in tariffs and distribution margins on real household income in Kyrgyzstan (percentage change over base-case scenario in 2015)
- Figure 4.1 Water management in Central Asia

- Figure 4.2 Main reservoirs and hydropower facilities in the Syr Darya basin
- Figure 4.3 Natural gas production (billions of cubic metres)
- Figure 4.4 Kazakh oil: production, consumption and exports, 1992-2015 (1,000 bpd)
- Figure 4.5 Power development and trade strategies for Central Asia
- Figure 4.6 Water and land use in the Aral Sea basin, 1960-2000
- Figure 4.7 Radioactive, chemical and biological hazards in Central Asia
- Figure 5.1 Economic loss potential from catastrophic events in selected CIS countries
- Figure 5.2 Seismic hazard area in Central Asia
- Figure 5.3 Global opium production, 1990-2003 (metric tons)
- Figure 5.4 Principal illicit drug-trafficking routes through Central Asia
- Figure 6.1 Public expenditure on health (per cent of GDP, 1995 and 2002)
- Figure 6.2 Health expenditure per capita, 2002 (PPP \$)
- Figure 6.3 A decrease in life expectancy at birth (total years between 1990 and 2003)
- Figure 6.4 Infant and under-five mortality (per 1,000 live births), 2003
- Figure 6.5 The incidence of tuberculosis, 1990 and 2003
- Figure 6.6 General secondary enrolments (gross rates, as % of population aged 15-18)
- Figure 6.7 Vocational and technical secondary enrolment in Central Asia
(gross rates, as % of population aged 15-18)
- Figure 6.8 Higher education enrolment in Central Asia, 1991 and 2001
(gross rates, % of population aged 19-24)
- Figure 6.9 Researchers in R&D, 2003 (per million people)
- Figure 6.10 Telephone mainlines and cellular subscribers per 1,000 people, 2003
- Figure 6.11 Internet users per 1,000 people, 2003
- Figure 6.12 Daily newspapers (2000) and radios (2003) per 1,000 people
- Figure 6.13 Female economic activity rate as % of male rate, 2003
- Figure 6.14 Ratio of estimated female-to-male earned income in selected countries, 2003

Tables

- Table 2.1 Financial transfers received by the Central Asian republics
- Table 2.2 Regional indicators (2003)
- Table 2.3 The Human Development Index in Central Asia and Russia
- Table 2.4 Population shifts
- Table 2.5 Central Asian poverty and inequality (2003)
- Table 2.6 Selected macroeconomic indicators (2003)
- Table 2.7 Progress on market-oriented reforms
- Table 3.1 Total merchandise exports and imports, 1996-2004
(millions of \$ unless otherwise indicated)
- Table 3.2 Share of merchandise trade with the former Soviet Union, 1988-2004 (%)
- Table 3.3 Central Asia's trade matrix, 2003 (millions of \$)
- Table 3.4 Tariffs in selected Central Asian countries (as of August 2005)
- Table 3.5 Status of WTO accession
- Table 3.6 Transport networks in Central Asian countries, 2004 (1,000 km)
- Table 3.7 Business regulations in Central Asia: the complexity of enforcing contracts
- Table 3.8 Stock of FDI per capita end-2003 (\$)
- Table 3.9 Selected data for small and medium enterprises
- Table 3.10 Prices for flour and tea in Kazakhstan, Kyrgyzstan and Uzbekistan (\$)
- Table 3.11 Estimated effect of a 50 per cent reduction in tariffs and distribution margins
on selected macroeconomic indicators in Kazakhstan and Kyrgyzstan in 2015
(% change compared with the base-case scenario)
- Table 3.12 Summary of indicative costs of non-cooperation and benefits of cooperation
- Table 4.1 Estimates of total agricultural losses due to poor management of irrigation systems
(millions of \$/year)
- Table 4.2 Primary energy resources
- Table 4.3 Surplus electricity available for trade (GWh)
- Table 4.4 ESI rankings for Central Asian countries
- Table 4.5 Summary of indicative costs of non-cooperation and benefits of cooperation
- Table 5.1 Average damages from large disasters

Table 5.2	The impact of natural disasters in Kazakhstan, 1995-2003
Table 5.3	Typology of criminal and extremist political groups operating in Central Asia
Table 5.4	Summary of indicative costs of natural disasters and man-made threats in Central Asia
Table 6.1	Population change and migration rates in Central Asia, 1989-2002 (beginning of the year, thousands)
Table 6.2	HIV prevalence estimates, end 2003
Table 6.3	Television access, 2003
Table 6.4	The impact of social sector issues
Table 7.1	Governance and stability indicators in Central Asia, 2002
Table 7.2	Indices of political transformation and liberalization
Table 7.3	Indices of economic transformation
Table 7.4	Corruption Perception Indices in Central Asia
Table 8.1	External aid to Central Asian countries
Table 9.1	The quantitative dimensions of regional human development and security challenges
Table 9.2	Possible cooperation and integration scenarios

Acronyms

BEEPS	Business Environment and Enterprise Performance Survey
BNSR	Bukhar National Soviet Republic
BOMCA	Border Management for Central Asia Programme
CACM	Central Asian Common Market
CACO	Central Asian Cooperation Organization
CADAP	Central Asia Drug Action Programme
CAEU	Central Asian Economic Union
CAREC	Central Asia Regional Economic Cooperation Programme
CEDAW	UN Convention on the Elimination of all Forms of Discrimination against Women
CIS	Commonwealth of Independent States
CSTO	Collective Security Treaty Organization
DFID	Department for Foreign and International Development
DOTS	Directly Observed Treatment Short Course
EBRD	European Bank for Reconstruction and Development
ECO	Economic Cooperation Organization
EEC/EAEC/EURASEC	Eurasian Economic Community
ESI	Environmental Sustainability Index
EU	European Union
EU-8	European Union 8 (2004 new EU member states excluding Cyprus and Malta)
EU-15	European Union 15 (EU member states prior to 2004 enlargement)
FDI	Foreign direct investment
GDP	Gross domestic product
GEF	Global Environment Facility
GNI	Gross national income
GUUAM	Georgia, Ukraine, Uzbekistan, Azerbaijan, Moldova
GWh	Gigawatt hours
HDI	Human development index
HIV/AIDS	Human immunodeficiency virus/Acquired immune deficiency syndrome
IMF	International Monetary Fund
IOM	International Organization for Migration
IRIN	Integrated Regional Information Networks
KhNSR	Khorezm National Soviet Republic
MDG	Millennium Development Goal
MTOE	Million tons oil equivalent
NATO	North Atlantic Treaty Organization
NGO	Non-governmental organization
OECD	Organisation for Economic Co-operation and Development
OPEC	Organization of the Petroleum Exporting Countries
OSCE	Organization for Security and Co-operation in Europe
PDR	People's Democratic Republic
PPP	Purchasing power parity

R&D	Research and development
RSFSR	Russian Soviet Federated Socialist Republic
SARS	Severe acute respiratory syndrome
SCO	Shanghai Cooperation Organization
SES	Single Economic Space
SPECA	Special Programme for the Economies of Central Asia
SSR	Soviet Socialist Republic
TADAZ	Tajik Aluminum Plant
TASSR	Turkestan Autonomous Soviet Socialist Republic
TB	Tuberculosis
TIR	Transports Internationaux Routiers/International Transport Road
TRACECA	Transport Corridor Europe Caucasus Asia
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UNIFEM	United Nations Development Fund for Women
UNODC	United Nations Office on Drugs and Crime
USAID	United States Agency for International Development
USSR	Union of Soviet Socialist Republics
WHO	World Health Organization
WTO	World Trade Organization

Executive summary

Increased cooperation among the Central Asian republics stands to produce big gains for the people of the region. The benefits from reducing trade costs, increasing remittances from migrant workers, and more efficient use of water and energy resources could generate a regional economy twice as large and well off 10 years from now. The price of non-cooperation could also be large, a heavy toll extracted from the spread of disease, lost economic opportunities, natural disasters and environmental destruction, as well as conflict and insecurity. Both costs and benefits will be felt most among the region's poorer populations.

Cooperation would ease the barriers posed by the new borders between the republics and allow people to connect throughout the region and beyond with trade and investment; linked infrastructure; shared water and energy; common environmental, health and disaster protection; and a free flow of ideas and knowledge.

Central Asia faces real opportunities. It is today surrounded by some of the most dynamic of the world's economies. The people of the region enjoy commonalities of history, culture and language. Conflict among the new nations has been avoided. New avenues for trade and access to world markets and knowledge are opening up. Regional organizations have been created and are gaining in strength. And the region's neighbours and the international community have increasingly recognized that they share a strong interest in a stable and prosperous Central Asia.

Big challenges also lie ahead. Central Asia is burdened by its landlocked location, by vulnerable infrastructure, by severe poverty in many areas, by institutional weaknesses, and by political barriers to cooperation. In two countries, the process of market reforms has yet to take hold and effective cooperation with their neighbours remains an elusive promise.

Central Asia is a pivotal region that for centuries served as a key intercept between Europe and East Asia, and between North and South Asia

The challenges and opportunities of regional cooperation and integration in Central Asia

Central Asia is a pivotal region that for centuries served as a bridge between Europe and East Asia, and between North and South Asia. For many centuries, it also functioned as a hub for the religious, scientific and cultural development of the Islamic world. From the 16th century onwards, however, Central Asia became marginalized, ending up as a relatively poor, landlocked fringe, first of Tsarist Russia and then of the Soviet Union. During 70 years of Soviet rule, when the Central Asian republics were largely shut off from the rest of the world, their economies became closely linked with the rest of the union. Living standards improved as a result of heavy investments in physical infrastructure and human capital.

In 1991, the disintegration of the Soviet Union produced five new countries in Central Asia—Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan—with a total population of 57 million people. New borders carved up the region like a jigsaw puzzle. They interrupted trade and other human links, and weakened critical but vulnerable region-wide water and energy systems. The severing of supply connections for industry and agriculture, the flight of many skilled Russians, the drying up of subsidies from Moscow, and the disappearance of the central administrative apparatus of the Soviet Union led to a dramatic economic collapse. This brought about a significant increase in poverty, severely weakening the region's human development and human security.

However, the break up of the Soviet Union also led to the opening of Central Asia's previously closed borders with China, Iran and eventually Afghanistan. This holds the potential for reviving the historic trade routes through Central Asia, for sending the region's rich energy resources to world markets, and for establishing dynamic trade and communication links between the region and the rest of the world. Capturing these possibilities to their fullest extent will require countries to work together cooperatively towards a common future.

Today, the Central Asian republics vary widely in terms of their geography and population size, natural resource endowments, human development, political orientation, and readiness to cooperate and integrate with each other and with the rest of the world. Nonetheless, they share many challenges and opportunities, in part because of their common history under the Soviet

regime; their important cross-border trade, water, energy and environmental links; and their shared perceptions and realities of internal and external threats to human and national security.

In many important respects, the people of Central Asia and their governments have been remarkably successful in meeting the very difficult problems they faced after the Soviet collapse. They have managed to establish national identities and institutions largely from scratch. Despite the potential for tensions over shared scarce resources, there has been no cross-border violent conflict among the countries or with their neighbors. Some have made significant progress in creating new market-based institutions and linking up with world markets. All the countries are well on their way to economic recovery after the severe dislocation and deep recession in the early years after independence. They have established regional institutions that can form the basis for improved regional cooperation and integration in the future. While there was reason for deep concern about the long-term future of the region in the late 1990s, there is justified hope today that Central Asian countries can thrive and achieve rapid advances in human development and human security for their people.

At the same time, recent surveys and case studies reveal that people in all the countries of Central Asia share frustrations and hardships from the borders that were drawn during Soviet times, but that only became divisive after independence. The borders split family and friendship networks, especially in border communities. They disrupt trade and investment not just for big businesses, but especially for small businesses, including the informal merchants known as shuttle traders. They separate farmers from their traditional lands and water sources. They create opportunities and excuses for harassment and extortion by border guards and customs officials, whether people want to cross for business or family reasons, or to migrate in search of better jobs. When administered unfairly, inefficiently and corruptly, borders are costly diversions of resources that drain opportunities for growth and prosperity. They have become potent symbols of the failure of the new states to provide for their citizens in a human and humane manner.

Since the borders between Central Asian states and their neighbours are here to stay, the countries in the region, their neighbours and their international partners now face the challenge of creating 'borders with a human face'; that is, borders that ease the flow of people and goods, rather than hampering it with time-consuming and unpredictable red tape and expensive official fees. People should not feel exploited or

People in all the countries of Central Asia share frustrations and hardships from the borders which were drawn during Soviet times, but which only became divisive after independence

harassed by extortionary and corrupt payment requirements.

Establishing ‘borders with a human face’ is an important step down the road to regional cooperation—but facilitating trade is only one of many arguments that support embracing closer ties between countries. Much has also been written about the need for regional cooperation on water and energy. Politicians in the region have recently pledged to work together to confront regional threats from violence, drug trafficking and terrorism. Cooperation should also be pursued on environmental management, migration, health and education, and preparedness for natural disasters.

In this report, we take a comprehensive view of the challenges of cooperation, because we believe there are important needs and opportunities in all of these areas to break down barriers and reap the benefits from closer regional connections. Priorities for action have to be set, but political and other obstacles may prevent progress in some areas at any particular time. Moving ahead with cooperation in other areas will not only produce benefits there, but can also build trust that in time may help overcome the obstacles to cooperation elsewhere.

Ultimately, the aim must be to meet the human development and human security objectives of the Millennium Declaration and the Millennium Development Goals (MDGs), which all the Central Asian countries have signed on to. Regional cooperation and integration, both among the republics and with the rest of the world, represents an important instrument for achieving these objectives. This requires cooperation among the countries in the region, but it also calls for support from the region’s neighbours and the international donor community.

Central Asian countries, their neighbours and their international partners have begun the process of cooperation by setting up regional organizations. They started just after independence in 1992 with the creation of the Commonwealth of Independent States (CIS), involving the participation of all the former Soviet countries except for the three Baltic nations. The Eurasian Economic Community or EEC (and various predecessors) followed, with Kazakhstan, Kyrgyzstan and Tajikistan as members besides Belarus and Russia. Additional regional initiatives have included the Central Asian Cooperation Organization (CACO, with Kazakhstan, Kyrgyzstan, Russia, Tajikistan and Uzbekistan as members), the Shanghai Cooperation Organization (SCO, involving China, Kazakhstan, Kyrgyzstan, Russia, Tajikistan and Uzbekistan) and others. Some regional agencies have had specialized

functions, such as coordinating regional water use. Others have encompassed much larger regional groupings, such as the Economic Cooperation Organization (ECO, which includes Afghanistan, Azerbaijan, Iran, Kazakhstan, Kyrgyzstan, Pakistan, Tajikistan, Turkey, Turkmenistan and Uzbekistan). Central Asian countries and Azerbaijan, China and Mongolia, together with the multilateral institutions led by the Asian Development Bank, have formed the Central Asia Regional Economic Cooperation programme (CAREC). Most external aid donors and partners now have assistance strategies that support regional cooperation.

Much remains to be done, however, to reduce cross-border barriers, to facilitate the best use of regional resources and to ensure that the people of Central Asia benefit from improved links among their countries, with their neighbours and with the rest of the world. The following pages summarize some of the most important issues at stake and this report’s main recommendations for national authorities, regional institutions and the international community, encompassing both the neighboring countries, and bilateral and multilateral partners.

Regional cooperation in trade and investment

Like other countries, the Central Asian republics have to promote trade and integrate into the global economy if they want to achieve international competitiveness, sustain economic growth, and advance human development and human security. At this time, trade within Central Asia, and with its neighbours and the rest of the world, is obstructed by numerous barriers—complex and opaque trade policies, high costs from border delays, visa requirements, bribes, detours when crossing borders and clearing customs, poor transport and transit conditions, and many hindrances to effective business, trade and transit behind borders.

Several factors fuel these problems. Current regional and bilateral trade agreements are overlapping, complex and mostly ineffective, and may actually harm rather than facilitate trade, since they are confusing for customs officials and create opportunities for corruption. In part due to the lack of regional cooperation, the Central Asian transport links with the rest of the world, and especially with the non-CIS countries, remain underdeveloped. Limited financial resources are spent on building roads and railway lines that bypass borders, which would be avoidable if cross-border transit were allowed and facilitated. Existing roads and railway services are in poor condition due to a

The countries in the region, their neighbours and their international partners need to create ‘borders with a human face’

The Central Asian republics have to promote trade and integrate into the global economy if they want to advance human development and human security

*Improvements
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the business and
investment climate and
financial sector of each
republic*

lack of maintenance funds and weak institutional capacity. International transit agreements are not fully implemented, while national transit systems are not integrated. Air transport is underdeveloped within the region and with the rest of the world. Finally, shuttle traders (many of whom are poor women) face pervasive restrictions and obstacles at and behind the borders, even though their activities create employment and lower prices, especially for poorer people.

Lowering these manifold barriers and facilitating trade will help the countries of Central Asia expand trade beyond the current low levels, boost economic growth and employment, reduce poverty and improve governance by narrowing the scope for corruption. Slashing trade costs by 50 per cent would increase gross domestic product (GDP) by an estimated 20 per cent in Kazakhstan and 55 per cent in Kyrgyzstan over 10 years. The poor will benefit most from the facilitation of trade.

However, it is not enough for trade costs to be reduced. Businesses must be able to respond by producing and investing more at home. This depends on the business climate and the quality of financial services in each country. These behind-the-border conditions are generally very poor in Central Asia. Improvements therefore are needed not only in trade policy, transport and transit, but also in the business and investment climate and financial sector of each republic. Experience further shows that reforms in trade, transit and the business climate in turn require measures to combat corruption, improve the civil service, and enhance the transparency and accountability of government—in other words, far-reaching steps to achieve good governance.

Recommendations

For the national governments in Central Asia:

Give priority in trade policy to accession to the World Trade Organization (WTO) and to non-discriminatory multilateral trade liberalization, including through easing restrictions on shuttle trade.

WTO accession is the best way to assure a competitive trade policy and domestic business environment. It should replace the ‘spaghetti bowl’ of regional and bilateral preferential trade agreements. Creation of a Central Asian common market could be a long-term goal, but it should be consistent with WTO rules and avoid the risk of trade diversion by adopting the trade policies of the member country with the lowest WTO-bound tariffs.

Focus regional cooperation to achieve competitiveness on improving transport

Creation of a Central Asian common market could be a long-term goal, but it should be consistent with WTO rules

links and trade facilitation, and on creating borders with a human face.’

Regional cooperation for competitiveness should focus on reducing transport costs, and facilitating trade and transit both at and behind the borders. In practice, this means simplifying and harmonizing visa regimes, and customs and border crossing rules and procedures; improving the professionalism and honesty at customs, police and border protection services; and facilitating rather than interfering with shuttle trade. These measures would go a long way to create ‘borders with a human face’.

Create an efficient transport infrastructure and improve transport services for lower-cost intra-regional and international access.

The Central Asian republics should avoid building new roads and railway links specifically designed to bypass borders. Instead, countries should use limited financial resources to rehabilitate and maintain existing transport networks, and develop key missing regional network links to connect with the rest of the world. Legal and regulatory frameworks should be improved for the transport sector to permit private carriers, enhance competition and remove barriers to entry, while maintaining system safety—in accordance with international conventions on transport and transit. They should support the development of a simplified and effectively managed regional transit system for road transport, as well as regional and international airline connections.

Reform the behind-the-border business environment and financial sector to assure that private sector firms, including medium, small and micro-enterprises, can respond effectively to the new opportunities and challenges from a more liberal and lower-cost trading environment.

Private firms of all sizes, domestic and foreign, need a secure and predictable business environment for opening, operating and closing firms, free from arbitrary restrictions and corrupt interventions, inspections and taxation. A sound and efficient court system that adjudicates disputes fairly and protects property rights is a necessary complement. While these basic elements of good governance do not come about overnight and may take years to completely develop, a start needs to be made in order to eventually secure the full range of benefits from regional cooperation.

For regional organizations:

Give one of the regional organizations of Central Asia clear lead responsibility for the regional trade agenda.

The multiple trade policy, transport and trade initiatives in different regional organizations should be concentrated and rationalized in one regional organization, possibly CACO. This organization would support individual Central Asian countries in their efforts to join the WTO. It would also establish benchmarks and monitor progress in trade liberalization, trade facilitation, transport cost reduction and regional transport service improvements, as well as in governance, business climate and financial sector reforms.

Develop and implement a comprehensive regional transport infrastructure and trade facilitation programme.

Such a programme would be designed to coordinate national road and rail transport infrastructure projects. It would focus on improving the region's transport links with other parts of the world; upgrading and integrating the region's air transport infrastructure; minimizing new transport infrastructure projects primarily aimed at avoiding transit through neighbouring countries; allocating adequate funds to the rehabilitation and maintenance of key existing transport networks; and supporting the development of comprehensive measures for trade facilitation and transit improvements.

Support regional forums for business communities at which regional organizations and their member governments can receive suggestions and feedback on the design and implementation of trade and related policies, and where businesses can develop regional contacts and integrated networks for providing better business opportunities and addressing common problems.

Such regional networks are key to fostering a vibrant regional market and offering vital feedback to governments on how their policies are perceived by the business community.

For the international community:

Encourage the governments of Central Asia with technical and financial support to pursue the regional competitiveness agenda in their bilateral policy dialogues and through CAREC.

Central Asia's neighbours and international donors should support WTO accession and regional transit improvements with project finance for transport investments, and behind-the-border and good governance reforms. CAREC can play a special coordinating role.

Commission analytical work that demonstrates the benefits of improved regional co-

operation to achieve competitiveness, that helps predict the winners and losers of reform, and that assists in building region-wide constituencies for reform.

International support for research, including in-depth surveys, case studies and sector-specific analysis, is needed to document for policy makers what is lost from the lack of cooperation and complementary reforms. It can also help define differing national interests across countries and internally diverging interests within each country that hinder reform. The research can assist in determining how particular vulnerable groups can best be protected from transition costs that in the short term may cause significant social disruptions.

Regional cooperation on water, energy and the environment

Water, energy and environmental resources are critical for human development and human security. In Central Asia, they are closely linked, through both geography and the vast infrastructure systems put in place during Soviet days. The republics are tightly interconnected with each other in managing these resources, even as each country has very different endowments and priorities.

At the core of the region's natural resource challenge lies the management of regional water resources, which requires a careful balance between irrigation, human consumption, the generation of electricity and the protection of fragile natural environments. Given the diverse national interests, the post-independence years have seen a serious weakening of the longstanding Soviet water and energy exchange arrangement among the republics. Kyrgyzstan and Tajikistan, the upstream countries along the two main rivers of the region—the Amu Darya and the Syr Darya—prefer to maximize the use of the water for generating electricity for export and to meet domestic energy demand, especially in the winter. The downstream countries, Kazakhstan, Turkmenistan and Uzbekistan, prefer to have maximum access to water for irrigation during the summer months, while also avoiding the floods caused by winter water releases. There are disagreements about payment for water resources and the maintenance of infrastructure. Each of the countries has an interest in self-sufficiency in water and energy resources, minimizing dependence on neighbours by investing in costly water or power projects on their own territories.

Regional approaches to the water-energy nexus in Central Asia would bring large benefits in

Water, energy and environmental resources are critical for human development and human security

Regional approaches to the water-energy nexus in Central Asia would bring large benefits

Currently available estimates indicate that the annual net benefits to Central Asia from cooperation in water sharing and conservation amount to about five per cent of GDP

terms of more efficient management of these scarce resources, a greater potential for exports of electricity, more reliable availability for communities and a reduction in the potential for conflict. However, such regional solutions would require compromises involving each country's interests and principles, and a fundamental trust that agreements once entered would actually be implemented.

Given the fragility of the regional water and energy infrastructure, non-cooperation carries grave risks and costs. According to some estimates, the region loses \$1.7 billion per year, or three per cent of GDP, from poor water management that lowers agricultural yields. The poor use of water resources throughout the region has contributed to major environmental and social problems, especially for the Aral Sea region. The revival of agricultural production in northern Afghanistan and the resulting increase in water use there will likely add to the scarcity of water in the Amu Darya river basin. At the same time, China's increased upstream use of the waters of the Irtysh and Ili rivers will create pressures on downstream water availability in Kazakhstan. There are also a number of water management 'hot spots' associated with potentially catastrophic risks of regional significance—one is the naturally dammed Lake Sarez in Tajikistan. A dam breakage could lead to devastating floods threatening millions of people throughout the Amu Darya basin.

In the energy sector, as for water, all the Central Asian countries would benefit from measures to use energy resources more efficiently. Kyrgyzstan and Tajikistan have large unused hydropower potential and a long-term potential for electricity exports. But huge investments would be required, with uncertain market prospects as well as political and security risks. For oil and gas, the other main energy resources in the region, access to world markets is heavily dependent on transit routes through neighbouring countries. Traditionally, the pipeline infrastructure has mainly led through Russia, which has effectively controlled off-take and price, and has an interest in maintaining this position. Alternative transit routes include China, which is now investing in joint production and transport ventures in Kazakhstan, and Afghanistan and Iran, although both pose geopolitical and security concerns.

On the environment, Central Asia struggles with the devastating environmental legacy of the Soviet period, including dangerous deposits of radioactive tailings from abandoned uranium mines and the lethal remnants of biological and nuclear tests. But serious risks also come from today's poor environmental policies and weak

institutional capacity, both at the country and regional levels. Many problems have regional spillover effects, often related to the big rivers connecting the countries. Whether the issue is waterborne pollution from industry, the loss of biodiversity or soil erosion, these problems require regional solutions. To varying degrees, the big regional seas—the Aral Sea and the Caspian Sea—are suffering serious environmental damage that is not only of regional but also of global significance.

It is not possible to make a comprehensive estimate of the benefits from cooperation and costs of non-cooperation in the water, energy and environmental areas, although these are likely to be large. Currently available estimates indicate that the annual net benefits to Central Asia from cooperation in water sharing and conservation amount to about five per cent of GDP. Benefits are likely to be double that percentage for the smaller and poorer countries. And these are clearly only a fraction of the benefits that could be reaped if Central Asian countries were to cooperate fully and effectively on water, energy and the environment. Further research needs to be devoted to a more systematic quantification of these potential gains.

Central Asia countries have gone some way already to cooperate in managing their shared natural resources. They have avoided outright cross-border conflicts, and engaged in continued dialogue, water-sharing agreements and cooperative initiatives. To varying degrees, they have welcomed the engagement of international donors and institutions. Currently, it appears that Kazakhstan, Kyrgyzstan and Tajikistan broadly have a common vision for regional solutions to water, energy and environmental problems, and are likely to look for common approaches. In addition, there is likely to be a continued focus on bilateral agreements on the most pressing cross-border issues, as reflected in the improved bilateral relations between Central Asian countries and their neighbours on several important water and energy issues.

Recommendations

For the national governments in Central Asia:

Improve the national management of natural water, energy and environmental resources, and address priority risks from potentially catastrophic 'hot spots'.

Many of the regional problems in natural resource availability would be much reduced if national policies encouraged a more efficient use of these resources. Efficient pricing, effective maintenance of infrastructure and improved national institutions

are essential for better national natural resource management. Given the interconnectedness of natural resource systems in Central Asia, region-wide commitment to better national resource use could have region-wide benefits. Specifically, cooperative solutions will help mitigate the potentially serious and even catastrophic risks posed by major 'hot spots', such as the possible breakage of the Lake Sarez dam, or potential landslides at the uranium tailing sites in Kyrgyzstan and Tajikistan.

Seek region-wide cooperative solutions to water and energy problems, but if these do not materialize, pursue bilateral or trilateral solutions as a way forward.

Given the interconnected systems of water and energy production, transmission and use in the region, region-wide agreements—if sustained and implemented—would be best. But since this may in practice be difficult to achieve, individual countries should be ready to explore less than universal agreements. For example, it may be possible to have separate agreements covering the watersheds of the Amu Darya and the Syr Darya river basins, and bilateral solutions may be best for many of the 'hot spots', or to deal with conflicts over access to natural resources among cross-border communities. However, since compromises may be easier to reach where more than one issue is being addressed at any given time—since one party may be able to offset a loss in one area by a gain in another—it is advisable to continue to pursue the option of region-wide agreements and institutions, building on past initiatives.

Strengthen environmental institutions nationally and regionally, and sign on to and implement global environmental conventions.

Given the weak environmental institutions in Central Asia, efforts to strengthen them and to give greater attention to global environmental conventions are a high priority. The region's environmental ministers and their agencies have made some progress in recent years, but they need the support of national leaders and the international community to be truly effective.

Support civil society in its work on water, energy and environmental issues on a national and regional basis. Help assist communities to solve cross-border problems and avoid conflict—'borders with a human face' are also needed in natural resource access and management.

Civil society representatives first flagged many of the natural resource management and conservation issues before and after

independence. Their role in identifying important problems and solutions has been reduced since the early 1990s, as economic recession caused the focus to shift to economic, social and poverty issues, and as many Central Asian countries began to place restraints on the freedom of civil society to engage in analysis and advocacy of critical issues. The tendency of governments to centralize authority and financial resources in the capitals has left local authorities and community leaders poorly placed to solve local border conflicts over natural resource access. Giving civil society, local leaders and communities more leeway in dealing with these issues, both nationally and across borders, would provide much better feedback for governments, and likely lead to more effective solutions and reduced conflict potential.

For regional organizations:

Develop clear, focused mandates and long-term visions for the regional organizations dealing with natural resource challenges, including major regional 'hot spots'.

Regional organizations currently have vague and overlapping mandates in terms of natural resource management, and have not been given clear visions of how they should support regional cooperation. CACO's planned Water and Energy Consortium could be an important step forward, but appears not to have yet received the full support from CACO member governments. Regional organizations should also develop a well-defined division of labour and adopt action plans for dealing with the various regional 'hot spots'. Where necessary and appropriate, bilateral or trilateral approaches should be supported.

Draw on and support the networks of academic institutions and civil society organizations that deal with natural resource management issues.

As at the national level, regional networks of academic and non-governmental organizations (NGO) can be very helpful in identifying environmental problems and solutions, and ensuring a feedback loop on the work of official regional bodies.

For the international community:

Develop a clear regional perspective and help build regional institutional capacities when supporting national programmes and projects involving water, energy and environmental resources.

Cooperative solutions will help mitigate the potentially catastrophic risks posed by major 'hot spots', such as the possible breakage of the Lake Sarez dam

Given the weak environmental institutions in Central Asia, efforts to strengthen them are a high priority

Central Asia is particularly prone to natural disasters, including major earthquakes, landslides and floods, on a scale that could affect millions of people

The international community has had a far-reaching engagement in many aspects of the natural resource management challenge in Central Asia. Important opportunities for supporting regional cooperation in this area could come from brokering closer cooperation among international organizations, taking a regional perspective even when dealing with national programmes, and supporting regional initiatives and institutions, including CACO's Water and Energy Consortium, if it receives the full backing of Central Asian partners. CAREC could serve as a focal point for bringing together international donors and regional organizations. The international financial institutions can play an important role in assessing the financial viability of various regional investments, and can help organize public-private partnerships as well as regional cooperative solutions among partner governments.

Support the adoption of global environmental conventions, and the governmental and non-governmental capacity to monitor their implementation. Help finance and organize research on long-term regional water, energy and environmental issues (including those related to glaciers, river flows and climate change).

Much remains to be done to better understand the regional challenges and risks of natural resource management in Central Asia. In some instances, lessons could be learned from watersheds and regional environmental initiatives in other parts of the world; Central Asia in turn has knowledge to share with other regions. Since the Central Asian experience undoubtedly has implications for global natural resource balances, the international community should be aware of and engaged in the full spectrum of water, energy and environmental issues.

Regional solutions for threats from national disasters, drugs, crime and terrorism

Because of its seismic and geographic conditions, Central Asia is particularly prone to natural disasters, including major earthquakes, landslides and floods, on a scale that could affect millions of people over large swaths of the region. A major earthquake could kill tens of thousands of people, as has happened in the past. Millions of people are at risk from post-quake dam breakages. In Tajikistan, an estimated 70 per cent of GDP could be lost as a result of natural catastrophes.

Other threats are man-made, coming from the impact of illicit drugs, crime and terrorism. Since the 1990s, Central Asia has been at the centre

of drug transit routes and has suffered from the resulting increases in disease, crime and corruption. Hundreds of thousands of people are addicted to drugs and the number is growing. The region is caught between a major hub of production (Afghanistan) and major hubs of consumption (Europe, Russia and China). While efforts to control trafficking can go some way to restrict or redirect the flow of drugs, experience shows that trafficking will continue despite such efforts, especially in environments where states are weak and governance is poor.

Central Asia also has been burdened with threats from terrorism—both home-grown and imported from neighbouring countries—which thrives on poor governance, political repression and drug money. The Afghan war largely eliminated Taliban support for extremist militant groups after 2001, and as a result the external terrorism threat in Central Asia appears to have been significantly reduced. However, some popular support for radical movements remains, and governments have been increasingly concerned about threats to national security and political stability.

Whether natural or man-made, real or perceived, all of these threats transcend the borders of each Central Asian country and involve neighbours beyond the region. A regional perspective is critical to understanding them and informing the search for solutions. These are areas where regional cooperation is relatively free of conflicts among national interests, and where progress can reinforce trust and the readiness for eventual cooperation in other fields. To varying degrees, the Central Asian governments, their neighbours and the international community have been engaged in addressing these risks on the national and regional levels.

In the case of natural disasters, national and regional institutions exist for natural disaster preparedness and response, but they lack adequate capacity and budgets for comprehensive and effective risk assessment, prevention, preparedness and response. Examples from elsewhere in the world show that risks can be substantially reduced through proper preparedness and early warning systems; through insurance mechanisms that not only help to respond financially after a disaster strikes, but also provide effective incentives for better construction standards and location decisions; and through coordinated regional responses. Community and civil society involvement is critical. For their part, international donors have been generous with emergency humanitarian assistance in the region once disaster strikes, but they have focused much less on supporting prevention and preparedness.

These threats transcend the borders of each Central Asian country and involve neighbours beyond the region

Regional and national efforts have also tackled the interconnected problems of illicit drug trafficking, crime and terrorism, although for drug trafficking, efforts have been hampered by limited cooperation among agencies across borders and within countries, and by the fundamental dilemma that trafficking will continue as long as supply and demand in the big hubs are not dealt with. The threats to national security from external and domestic radical opposition groups, however, have become a major preoccupation for the leaders of the region and their neighbours, and have been the focal point of discussions at various regional summit meetings, including the 2005 SCO summit.

These issues have a number of implications in terms of human security. First, a comprehensive understanding of the relationship between drugs, crime and terrorism must inform effective security policies. Second, the drug-crime-terror nexus requires that governments, law enforcement and security agencies in the region work together under an umbrella of national, regional and international interagency cooperation. Third, it is necessary to tackle the root causes of criminal and terrorist activities, including poverty, inadequate and inefficient governance, and the breakdown in social contracts between state and society.

Measures for better law enforcement and control of security threats should not lead to general repression of political life. Rather, they need to be reinforced with heightened respect for human rights, empowerment of communities and the strengthening of good governance. This requires a comprehensive human development and human security strategy, combining security measures and control of illegal activities with developmental measures and good governance reforms. The risk here is that if the governments of the region take a narrow view of their security challenges and do not effectively address some of the key developmental and political issues that could lead to grievances and need to be resolved in the long term, then stability will be further threatened.

Recommendations

For the national governments in Central Asia:

Develop comprehensive, development-oriented strategies for addressing the underlying socioeconomic risks and challenges of natural disasters and man-made threats in cooperation with regional neighbours.

This would include joining and implementing the relevant international conventions on disaster preparedness, drug control and anti-terrorism,

and modernizing national legislation in all three areas. For natural disasters, governments should improve land use and building code regulations and enforcement, introduce insurance schemes, and develop disaster preparedness and training programmes. For anti-drug and anti-terrorism initiatives, it is important to combine control-oriented actions with developmental programmes that create jobs, especially for young people; public health and education programmes; and efforts to reduce corruption.

Strengthen the capacity of natural disaster preparedness and response agencies, the police, and security and border control forces; ensure cross-agency coordination and information sharing; and maintain a balance between enforcement and development approaches.

This requires high-level attention by leaders and adequate financial resources, and steps to ensure that corruption does not undermine the quality of implementation. It is important to modernize border management for effective control of drug flows and cross-border criminal and terrorist activities, while maintaining 'borders with a human face' for ordinary people, trade and commerce. It also helps to systematically involve local communities and civil society organizations in disaster preparedness and response initiatives as well as anti-drug campaigns, and in the design and implementation of anti-terrorism programmes. This will make it easier to protect human rights and limit repressive responses in the fight against drugs and terrorism, which will minimize costs to human security and reduce the long-term risk of alienating people.

For regional organizations:

Makedisasterpreparednessandresponse, and anti-drug and anti-terrorism programmes high priorities, and clarify the mandates of regional organizations in these areas.

Recent CACO and SCO summits have made declarations and taken steps to combat drugs and terrorism, but need to do so also for natural disasters, and need to follow up effectively. A clearer delineation of mandates would help avoid duplicate efforts.

Develop regional risk assessment and planning capacities, early warning systems (especially for natural disaster 'hot spots'), and systematic links among relevant national and regional agencies.

One important priority is to strengthen information collection and sharing systems at the regional level

It is necessary to tackle the root causes of criminal and terrorist activities, including poverty, inadequate and inefficient governance, and the breakdown in social contracts between state and society

It is important to modernize border management for effective control of drug flows and cross-border criminal and terrorist activities, while maintaining 'borders with a human face' for ordinary people, trade and commerce

Migration, health, education, communication and gender issues involve key challenges and opportunities for human development and human security

for disaster management, as well as for anti-drug and anti-terrorism programmes.

Provide encouragement, guidance and support for national initiatives that apply best practices in balancing control and national security responses with broader developmental initiatives, that improve border management to achieve 'borders with a human face' and that assure respect for human rights and the active engagement of local communities and civil society organizations.

Regional organizations are by necessity the creations of their members. To be effective, they need to reflect the priorities and values of their members, including when it comes to striking a balance between control-oriented versus developmental approaches to dealing with national security issues. However, regional organizations can provide an opportunity to foster debate on alternatives and bring in experiences from the rest of the world on disaster prevention and preparedness, as well as on drug trafficking, crime and terrorism.

For the international community:

Focus more donor attention on regional natural disaster preparedness and prevention, and support comprehensive and coordinated regional approaches to anti-drug and anti-terrorism programmes with adequate and sustained funding.

An important element of international engagement to stem drug trafficking is to focus attention on controlling production and consumption outside Central Asia, while also setting realistic goals for what drug interdiction programmes can achieve along the drug-trafficking routes. Donors can play a significant role in emphasizing the need for development and good governance programmes that are community based and deal with conflict prevention, drug control and natural disaster prevention. These should involve civil society, support management of 'borders with a human face' and encourage respect for human rights. Better regional coordination among donors would enhance their effectiveness. Donor funding for research, training and information management involving regional experts and institutions is critical.

Some 1.5 million migrant workers from Central Asia may be working in Russia; for Tajikistan, remittances make up about 20 per cent of GDP

Regional cooperation in meeting social development challenges

Migration, health, education, communication and gender issues involve key challenges and

opportunities for human development and human security. Working on all of these fronts will be essential for progress towards achieving the MDGs in Central Asia. Regional implications are most obvious in the case of migration and communicable disease, but they are found as well in other areas. Regional cooperation can help manage the points of interconnection, and encourage regional benchmarking, monitoring, information exchange and the sharing of best practices. The MDGs provide an excellent framework for a regional approach, but major improvements in statistics are needed for reliable assessment of trends and policies nationally and regionally.

The numbers of migrants from and in Central Asia are large, as people from the countries with fewer economic opportunities (Kyrgyzstan, Tajikistan and Uzbekistan) seek jobs and better lives in those countries with better-off economies (especially Russia and more recently Kazakhstan). Taking the midpoints of reasonable but uncertain estimates of the number of migrants, some 1.5 million migrant workers from Central Asia may be working in Russia. Their remittances form a vital economic lifeline—remittances in Tajikistan make up about 20 per cent of GDP. Despite their significant contributions, however, migrants face very serious problems in crossing borders, in sending remittances home and in their working conditions. No regional framework or forum exists for consistently addressing these issues.

In health and education, the deterioration in social indicators and services since 1991 has been dramatic. Countries have faced common challenges, but chosen different responses, which presents an opportunity to learn from each other in terms of what works and what does not. In health, the greatest regional challenge comes from rising HIV/AIDS and tuberculosis rates, which are reaching epidemic proportions, with evident cross-border links. Increasingly prevalent intravenous drug addiction significantly adds to the risk of infection. An estimated 50,000 people are already HIV positive, and if current trends continue, the cost of HIV/AIDS treatment and prevention could top \$1 billion between 2004 and 2007. With the severe acute respiratory syndrome (SARS) epidemic of 2001 and 2002, and the avian flu risk in 2005, both originating in East and South-East Asia, new epidemic threats have appeared. Fortunately, governments and regional organizations have now recognized the serious risks posed by communicable diseases and have started to take action at the national and regional levels.

Educational issues are mostly national in nature, but there are also important regional connections.

Border communities would benefit from access to educational facilities in neighbouring countries, and minority populations from textbooks and trained teachers in their own languages, which could be supported by neighbours. Student exchanges at the tertiary level and recognition of diplomas from neighbouring countries would nurture a competitive, flexible workforce across the region. Maintaining Russian as a second language and lingua franca for cross-border communication by government, business, academia and civil society would help economic and intellectual integration to flourish, even as over time English as a language for global communication is likely to play an increasing role.

Women in Central Asia have faced particular challenges during the transition from the Soviet system, a process that has stripped many of the economic and social gains they had made in previous decades, especially in rural areas. Women have lost jobs and support for child rearing. The resumption of traditional cultural practices in many parts of the region is curtailing women's rights. Statistics disaggregated by gender are extremely limited, which masks the extent of many problems, including such practices as human trafficking, bride snatching and the denial of property rights. Countries in the region have signed on to global conventions on women's rights and empowerment, and civil society groups have been active in trying to strengthen women's position in Central Asia, but much remains to be done in reversing the tide of discrimination, including through networking and the regional exchange of information.

Governments and civil society organizations have begun implementing regional projects to address social development issues. Russia and Tajikistan recently struck an agreement on the treatment of Tajik migrant workers in Russia; national governments, CACO and the international donor community are sponsoring a regional HIV/AIDS project; various regional networks have formed to improve education and expand Internet connectivity; and many gender-oriented civil society organizations work together across borders on joint advocacy and action. Building on these and many other examples of successful regional cooperation is an excellent place to start considering how to improve regional cooperation and integration in the social sphere. While most governments appear to recognize the importance of a well-educated population and healthy work force, Turkmenistan's isolation and apparent destruction of its social service system is a national tragedy and potentially a problem of regional significance.

Recommendations

For the national governments in Central Asia:

Ensure 'borders with a human face' for migrants, students, NGO network representatives and citizens of border communities seeking access to health and education services across borders.

People should be able to cross borders without undue hassle or loss of time, and migrants should be able to transfer their earnings home securely and at a reasonable cost. National authorities also need to help ensure that their nationals working abroad have legal protections and access to advice and information about how to protect their rights under the laws of the host country. They need to address human trafficking, which now affects a growing number of Central Asian women. The local authorities in border communities should be encouraged to work together to provide access to social services across borders in cases of emergency, for isolated communities or where this provides substantial mutual benefits.

Strengthen national legal norms in line with international conventions and join regional efforts in the fight for better social conditions region-wide.

National legislation can be strengthened, among other ways, with laws that assure equal rights for women, diploma recognition across borders, and consistency between drug enforcement and the fight against HIV/AIDS. Governments should also join in regional monitoring and benchmarking of progress in the social sectors, using the MDGs as a key tool. There are useful opportunities to share experiences and best practices in reform programmes, innovative practices and appropriate financing strategies. Governments should also strengthen the collection of national statistics for the main health, education and gender parameters, following international standards so as to permit reliable analysis of major trends and issues, and comparison of progress across countries.

Support regional information exchange and networking among medical professionals, educators, scientists and journalists on an individual and institutional basis.

Central Asia has a history of tight networks in academia, the media, civil society, and arts and culture. Building on this history, governments can foster the continuation and strengthening of these links in the interest of building a modern knowledge society in the region. Some fundamental ingredients include supporting the growth of information and Internet technology, and maintaining Russian as a second language

Governments and civil society organizations have begun implementing regional projects to address social development issues

People should be able to cross borders without undue hassle or loss of time and migrants should be able to transfer their earnings home securely and at a reasonable cost

The challenge for the regional agencies will be to focus on a few critical areas in line with their mandates, administrative capacities, financial resources and political support from the member countries

for cross-border communication. National governments should also encourage local authorities in border regions to work with their cross-border counterparts to facilitate social sector connections.

For regional organizations:

Define clear mandates for regional institutions on major social sector cooperation activities.

No major regional institution has systematically addressed fostering cooperation in the major social sectors. CACO, the SCO and CAREC appear to be best suited for these responsibilities.

Lead or support region-wide initiatives in the social sectors, including regional programmes on HIV/AIDS and TB, the harmonization and simplification of visa and passport requirements, the treatment of migrants abroad, the facilitation of remittance flows, diploma recognition and Russian as a second language.

A wide range of regional programmes could help develop and reinforce consistent national approaches and diffuse best practices. The challenge for the regional agencies will be to focus on a few critical areas in line with their mandates, administrative capacities, financial resources and political support from the member countries.

Take on benchmarking and monitoring activities, and exchanging experiences and best practices as important roles.

Benchmarks could usefully draw upon the MDGs, which UNDP and others are already monitoring in the region. This also requires upgrading regional social statistics.

For the international community:

Develop regional strategies for the support of improved national and regional social policies and programmes, and for strengthening the capacity of regional organizations to help address region-wide social sector issues.

This would include support for regional monitoring and benchmarking, and the improvement of regional statistics. It would also involve financial and technical assistance, especially in the poorest countries, for government agencies, the media and civil society organizations, so they can network across the region, as well as develop and implement multi-country programmes and strategies.

Focus priority attention, financing and advocacy on those social development issues of regional significance that are important but

often neglected by the national governments and regional organizations in Central Asia.

These would include migrant, minority and women's rights, health and education; combating communicable diseases, especially HIV/AIDS and TB; regional media and civil society networking; and expedited access to the Internet.

Political and institutional constraints to regional cooperation

The dissolution of the Soviet Union led to the establishment of political regimes that had a great and understandable interest in preventing chaos and civil strife. They acted quickly to establish a national sense of identity among their diverse populations, create national symbols and institutions along with a clear sense of sovereignty, and protect the sanctity of new borders. The leaders of the new republics generally succeeded in these goals. They avoided cross-border violent conflict and, with the exception of Tajikistan, the civil strife that had been widely feared.

These leaders, having emerged mostly from the ruling elites of the Soviet days, also created, to varying degrees, a political structure in which they and their governments retained almost exclusive power over the political levers throughout their societies, balancing the competing claims of various powerful elites and interest groups. These factions generally secured their influence and wealth through control of various key public and private assets, such as energy, water, industry, agriculture or banks. Weak public administrations, often linked closely to the special interest groups, were unable to stop or reinforced these trends. At the same time, small and medium enterprises, shuttle traders, small farmers and farm employees suffered from restrictive and often corrupt administrative practices. They found little recourse to justice except through the avenues of patronage and protection obtained by either clan affiliation or purchase.

This confluence of political, institutional and economic developments, particularly in the post-independence environment of economic recession, explains to a significant extent why regional cooperation in the early years after independence remained weak despite many statements at the top to the contrary. Leaders aimed to reinforce their control over national territory and were reluctant to share any elements of sovereignty. National elites and interest groups sought to protect their assets by limiting any external competition and maximizing the rents

The leaders created, to varying degrees, a political structure in which they and their governments retained almost exclusive power over the political levers throughout their societies

that could be extracted in the short term. The middle- and lower-level public servants tried to guard their livelihoods by petty and not-so-petty corruption at the borders, on the roads, and in the tax and license offices.

Compared with the early years of independence, today the fear of state disintegration, ethnic separatism and inter-state conflict has declined in Central Asia. This has allowed the countries' leaders to pursue regional interests. Economic recovery has made it possible to move beyond economic crisis management. Internet communication has helped build cross-border connections. External partners have become more directly engaged in supporting regional institutions and cooperation, recognizing they have a common interest in a prosperous and stable Central Asia. The growing sense of shared security interests and the utility of the SCO in addressing these have opened up a basis for greater trust and cooperation in other areas, including economic cooperation as an important ingredient in fostering better regional development, security and stability.

But obstacles to further economic reform and regional cooperation and integration remain embedded in highly centralized presidential institutions, in powerful business interests linked to governments, and in the middle and lower levels of the public administrations and security services. The formal governmental institutions and widespread informal networks and interest groups benefit from the status quo, at least in the short term. In the long term, there is a risk of a vicious cycle, in which poor governance, limited opportunities and a lack of accountability lead to popular resentment and opposition that is crushed by the government. Worse governance and more resentment inevitably follow.

Such a cycle, once unleashed, creates risks of political and economic instability in the country and the region, and undermines the basis for regional cooperation on key economic issues. Governance problems, especially corruption, lead to an inability to manage borders and cross-border transactions in an efficient, humane and predictable manner. They also result in declining state resources, falling foreign direct investment (FDI) outside of the extractive sectors, increasing social inequality, blocked reforms and rising discontent. In the spring of 2005, the collapse of the Kyrgyz regime and the violence in Uzbekistan in different ways demonstrated the potential fallout.

It is impossible to predict how political developments in the region will unfold, but the Kyrgyz upheaval and the violence in Uzbekistan provide a warning signal to Central Asian governments.

How they interpret and react to this will determine the future of the region and the human development and human security of the people who live there. Three scenarios are broadly possible. Under the first option, leaders clamp down further on political and economic freedoms to achieve short-term stability, but likely with a high risk of instability in the medium to long term. The second option combines strict political controls with economic freedoms, but it is doubtful that this option can be implemented. The third option entails at least gradual liberalization in both the political and economic spheres, and should open the door to lasting political and economic stability. Greater regional cooperation could provide a significant boost to the hopes for political and economic success under this scenario. However, it would also require convinced and courageous leaders willing to take some risks of short-term instability and prepared to take on the special interests opposed to any political and economic liberalization. Central Asia's neighbours and the international community could help support this outcome.

In light of the political, economic and institutional realities in Central Asia, we should expect only limited region-wide cooperation in the short to medium term. The most likely evolution is bilateral or trilateral cooperation among Kazakhstan, Kyrgyzstan and Tajikistan. This is especially likely in the areas in which these states agree and see common interests—namely, cross-border trade, transport and transit, water and energy, resolution of border disputes and inter-ethnic conflict prevention. Turkmenistan and Uzbekistan are much less likely to engage in regional cooperation in the short term, since the dominant political institutions and interests will not clearly gain from open trade and liberalized economies. However, as they see their neighbours make progress, and as they seek to decrease risks from poverty and internal instability, they too may eventually select regional cooperation and integration as the preferred path.

Recommendations

Political and institutional processes are difficult to change unless leaders, the political interests of the elite or strong popular pressure from below create a momentum for change. Some of the elements of these changes can be identified in recommendations that are easy to propose, but difficult to implement.

For the national governments in Central Asia:

Liberalize the political and economic systems currently in place, with greater transparency

Compared with the early years of independence, the fears of state disintegration, ethnic separatism and inter-state conflict has declined in Central Asia

Governance problems, especially corruption, lead to an inability to manage borders and cross-border transactions in an efficient, humane and predictable manner

For regional cooperation and integration, a high priority is reform of police and border guard services to eliminate major barriers to investment, trade and transit

and accountability for the national executive branches.

This is a prerequisite for establishing more effective states and for fostering regional economic cooperation and integration. Unless change is to come from below, this requires leaders willing to take a long-term view and ready to take on vested interests, including those supporting the regime and possibly losing from such reforms.

Introduce the essential elements of good governance as a prerequisite both for each country's own development, but also as a means for supporting key elements of the regional cooperation and integration agenda.

Good governance reforms would include reform of the civil service as a way to improve the quality and effectiveness of state institutions, and address some of the corruption and governance problems that stand in the way of effective cooperation. For regional cooperation and integration, a high priority is reform of police and border guard services to eliminate major barriers to investment, trade and transit. Since these security services are the everyday face of a government, abuses shape the perception that the government is illegitimate, and feed social discontent and political instability. More generally, broad anti-corruption programmes need to be pursued, led from the top levels of governments. These should target branches of the public service of particular concern for the victims of corruption—the agencies of state revenues, including the tax and customs agencies; the judiciary, courts and procurators; and the police and border guards.

Participate in regional cooperation and regional organizations as a way to reinforce economic reforms and political commitment to anti-corruption programmes and good governance, and to reap the economic and social benefits from integration, which in turn will provide the political momentum for further domestic reforms.

Participation in regional cooperation and membership in strong regional organizations, or aspiration to such membership, can provide a firm anchor for political, economic and governance reform, including reform in support of regional cooperation and integration.

For regional organizations:

Reinforce national reforms and promote regional cooperation and integration by establishing peer reviews of key areas of reform, with agreed benchmarking and conflict resolution mechanisms where appropriate.

Regional civil society networks could play a significant role in monitoring progress and providing feedback on key areas of national reform and regional cooperation

This reinforcement has been seen as a major factor in the European Union (EU) accession process, which demonstrated the discipline and commitment mechanism that membership in such a body offers, along with the rewards in terms of better economic performance and political stability. Of course, the peer pressure of a regional organization can also work in the opposite direction, if the members, in particular the stronger members, cooperate in preventing political and economic reforms.

Support regional civil society networks, including chambers of commerce and industry, associations of farmers and trade unions, and networks of NGOs dealing with key issues such as the environment, gender, human rights, disaster prevention, etc.

Such regional civil society networks could play a significant role in monitoring progress, and providing essential feedback on national reform and regional cooperation. They could also act as powerful reinforcements of reform momentum at the national level to the extent they reinforce national civil society networks.

For the international community:

Support national reforms towards accountable and transparent government, and against corruption, by offering analytically based advice, and technical and financial assistance.

Such support will have to be tailored based on government receptiveness and demand. Reforms of this kind are difficult under the best of circumstances, requiring time to take root and show effect. Progress in one area may be subverted by the lack of progress in others. So patience and a measure of humility are needed on the side of the external partners.

Help develop regional cooperation among governments and support regional institutions in devising region-wide programmes at the national and community level, including targeted programmes of conflict resolution, border management and development of civil society networks.

Progress in these areas will contribute directly and indirectly to better human development and human security. To be effective, however, the international community—encompassing the immediate regional neighbours, bilateral partners and donors, and the multilateral agencies—must not only have common objectives, but also work in tandem. This is a difficult challenge in the context of geopolitical rivalries and deep differences in

political systems and perceptions among Central Asia's various international partners.

Regional cooperation in Central Asia in a broader international framework

Central Asia is heavily dependent on its immediate neighbours and the international community for access to the rest of the world, for security, and for support for its economic and social development. In turn, Central Asia's neighbours and other key international partners share a common interest in seeing Central Asia develop into a stable, prosperous region, in which countries and communities live peacefully alongside each other, respect their common borders, and maximize the gains from cooperation and integration for the benefit of themselves and the rest of the world. This shared interest is grounded on the negative side in the fear of weak or failed states providing havens for terrorists, traffickers of drugs and humans, criminals and despots. On the positive side, it is grounded in the wish to see secure access to the region's ample energy resources; to protect the region's agricultural, water and environmental base, which has global significance; to provide for secure transit from east to west and north to south across the increasingly integrating Eurasian super-continent; and to help reverse the poverty and deprivation that have gripped the people of Central Asia following their independence.

In the early years after independence, Central Asia's neighbours and the international community paid scant attention to the region. This changed after the terrorist attacks on the United States on 11 September 2001. With its proximity to Afghanistan, its exposure to terrorist threats, and as a staging site for military action against the Taliban, Central Asia was thrust under the spotlight of international attention. This was reinforced by Russia's re-emerging interest and China's newly found interest in their Central Asian neighbours.

External engagement has varied widely since then, with the neighbours involved mostly in assuring mutual access to energy resources and markets, and in dealing with shared security threats from terrorism and drugs. International donors have focused on assisting with a broader agenda of transition reforms, the building of market institutions, and the provision of social and physical infrastructure. The EU and the United States in particular have been engaged in support for regional security-related initiatives, including the fight against drug trafficking. The recent commitment by China of a \$900 million financial package of support for economic

development in Central Asia also shows that some of the neighbours may well become increasingly engaged as donors.

However, the ability and willingness of the international community to influence the events in Central Asia have been limited. While their involvement has helped the economic and social revival of the region, this was ultimately due more to the economic upswings in China and Russia, to the energy and raw materials price and export boom, and to the built-in forces of recovery after the severe recession of the 1990s. More importantly, it does not appear that enough has been done by the neighbours and the international community to turn around the weak government structures and poor governance of most of the Central Asian countries. International support has been too little and too diffuse. It has had too limited leverage in a context where the leaders and elites of Central Asia have shown scant interest in, or indeed outright resistance to, improved governance and serious political reforms, and where the immediate neighbours similarly lack interest in changing the quality of governance in the region.

External partners face five main challenges today. First, there is the scale of engagement. Shortfalls are currently expected in the attainment of the MDGs, especially for the poorer countries. There are great needs for improvement in the regional transport, water and energy infrastructure, and to control the many threats to human security. Substantial financial support from the neighbours and the international community, especially for the poorer countries, will be essential for working on these issues. In particular, countries pursuing systematic and credible economic reforms and willing to actively support regional cooperation and integration deserve increased support over the limited levels currently provided.

The second challenge relates to the focus of external engagement in terms of the choice between regional initiatives and nationally focused programmes. While donors have taken more of a regional perspective in recent years, support for regional cooperation and regional integration has not yet been sufficient.

A third challenge relates to how donors can support countries in improving the quality of governance, given that poor governance obstructs not only effective national policy-making and implementation, but also regional cooperation and integration. While some bilateral and multilateral donors have provided assistance for strengthening good governance, overall the neighbours have not shown much interest in this issue, nor have the international donors devoted much of their diplomatic and financial resources

Central Asia's neighbours and other key international partners share a common interest in seeing Central Asia develop into a stable, prosperous region

Countries pursuing systematic and credible economic reforms and willing to actively support regional cooperation and integration deserve increased support

The final challenge is that of assuring strong and effective regional organizations in Central Asia that can develop and carry forward a regional cooperation and integration agenda that truly supports human development and human security

to hastening the transition to democracy and improving governance structures. It is also clear that neighbours and donors are constrained in their willingness and their ability to influence the national leadership in Central Asia countries.

The fourth challenge relates to the coordination of regional assistance programmes. There are many examples of effective cooperation among individual donors on particular projects, and the multi-lateral institutions have come together for regular consultations under CAREC. However, much of this cooperation remains ad hoc. Coordination could be organized more systematically at the sectoral or thematic level in an overall framework of regional cooperation, using one of the existing regional organizations.

The final challenge is that of assuring strong and effective regional organizations in Central Asia that can develop and carry forward a regional cooperation and integration agenda that truly supports human development and human security. CACO and the SCO have emerged as the principal regional organizations, and while they have advanced in their ability to address regional issues, there remains a need to clarify and align their mandates to avoid duplication and confusion. Further institutional strengthening and closer cooperation between CACO, the SCO and the international donor community, drawing especially on the support of CAREC, would be an additional agenda.

Recommendations

Our recommendations respond to the five challenges listed above.

International partners and neighbours should maintain, and if possible expand, their engagement, including their financial assistance, in supporting the human development and human security of people in Central Asia.

All partners should expand their support for regional cooperation and integration as part of explicit regional strategies to assist the countries of Central Asia, their governments, their private sectors and their civil society to promote the improvement of regional social and physical infrastructure, policy reforms that permit better integration and responses to common threats, and regional communication and knowledge networks.

All partners should assist Central Asian countries in improving their institutions and policies for good governance and reduced corruption, including through the increased

transparency and accountability of state institutions.

All partners should work together and with the authorities in Central Asia to improve the coordination of their assistance programmes. One way to do this would be to strengthen the role of CAREC as a coordination mechanism in support of the key regional organizations, CACO and the SCO.

The members of CACO and the SCO should consider clarifying, streamlining and in certain areas expanding their currently overlapping mandates. They should also consider strengthening the institutional infrastructure, and perhaps align their members and countries in observer status to assure that all relevant regional players are represented.

A key objective of this report is to promote regional cooperation and integration in Central Asia based on the recognition of the benefits from cooperation, on growing mutual trust across borders and on implementation of some of the report's recommendations. A UN Special Envoy and Representative of the UN Secretary-General can help achieve this goal through high-level dialogue with all partners in the region. To be effective, the Special Envoy would have to enjoy a high level of credibility in the Central Asian countries as well as the respect of the broader international community. Therefore our final recommendation is:

Appoint a high-level UN Special Envoy and Representative of the UN Secretary-General for Central Asia with the mandate to follow up on the key recommendations of this report in high-level dialogue with national authorities, regional institutions and the broader international community.

Summary of overall findings and implications

This report draws together evidence on how people in Central Asia are affected by the lack of regional cooperation and integration, on the benefits from cooperation, and on what is already being done to promote cooperation and the lessons learned. Where possible, we have tried to quantify the impacts, in terms of the economic losses and gains, and the number of people involved. For many issues, it is analytically difficult or impossible to make these estimates, partly because little analytical work has been done on Central Asia. But we have been able to glean some insights.

These start with the fact that the number of people affected by regional threats and risks is large. Secondly, in terms of gains from cooperation and losses from non-cooperation, the greatest measured aggregate economic benefits come from the reduction in trade costs, and the most profound losses from civil war. Important gains can also be reaped from improvements in water use policy and control of flooding, and from negotiating better cotton prices in international trade forums. Some of the economic costs the region faces are very steep, including for HIV/AIDS treatment and from natural disasters.

Regional cooperation can help limit these costs and increase the benefits, although not all risks, costs and benefits are evenly spread across countries. Generally, small (and in this case, poor) countries tend to benefit more from regional cooperation than large countries, especially in relation to their GDP. This helps explain why small countries such as Kyrgyzstan and Tajikistan are especially interested in regional cooperation and integration, while the larger countries tend to focus more on national and regional security. Some countries are more prone to natural disaster risks, while the prospect of violence and civil war may not loom equally everywhere.

The task still remains of measuring the benefits of regional cooperation that would come, for example, from fostering a better regional investment climate, developing the region's energy resources, better managing regional environmental assets and risks, or collaborating on education and knowledge sharing. However, hazarding a guess at how much higher the regional GDP could be after 10 years with a comprehensive approach to regional cooperation and integration, compared with the status quo of limited efforts, we have concluded that it could soar by between 50 per cent and 100 per cent. In the smaller countries, the increase would likely be at the higher end of the range, in the larger countries at the lower end. These are likely to be conservative numbers—by considering major risks averted (such as civil wars and natural disasters), or the development of a highly dynamic regional economy that is fully integrated with its neighbours and the world economy, the cumulative and compounded gains from cooperation could be even greater.

Our estimates also show that the benefits from regional cooperation are likely to be distributed in a way that the poor benefit on average more than the better off. But this fact by itself is not likely to translate into political commitment for domestic reforms or strong regional cooperation. The leading political and economic interests in Central Asia are more likely to align themselves

with the better-off elites, and those who control the flow of legal and illegal rents that currently are so pervasive in Central Asia. The political push for change, open borders and regional cooperation will likely have to come either from the top leadership, or from the enlightened self-interest of the elites as they recognize that in the longer term, they will also benefit substantially from a more competitive, vibrant and rapidly growing regional economy, one based on integration and cooperation. The drive for change could also come from those who feel most oppressed by the closed borders and corrupt officials—the people in the border communities, who, according to surveys, are the most negatively affected, and most prone to turn to radical and potentially violent responses.

A special area for cooperation is national and regional security—impetus on this issue has been gathering recently in Central Asia. From the perspective of building links and developing trust, this is a good thing. But there are risks as well when governments perceive their countries' stability and their own survival threatened not just by radical and terrorist forces, but by the growth of civil society and political opposition. Following the 'color' revolutions in Georgia and Ukraine in 2004 and the political events in Kyrgyzstan and Uzbekistan in the first half of 2005, governments have clamped down on these perceived and real political threats. While this may help maintain short-term stability, it will not help to build the kind of transparent, accountable and honest government structures that are essential in the longer term for a stable, peaceful, integrated and cooperative region.

In this report, we conclude that the most likely trajectory in terms of cooperation and regional integration in Central Asia over the coming years could follow one of three possibilities: a *status quo* scenario, which perpetuates the current relatively low-key approaches; a *cluster* scenario, where some countries in the region cooperate and integrate, but others more or less isolate themselves from their neighbours; and a scenario of *proactive cooperation*, with much more open borders, stronger regional institutions, and a broad-gauged scope of cooperation that is also intensive in some areas.

The *status quo* has high costs of forgone benefits and risks, which appear to be appreciated at least by some of the countries in the region. Indeed, extrapolating from the growing cooperation among Kazakhstan, Kyrgyzstan and Tajikistan, we conclude that the *cluster* scenario is the most likely to develop in the near term. If Uzbekistan and especially Turkmenistan remain

on a more isolationist trajectory, they risk being left behind by the other three in terms of economic growth and human development. This could lead to more economic, social and political instability for these countries; but—because of the demonstrated success of the integration process for the other countries—it could also convince the laggards to join their neighbours, thus spurring momentum for the proactive cooperation scenario.

Considering the great benefits that Central Asia can derive from greater cooperation and integration, the following eight overall recommendations reflect the key messages of this report for all partners in striving for human development and human security for the people in the region.

Overall recommendations

- Focus on regional cooperation in Central Asia with the overarching goal of creating ‘borders with a human face’.
- Promote regional cooperation especially in trade and transit, water and energy management, and disaster preparedness.
- But also proceed in other areas as far as possible, including environmental protection, migration, education, health, anti-drug trafficking and regional security.
- Promote domestic policy and good governance reforms as essential complements to regional cooperation in achieving the goals of human development and human security, with regional benchmarking against the MDGs.
- Aim for maximum benefit to the people in Central Asia by having all countries participate in regional cooperation and national reforms. If

some countries do not participate, the others should push ahead and cooperate with each other.

- Encourage and allow all actors (government, business, academia, civil society and individual people) to travel, work and network across borders.
- Streamline and strengthen key regional institutions with clear and effective mandates to support regional cooperation across the spectrum of relevant cross-border issues.
- Central Asia’s neighbours and the international community should do more to encourage regional cooperation and integration in a mutually supportive and coordinated manner.

Today, the prize of successful regional cooperation and integration is huge: The nearly 60 million people of Central Asia are too many and too precious to be left isolated, landlocked and impoverished. The role of Central Asia at the core of the Eurasian continent is too significant and the resources—human, energy and environment—too important for the world to neglect them.

The time is now for the leadership of the region to open up their countries politically and economically. The time is also now for big neighbours and the wider international community to offer Central Asia the kind of anchor that the EU has given to its neighbours in providing access to markets, finance and knowledge, and in bolstering expectations of good governance and respect for human rights. Under these conditions, Central Asian countries, individually and cooperating in regional unison and mutual support, will be prepared to achieve the levels of human development and human security that the people of the region deserve.

Chapter 1

Introduction—framing the issues

**“Central Asian republics need to unite to survive.
Regional unity must be a national concern of all Central Asian
states.”**

—*Chingis Aitmatov*¹

With the rise of the Soviet Union, Central Asia became integrated into the Soviet command economy, but remained geographically and economically distant from the core of the Soviet empire

Since the late 1990s human development and human security have suffered greatly

One of the biggest common challenges is that of regional cooperation

Central Asia²—a pivotal region in Eurasia

For centuries before modern times, the Eurasian continent stretched as one geographic and economic entity from the Pacific to the Atlantic, and from the Arctic seas to the tip of the Indian subcontinent. Transport, communication and trade were difficult and hazardous across this vast space. Always costly and time consuming, they were impeded by natural obstacles and shifting borders, and interrupted by wars. But they did connect distant peoples, most notably along the famous Silk Road from China to Europe. At the geographic core of Eurasia, Central Asia was a pivotal place. Its oases served as way stations along the trading routes. Its empires were birthplaces of conquerors or prizes for marauding armies. Its great cities became sources of commercial and scientific advancement, and its holy shrines drew pilgrims from across the Islamic world.

By the 19th century, however, the development of efficient sea transport, the decline of the Central Asian and Chinese empires, and the rise of colonial competition between Tsarist Russia and Great Britain had cast Central Asia's transcontinental transport and trading routes into oblivion, even as the great powers of that era sought to dominate the region. With the rise of the Soviet Union, Central Asia became integrated into the Soviet command economy, but remained geographically and economically distant from the core of the Soviet empire. It was largely cut off from the rest of the world, including from its immediate neighbours and historic trading partners to the south (Afghanistan, Iran and the South Asian subcontinent) and to the east (China and Mongolia). As a result of these historic developments, accompanied by the rise of the Iron Curtain in Central Europe and the divisive forces of the Cold War, the great Eurasian continental space was politically and economically pulled apart.

When the Soviet Union collapsed in 1991 under the burden of the many political and economic problems created by the Soviet system, the impact on the five Central Asian republics—Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan—was dramatic. Economic activity dropped precipitously. New borders and the end of the command economy disrupted Soviet trade, transport and financial flows. Skilled Russian labourers, along with some other ethnic minorities, left in large numbers. Investments and traditional inter-republican cooperation in key sectors, especially water and energy, lapsed, even as the new states faced great problems in joining the world economy due to their landlocked location far from international markets. Some confronted civil

war and security challenges, and in general there was a dramatic increase in poverty and a severe reduction in social services and social protection. In the midst of all these difficulties, each country also had to forge a new national identity and establish government institutions. Market reforms had to be introduced in most cases by political and administrative cadres carried over from the Soviet republican administrations.

Since the late 1990s, like most of the countries of the former Soviet Union, the Central Asian republics have benefited from an economic recovery, but in much of the region, incomes remain below those of 1990. Human development and human security have suffered greatly, with poverty and inequality much higher than before the break up of the Soviet Union. Governance remains generally weak, and social services and protection are fragile. Many common challenges related to economic, institutional and political reform remain, even as differences among the countries are becoming increasingly evident.

One of the biggest common challenges is that of regional cooperation. The five Central Asian landlocked countries will not flourish as long as they impede the cross-border movement of people, goods and knowledge, among themselves as well as with their neighbours and the rest of the world. Cooperation does not mean recreating the centrally planned integration of Soviet times. Instead, it implies fostering the conditions that allow people and markets to work across borders, through trade and investment, linked infrastructure, shared water and energy, common environmental and health protection, and a free flow of ideas and experiences.

Cooperation is particularly critical in the wake of the disintegration of the Soviet empire, which opened a new, historic opportunity for the re-integration of the Eurasian continent. The great continental powers—China, India, Russia and the European Union (EU)—are now no longer separated by sealed and hostile borders. There is new hope for a peaceful Afghanistan serving as a bridge between North and South Asia. Regional economic and political institutions are emerging as focal points for regional cooperation. And modern means of communications—including air transport, telecommunications and the Internet—are shrinking overland distances both in terms of cost and speed.³

Situated at the core of this potentially integrated continental economic space (see Figure 1.1), Central Asia has the opportunity to once again

become a hub for transcontinental links. However, the Central Asian countries will need to cooperate on creating the conditions allowing the region to flourish as a peaceful and prosperous area that supports the integration of the Eurasian continental economy, and attracts the investment and expertise needed to build on the region's natural and human resource base. Only if the republics have open borders will they return to their role as an integral part of Eurasia, and attain economic prosperity, social progress, human security and political stability.

By cooperating and integrating their economies, and by lowering the costs of transport and transit, the Central Asian states can create larger markets for production, trade and investment, and gain better access to neighbouring and international markets. Cooperation and integration also can serve as a commitment mechanism for governments to reform their economic policies and political systems. Cooperation would facilitate the provision of 'regional public goods' (water, energy, etc.) and the prevention of 'regional public bads' (natural disasters, the drug trade and crime);⁴ reduce the risk of cross-border conflicts; and strengthen the collective bargaining power of the countries of the region in international forums and supra-regional negotiations.

Central Asia still faces a number of political obstacles to cooperation and integration, however. It was natural that in the early years after

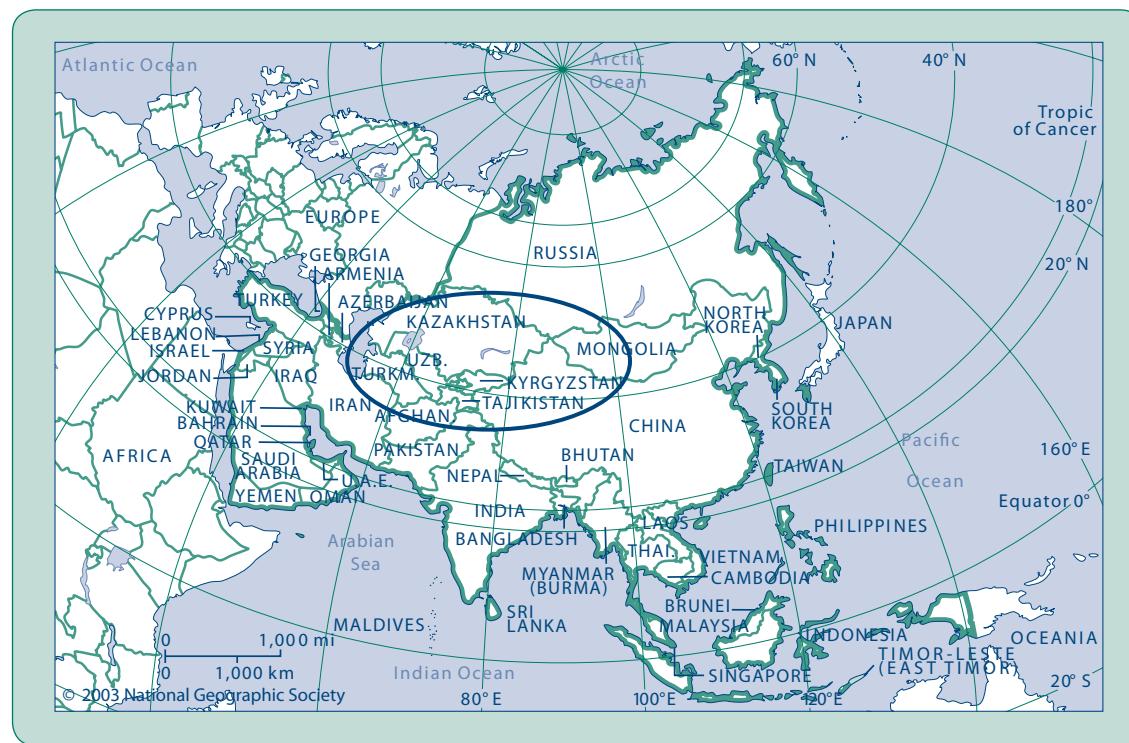
the disintegration of the Soviet Union the leaders of the new republics focused mostly on nation-building and on the painful transition process to a market-based economic system. Accordingly, they had only limited interest and capacity to deal with broader issues. There was also a strong resistance to giving up any degree of newly won national sovereignty. A sense of competition and distrust persisted among the countries' leaders, reinforced by the notion that international and regional economic and political relations are strictly a 'zero-sum game'—whatever one country gains must entail a loss to another.

Despite these obstacles, up until the outbreak of political and social unrest in Kyrgyzstan in March 2005 and in Uzbekistan in May 2005, most of the leaders of the Central Asian republics appeared to have become increasingly ready to support closer cooperation, both on a bilateral basis and in the context of regional institutions that also involve China and Russia. In addition, the broader international setting had become more supportive. During the 1990s, little international attention had been devoted to Central Asia, as the focus was on the rapid recovery of Central Europe, the civil wars and reconstruction in the Balkans, and the fitful transition of Russia. This changed after the terrorist attacks of September 11, 2001. Central Asia, along with Afghanistan, was thrust into the limelight of international attention as a region of immediate geopolitical significance

Central Asia still faces a number of political obstacles to cooperation and integration

Central Asia: the core of Eurasia

Figure 1.1



Source: National Geographic Society

There is a risk that governments in the region will focus mainly on the short-term goal of maintaining national political stability and cohesion, rather than on more intensive cooperation with each other

and potential long-term risks. New interest grew in its central location at the intercept of Eurasian East-West and North-South political fault lines, its great natural resource base (especially energy), its serious economic and social difficulties, and its apparent potential for political instability. Major neighbours, especially China and Russia, along with multilateral and bilateral donors realized that improved regional cooperation would be critical for stability and economic growth.

As a result of the recent unrest in Kyrgyzstan and Uzbekistan, however, there is now a risk that governments in the region will focus once again mainly on the principal short-term goal of maintaining national political stability and cohesion, rather than on more intensive cooperation with each other. There is also a growing risk that the neighbours and international partners will compete with each other in positioning themselves in the region, rather than cooperate with each other in helping the countries of Central Asia. The purpose of this report is to demonstrate that Central Asian countries and the international community need to cooperate if the people of the region are to achieve lasting human development and human security.

The challenges and opportunities of regional cooperation and integration

This report assesses the potential impact of economic cooperation and integration on human development and human security in Central Asia against the backdrop of the collapse of the former Soviet Union. It also considers the new opportunities created by the recent recovery of the Central Asian economies along with that of Russia, by the rapid economic development and increasingly outward orientation of China, and by the opening up of Afghanistan. But first, a number of practical issues arise: How should regional boundaries be defined? What forms of regional cooperation and integration should Central Asia aim for? What are the main regional linkages to consider?

Defining regional boundaries

Contemporary boundaries of the republics were set in Soviet days often without regard to any geographic, economic or ethnic features that might naturally separate them

Defining regions and regional boundaries involves some difficult choices. For this report, we have chosen the five newly independent Central Asian states of the former Soviet Union as the area of principal focus. The reasons are straightforward: With a common political and economic history, these countries are also geographically contiguous, and they have been linked for centuries by strong ethnic, cultural and linguistic ties.⁵ How-

ever, it is also important to note that the contemporary boundaries of the republics were set in Soviet days often without regard to any geographic, economic or ethnic features that might naturally separate them.

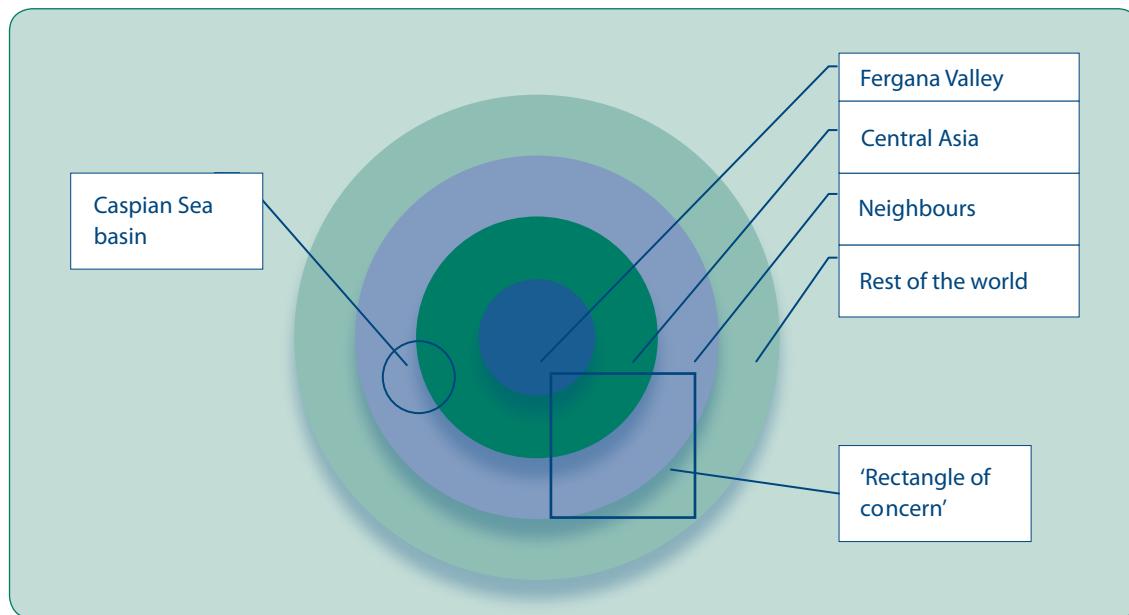
We could have chosen other regional boundaries. For example, since the borders between the Central Asian republics and their neighbours are now much more porous and should become more so over time, one could define the Central Asian region in a broader way to include the geographically, ethnically and (potentially) economically linked regions of neighbouring countries. Among these are Western China with its Turkic Uighur population and its links of water resources and trade opportunities; Northern Afghanistan with its ethnic, water resource and trade links; and Azerbaijan with its Turkic ethnic and Islamic religious background, close historical connections, and energy and environmental links across the Caspian Sea. But Western China's principal political and economic ties are with China, Northern Afghanistan's long-term future is likely to continue to lie with the rest of Afghanistan, and Azerbaijan's actual and potential regional ties are mainly with the countries of the Caspian Sea basin and the South Caucasus region.

At the same time, within the Central Asian region defined by the republics, some sub-regional linkages are stronger than others—for example, the cross-border linkages within the Fergana Valley have traditionally been very close. In contrast, high mountain ranges divide the territory of Tajikistan into smaller sub-regions that have traditionally had stronger economic and ethnic ties with neighbouring countries in Central Asia than with each other. And it can be argued that Kazakhstan's northern and western regions are more oriented towards Russia and China than their Central Asian neighbours.

To reflect these natural tensions in the definition of regional concepts, this report starts with the regional unit of the Central Asian republics as the primary focus, but we will consider other regional relations as appropriate (see Figure 1.2). For some purposes, we will deal with sub-regions within Central Asia (e.g., the Fergana Valley). For others, relations with principal neighbours are essential, especially with Afghanistan, China, Iran and Russia. And for others yet, and especially for understanding the broader geopolitical context within which the development of Central Asia is taking place, relations with the rest of the world—with the EU and the United States, as well as with India, Pakistan and Turkey—will be critical. Finally, for some specific issues, other regional concepts may be important. For example, the Caspian Sea basin

Regional groupings used in this report

Figure 1.2



is relevant for gas and oil resource management in Kazakhstan and Turkmenistan. Or the so-called ‘rectangle of concern’—encompassing much of the Fergana Valley, Afghanistan, Western China, Northern Pakistan and parts of Tajikistan—is significant in focusing on those interconnected areas that are most at risk of severe poverty and conflict in the wider Central Asian region.⁶

Choosing an approach

We have so far used the terms cooperation and integration together. It is worth clarifying what we mean by these terms. Integration can refer to two interrelated concepts—the cross-border integration of economic and social activities, and the cross-border integration of institutions. High integration of economic and social activities usually depends on the existence of highly integrated institutions that help to regulate and facilitate cross-border links.

Cooperation, in contrast, refers to a more informal interaction among countries and a relatively low degree of institutional integration generally associated with more limited integration of activities. Cooperation usually involves agreements among partners that are less binding, and hence less predictable and secure, but they also require fewer sacrifices in terms of giving up national sovereignty and freedom of national action.

Both cooperation and integration refer to more than governmental activities and institutions. In a market economy, private actors—firms, traders, civil society groups, academic institutions, individual people—must interact and cooperate

effectively across borders. Governments should aim to facilitate this process.

Are there examples of regional integration and cooperation that Central Asia could emulate? Selecting the right benchmark is important to ensuring realistic expectations that will not be disappointed by predictable shortfalls in implementation.

The EU is often cited as an important example of successful regional integration, one that Central Asia could follow. After World War II, Western Europe had a strong political impetus for cooperation under the joint leadership of the two largest economies, France and Germany. It faced a perceived common external threat of communism, and had the United States as a protector and patron. Different factors are at work in Central Asia, however, so the relevance of the EU as a model is limited at best (see Box 1.1).

The recent experiences with regional integration among developing countries may be more relevant. Since 1947, three waves of regional cooperation have taken place.⁷ Following the example of the European Economic Community, many developing countries joined regional customs unions during the 1960s. Most of these effectively disappeared during the 1970s, since the partners were generally not ready to give up lower-cost and higher-quality imports from outside the regional groupings. During the 1980s and early 1990s, the continued expansion and deepening of the EU and the creation of the North American Free Trade Agreement spawned another round of initiatives, including the Mercosur in Latin America and a number

Both cooperation and integration refer to more than governmental activities and institutions

Can Central Asia follow the path of European integration?

The EU started as a free-trade area and gradually developed into a customs union, then a fully integrated common market and finally a currency union over a period spanning more than 50 years. European integration has evolved over many decades, adapting and developing to accommodate changing economic and geopolitical environments.

There are many differences between Europe 50 years ago, when the first steps towards European integration were taken, and Central Asia today. Consequently, the EU experience cannot be transferred directly. However, the EU path towards integration highlights a number of important success factors. First, European countries had two compelling common objectives: reconstruction of the economy after World War II, and the promotion of peace and prosperity on the basis of shared democratic and liberal economic values. A second important factor was that these common objectives were strongly supported by the political commitment and leadership of two key players: France and Germany. Third, post-war economic conditions were favourable, including rapid economic growth and deepening commercial ties. Finally, European integration stemmed from a strategic choice made by countries with similar levels of development and economic systems.

In contrast, the absence of shared objectives, strong political commitment and a clear vision for long-term cooperation, and the great differences that have emerged in economic systems and aspirations across the countries of Central Asia, will likely make integration processes there very different from the EU experience. Europe's example suggests, however, that if gradual regional integration is the aim for Central Asia, the more developed and wealthy countries in the region need to take the lead and push for economic integration based on a common vision. It also implies that over time, countries need to be willing to adopt similar economic systems. In the case of Central Asia, this would mean that those countries lagging furthest behind in the transition to a market economy need to catch up with the leaders in reform. It further suggests that countries need to be willing to give up some degree of autonomy as integration progresses. And they need to go beyond declarations of intent to real actions.

Source: UNESCAP 2004b.

Cross-border cooperation means that the people and institutions in different countries have to develop the commitment and trust to work together

of regional organizations in Asia (the Economic Cooperation Organization or ECO, the South Asian Association for Regional Cooperation and the Association of South East Asian Nations). Again, for the same reasons as with the earlier customs unions, the impact of these agreements was limited. Following the Asian crisis of 1997/1998, a third round of regional initiatives started, mostly involving bilateral negotiations in Asia and with so far uncertain effects.

Perhaps the most relevant model for Central Asia is the Stability Pact for South-Eastern Europe, which was formed after the end of the Balkan wars in the late 1990s. The Stability Pact sought to overcome the legacy of regional conflict in South-Eastern Europe by creating important economic, social and cultural links. Key features included the strong leadership of the EU as a sponsor from the outside, the prospect of eventual EU membership for the countries involved, and the very large financial engagement by the international community in supporting the economic recovery of the region. While these conditions do not as such hold for Central Asia, the broad range of regional issues covered by the pact and the lean institutional approach, which stresses carefully focused agreements in specific areas and networking among many regional actors (including business and civil society organizations), are of special relevance (see Box 1.2).

In the case of Central Asia, there are at least two reasons to begin with cooperation and only in the long term perhaps aim for more

intensive institutional and economic integration. First, despite their historical connections, the countries today have different levels of economic development and political orientation, and different economic and institutional frameworks. These fuel diverging interests and needs that may drive countries in different directions.

Second, against the backdrop of the Soviet history of Central Asia, integration is still often approached with a sense of suspicion and the belief that it implies the loss of national independence and identity. Examples in other regions show that cooperation and integration do not mean that national borders need to disappear or that national sovereignty needs to be abandoned. For example, deep economic integration exists across the Atlantic between the European and US economies, and even more so across the Canadian-US border, although the countries concerned maintain their independent, sovereign national status. But cross-border cooperation means that the people and institutions in different countries have to develop the commitment and trust to work together, so as to minimize the frictions and barriers created by borders. Agreements among neighbouring countries that facilitate the movement of people, goods, capital and knowledge, and that harmonize sectoral and macroeconomic policies as well as economic institutions and civil and constitutional laws, do imply a need to share some elements of national sovereignty among the partners.

Box 1.2

The Stability Pact for South-Eastern Europe

The Stability Pact for South-Eastern Europe was signed in Cologne in June 1999. In the founding document, more than 40 partner countries and organizations agreed to support the countries of South-Eastern Europe “in their efforts to foster peace, democracy, respect for human rights and economic prosperity in order to achieve stability in the whole region”. The pact aims at stability through regional projects in the following areas:

- Local democracy and cross-border cooperation
- Media
- Energy and regional infrastructure
- Inter-regional trade/investment compact
- Fighting organized crime and corruption
- Migration and asylum/refugees

The Stability Pact is a political declaration of commitment and a framework agreement on international cooperation. It is not a new international organization, nor does it have any independent financial resources or programme implementing structures. The pact serves as an informal political organization and a forum for coordination of activities between countries of the region, donor countries, international financing institutions, and business and civil society groups. Organizationally, the Stability Pact relies on a special coordinator with a 30-member team. His/her most important task is to bring the participants’ political strategies in line with one another, to coordinate existing and new initiatives, and to help avoid unnecessary duplication of work.

In the pact’s founding document, the EU, which has assumed a leading role in supporting the pact, undertakes to draw South-Eastern Europe “closer to the perspective of full integration...into its structures”, including eventual full membership. This and the heavy financial engagement by the international community in assisting reconstruction, national reforms, and regional cooperation and integration have been key sources of progress on cooperation.

Source: Adapted from www.stabilitypact.org.

The Central Asian countries will ultimately have to define their own approach to regional cooperation and integration. Despite common threats to economic and social stability, they currently lack not only strong political motivation and leadership to deepen regional integration, but also concerted external financial support and the overriding incentive of an international political interest, such as membership in the EU. In advocating regional cooperation and integration efforts, these constraints need to be well understood.

What can be learned from the EU experience is that success has been achieved because of gradual and pragmatic sequencing that involved modest initial steps within a clear, long-term vision, and with cohesion among the lead participants. What can be learned from the Stability Pact is that strong external support and incentives combined with light and flexible institutional structures can bring countries together even after a recent history of conflict. Realistically, Central Asia will need to start at the lower end of integration of activities and institutions, focusing on cooperation across a broad range of possible issues, and picking those where early gains are feasible, where success will build trust, and from which more ambitious long-term regional integration goals can be established. Along the way, Central Asian countries, their neighbours and the international community can work together to rationalize

and strengthen regional institutions so they can serve as effective instruments in support of regional cooperation.

Choosing key regional links

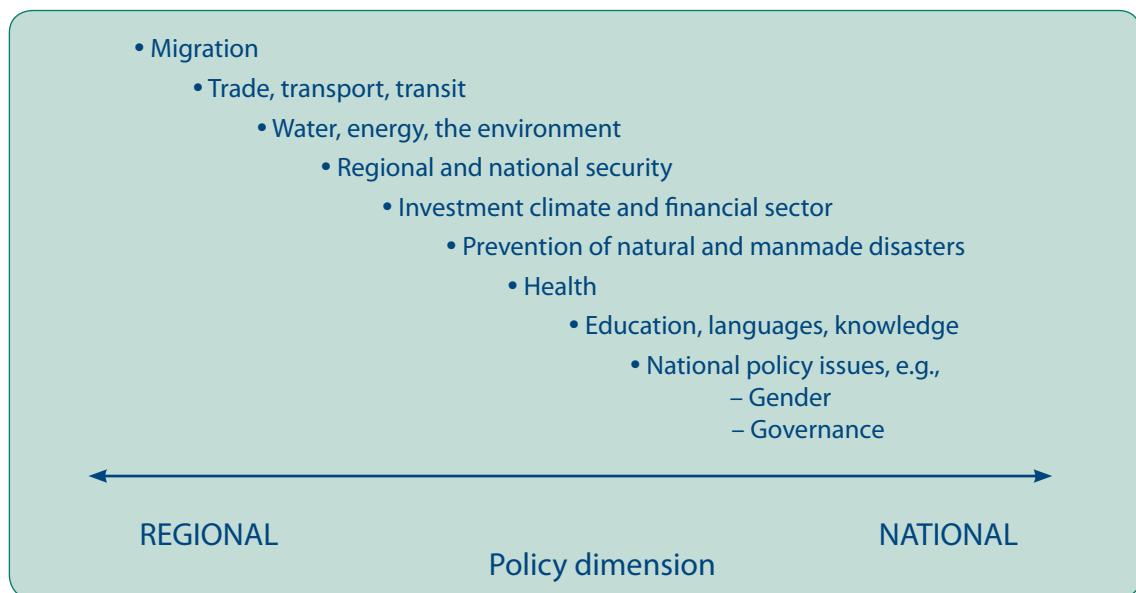
Regional cooperation and integration are often considered in terms of key economic links (especially trade, transport, transit and investment), natural resource links (water, energy and the environment), or national security links (including terrorism, arms and drug trafficking, and Islamic militancy).⁸ In fact, all three of these areas deserve consideration in Central Asia. Other important links include migration, education, health, natural disaster preparedness, gender and governance. Clearly, some of these areas involve stronger cross-border ties than others. However, even for those domestic policy issues without major cross-border impacts, regional cooperation can help reinforce domestic policy reform and institutional development. Figure 1.3 aligns the main policy areas according to their regional or national policy dimensions.

In this report, we have deliberately chosen a broad scope for analysing regional cooperation and integration by addressing all major regional linkages and selected national policy issues. There are several reasons behind this approach. First, all the areas considered are important in their own right in contributing to human

The Central Asian countries will ultimately have to define their own approach to regional cooperation and integration

Policy dimensions of the main regional issues

Figure 1.3



While there may be political and other obstacles to cooperation in some areas at any given time, cooperation may be feasible in others

development and human security. Second, there are important linkages between many of these areas, e.g., between trade barriers and concerns about security, between water and energy, and between trade competitiveness and educational achievements. Third, while there may be political and other obstacles to cooperation in some areas at any given time, cooperation may be feasible in others. This may yield important direct benefits, but also indirectly contribute to building networks, connections and trust that over time will help bring about broader-gauged cooperation in areas that lag behind. On the following pages, we will briefly assess each of these policy dimensions in terms of their significance for regional cooperation and integration. Subsequent chapters deal with these areas in greater depth.

Migration

During Soviet times, there was very limited freedom for people to relocate of their own will. Official policies moved people according to the dictates of central planning. After the Soviet Union disintegrated, significant numbers of skilled workers returned to their homelands. New migration patterns developed, mostly from the poorer Central Asian countries to Russia, but also more recently to Kazakhstan. In addition, the new borders between the Central Asian republics disrupted traditional ties of families and work in the border regions. A limited number of refugees, asylum seekers and stateless individuals were stranded unwillingly or unwittingly outside their traditional homes, with limited or no institutional or legal support or protection. Many

Many of the human development issues, problems and opportunities would be best addressed in a cooperative manner

of the human development issues, problems and opportunities that have resulted would be best addressed in a cooperative manner, among the Central Asian republics and with their neighbours, especially Russia.

Trade, transport and transit

Trade integration is one of the main areas of regional concern for Central Asia if it is to achieve competitiveness and integration with the world economy. Since all the Central Asian republics are landlocked,⁹ they depend on each other and their neighbours for access to markets. Trade integration requires sound trade policies and institutions, and good transport links and transit facilitation, both at and behind borders. These are best harmonized across the region.

Water, energy and the environment

Water, energy and the environment are inextricably connected in Central Asia—a region where each country is blessed with some rich natural resources and environmental assets, but desperately lacks others. Natural and man-made links across borders are of great significance. Disintegration of the water and energy systems of Central Asia threatens the economic future as well as the environmental and social balance of the region. The Aral Sea disaster, with its economic, social and environmental damage, is the best known case in point. Other issues include the decline in water, irrigation and energy systems; the growing risks from poor dam safety; and the community disruptions from artificially drawn borders (e.g., in the Fergana

Valley). The benefits of regional cooperation could be great in this sector, as could be the potential for regional conflict should countries choose not to cooperate with each other.

Regional and national security

In a world of growing interdependence, peace and national security depend on regional stability. The new security challenges and risks cannot be handled by any individual state alone. Regional efforts can contribute significantly to maintaining both national security and regional stability. Security cooperation can help build trust and mutual understanding while decreasing the likelihood of conflicts. It can also help reduce the incidence of international crime and illegal cross-border activities (including cross-border trafficking of people, especially women and children, as well as of drugs, arms and other contraband, and money laundering).

Investment climate and the financial sector

The investment climate and the financial sector in a country are key factors for determining the flow of domestic and foreign direct investment (FDI). If business conditions are poor, FDI stays away, and domestic investors tend to send their money abroad. However, investor perceptions are affected not only by what happens in a particular country, but also to a large extent by what happens in neighbouring countries. A well-developed financial sector and an efficient regional payments system contribute to a better business climate, more investment and more effective cross-border transactions. In support of this favourable environment, regional cooperation among governments can help ensure that well-functioning financial systems are in place. At the same time, regional networks of business and banking associations can represent important lobbies to help advance regional cooperation and integration.

Prevention of natural disasters and man-made threats

Central Asia is particularly vulnerable to natural disasters and man-made threats. Among the natural catastrophes, earthquakes and floods are major risks with potentially significant cross-border fallout. Among man-made threats, international and regional networks of the drug trade, crime and terrorism wreak havoc. All of these issues contribute to the range of tragedies affecting human development and human security for individuals, communities and at times entire countries. Regional initiatives are important to prepare for, control and respond to disasters and threats.

Health

HIV/AIDS, tuberculosis and other communicable diseases do not respect borders. All over the world, they spread along truck routes, follow the trails of drugs and criminal elements, and are carried by migrants, refugees and even international air travellers. This threat now extends to Central Asia. Given the cross-border risks and the limited resources each country can devote to these serious problems, cooperation in tracking the spread of diseases, developing joint strategies for combating them, and exchanging information on socially acceptable forms of prevention and treatment are important for an effective response.

Education, knowledge and language

The Soviet Union had a highly developed scientific establishment and a strong educational system that valued rigorous scientific training and research, even as it was poorly adapted to the requirements of a modern market economy. With the collapse of the Soviet Union, this system suffered throughout the entire Commonwealth of Independent States (CIS),¹⁰ especially in the remote and poor countries of Central Asia. While there remain networks of researchers that span the new republics' boundaries, the scope for knowledge development and sharing and for creating a modern knowledge society has narrowed. The Russian language, a long-established lingua franca, is still widely used in Central Asia, but it is increasingly giving way among members of the younger generation to national languages. Finding regional approaches and solutions for these issues will be an important part of managing the overall educational and knowledge management challenge.

National policy issues—governance, gender and others

There are many important national policy and institution-building issues that fundamentally affect human development and human security, but do not have direct cross-border impacts. Even in these areas, regional cooperation can be helpful for national policy and institutional reform by setting regional benchmarks for progress and in sharing lessons from experiences in implementing reforms. Gender and governance issues are just some of the areas where Central Asian countries face similar and serious problems, the extent and precise nature of which may vary. Other areas include community development, independent media, human rights and democratic reforms.

Regional cooperation and integration are objectives not in their own right, but contributions to human development and human security

Regional human development and human security challenges and opportunities

Ultimately, regional cooperation and integration are objectives not in their own right, but contributions to human development and human security. Understanding the impact of regional cooperation and integration on human development and human security in Central Asia starts with defining these terms. We must also outline how they relate to the UN Millennium Declaration—universally endorsed by UN member states, including those of Central Asia—as well as to the Millennium Development Goals (MDGs) that subsequently emerged.

Human development and human security

Human development is about creating an environment in which people can develop their full potential and lead productive, creative lives in accord with their needs and interests

Since UNDP published its first *Human Development Report* in 1990, the concept of human development has been central to much of the UN's development work. Human development recognizes that people are the true wealth of a country, and considers them both the ends and the means of development. To develop their human potential, people must be able to make choices about their lives in a way that helps them be productive, creative and satisfied. *Human Development Report 2001* explains succinctly:

"Human development...is about creating an environment in which people can develop their full potential and lead productive, creative lives in accord with their needs and interests. ... Fundamental to enlarging choices is building human capabilities—the range of things people can do or be in life. The most basic capabilities for human development are to lead long and healthy lives, to be knowledgeable, to have resources needed for a decent standard of living and to be able to participate in the life of the community. Without these, many choices simply are not available and many opportunities in life remain inaccessible."¹¹

UNDP's *Human Development Reports* have developed and annually published the human development index (HDI), which combines simple measures of life expectancy, educational achievement and income to construct an indicator of human development across countries (and increasingly also across areas within countries). The HDI has been criticized for leaving out essential elements of human development—most importantly, participation and political freedoms. But the HDI has

Human security aims at addressing today's security threats in an integrated, multidimensional and comprehensive way

nonetheless been a resilient and widely used measure of the differences among countries and regions in their achievement of key human development goals. We will use it in this report for comparing the relative standing and trends in human development across the countries of Central Asia. As appropriate, we will add other measures of economic and social progress, as well as of political freedoms and governance.

Starting with the UNDP *Human Development Report 1994*, the United Nations and, under its umbrella, the Commission on Human Security have promoted the concept of human security. Human security aims at addressing today's security threats in an integrated, multidimensional and comprehensive way. By focusing on individuals and communities, human security looks beyond the security of borders to the lives of people and communities inside and across those borders, and provides the analytical framework for developing policies that not only shield people from critical and pervasive threats but also empower them to take charge of their own lives. In the words of the commission, human security means:

"...to protect the vital core of all human lives in ways that enhance human freedoms and human fulfilment. Human security means protecting fundamental freedoms—freedoms that are the essence of life. It means protecting people from critical (severe) and pervasive (widespread) threats and situations. It means using processes that build on people's strengths and aspirations. It means creating political, social, environmental, economic, military and cultural systems that together give people the building blocks of survival, livelihood and dignity."¹²

By making no distinction between 'freedom from fear' and 'freedom from want', human security complements state security, enhances human rights and strengthens human development. In the words of the UN Secretary-General Kofi Annan:

"Human security in its broadest sense embraces far more than the absence of violent conflict. It encompasses human rights, good governance, access to education and health care, as well as ensuring that each individual has opportunities and choices to fulfil his or her own potential. Every step in this direction is also a step towards reducing poverty, achieving economic growth and preventing conflict. Freedom from want, freedom from fear and the freedom of future generations to inherit a healthy natural environment—are the interrelated building blocks of human and, therefore, national security."¹³

In its 2003 report *Human Security Now*, the commission paid special attention to 'downturns with security' in order to help protect poor individuals and communities against the negative impacts of economic downturns and political upheavals.¹⁴ The experience of the countries in the former Soviet Union shows how dramatic these can be, and how important are the social safety nets and other means to protect the poor. Fortunately, these countries are now experiencing a sustained recovery. But future reversals cannot be ruled out, whether as the result of natural disasters; mismanagement of the economy or natural resources; or conflicts, drugs, crime and terrorism. The challenges to human security are particularly severe in Central Asia, and regional cooperation is an essential ingredient for meeting them. This was highlighted in the Round Table on Transition and Human Security in Central Asia organized by the Commission on Human Security in Ashgabad, Turkmenistan in April 2002.¹⁵

The concepts of human development and human security are closely interrelated. For this report, we will consider both concepts jointly as encompassing the essential elements of a people-centred approach to development, peace and security: *widening the range of people's choices by offering them the freedom from want, while ensuring that people can also live in freedom from fear of losing their opportunities and capabilities.*

The Millennium Declaration and the Millennium Development Goals

The concepts of human development and human security are inherent in the objectives and goals set forth in the Millennium Declaration.¹⁶ The declaration, which was adopted by the UN Millennium Summit in September 2000, outlines human rights, peace, security, development and environmental concerns as a set of interconnected development objectives and integrates them into a global agenda.

While the Millennium Declaration provides the overall vision for action to achieve universal human development and human security, the MDGs offer a focused set of quantitative goals and targets for measuring and monitoring the world's success in achieving progress on key parameters. The complete MDG framework comprises eight goals, 18 targets and 48 indicators. Most of the targets are to be reached over a 25-year period from 1990 to 2015. The eight goals are:

- Goal 1: Eradicate extreme poverty and hunger
- Goal 2: Achieve universal primary education

- Goal 3: Promote gender equality and empower women
- Goal 4: Reduce child mortality
- Goal 5: Improve maternal health
- Goal 6: Combat HIV/AIDS, malaria and other diseases
- Goal 7: Ensure environmental sustainability
- Goal 8: Develop a global partnership for development

The MDGs provide a flexible framework within which countries can adapt the global goals to address their own national challenges. Each Central Asian country has already adopted specific targets and indicators reflecting their most crucial development issues. This has taken place through participatory processes involving different groups of society, government, academia, civil society and private businesses that have allowed citizens to identify both the needs and priorities of their countries and the regions within them. Given Central Asia's legacy of post-Soviet economic collapse, unfavourable geography and general low per capita gross domestic product (GDP), the MDGs are not only relevant but also present a useful tool for policy makers.¹⁷

Human development, human security and regional cooperation

The links among regional policy issues, the Millennium Declaration, the MDGs, and human development and human security are complex. Figure 1.4 shows schematically how the main areas of regional policy action can be mapped into the MDGs and the broader goals of the Millennium Declaration, which in turn underpin human development and human security.

For example, regional solutions to the problems related to water, energy and the environment, and joint action aimed at preventing natural threats contribute to resource conservation and thus to sustaining the environment, part of MDG 7. Regional efforts to support trade, improve transport infrastructure and transit conditions, develop the financial sector and improve the investment climate stimulate economic growth, which can in turn contribute to poverty eradication, the subject of MDG 1. Regional actions to prevent man-made threats (including narco-trafficking and international terrorism), improve governance, and increase regional and national security contribute to the objectives of the Millennium Declaration related to peace, security and disarmament.

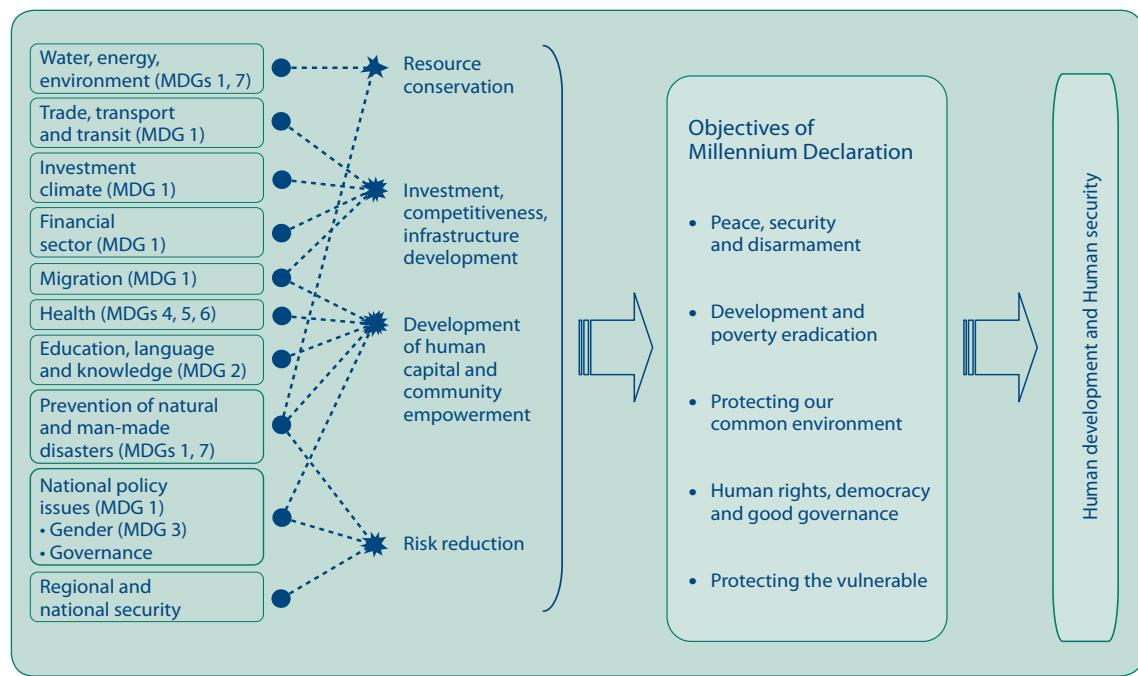
The significance of regional cooperation for the achievement of the MDGs is well summarized

The MDGs provide a flexible framework within which countries can adapt the global goals to address their own national challenges

Regional policy action can be mapped into the MDGs and the broader goals of the Millennium Declaration, which in turn underpin human development and human security

Links among regional policy issues, the Millennium Declaration, the MDGs, and human development and human security

Figure 1.4



in the UN Millennium Project's 2005 report, which provides a comprehensive overview of progress in reaching the MDGs and the remaining challenges.¹⁸ The report notes that meeting the goals depends on the provision of regional public goods, a point that is applicable worldwide, but applies with special urgency to the challenges facing Central Asia (see Box 1.3).

Political and institutional dimensions of regional cooperation and integration

From a purely economic and social perspective, the case for regional cooperation and integration in Central Asia may be clear. However, judging

Box 1.3

Regional public goods and the Millennium Development Goals

The UN Millennium Project's report summarizes the link between regional public goods and the MDGs as follows:

"Regional public goods are generally overlooked and underprovided in most parts of the developing world, despite their critical role in promoting development. A country's immediate neighbours tend to be among its most important trading partners. The economic ties can be strengthened through regional cooperation—critical for economic growth and poverty reduction when an economy is landlocked, a small island state, or dependent on neighbours for vital resources, such as food, water, or energy. Regional integration is even more important for countries with very small populations, which must rely on regional rather than national markets to enjoy economies of scale and scope in industry, public administration, and research and development. Further, the management of trans-boundary watersheds, desertification, and biodiversity can be addressed only through regional strategies integrated with national plans of action. And since many local conflicts have repercussions on entire regions or are driven by regional tensions, conflict management requires greater regional cooperation to detect conflicts before they erupt and to develop coordinated responses from neighbouring countries to end them."

The report recommends the provision of such regional goods as:

- Infrastructure for transport, energy and water management, including highways, telecommunication lines, cross-border power grids, oil and gas pipelines;
- Coordination mechanisms to manage trans-boundary environmental issues;
- Institutions to promote economic cooperation, including coordination and harmonization in trade policies and procedures; and
- Political cooperation mechanisms for regional dialogue and consensus building.

It further recommends that the provision of regional public goods be supported internationally and integrated into national MDG-based poverty reduction strategies.

Source: UN 2005b, pp. 223-224.

from past experiences in Central Asia and elsewhere, political constraints and institutional challenges often prevent cooperation from taking place. One often hears that a lack of political will is the cause for a lack of regional cooperation, even though the technocratic argument for it may be strong. But in fact, it is not a matter of ‘will’ as such, but of how political and economic interests are affected, and how they are mobilized through various institutions. Any regional strategy has to be grounded in a thorough understanding of what these interests are, and what institutional obstacles and opportunities could impede, or tip the balance towards, regional cooperative action.

The formation of interests and their intermediation through institutions is a complex process that is specific to countries, and can change at times rapidly, especially in a context like the transition experienced in Central Asia over the last 15 years. In terms of regional cooperation and integration, the key question is whether national politics and institutions will permit a course of action that can mediate the different competing interests, giving voice to those who benefit from cooperation and integration, and offering those who stand to lose a chance to argue their case and, where appropriate, receive some compensation for their loss or share in other ways in the aggregate benefits.

Take as an example the case of customs administration. Improvements in customs administration will benefit large numbers of exporters and importers as well as producers and consumers. If they can articulate their demands, for example through business chambers, shuttle trader associations, consumer unions, political parties and votes, they will be able to mobilize political support for reform. On the other hand, customs officials, who might lose their jobs or their ability to collect bribes, will tend to oppose customs reforms and will need some support in the form of retraining or higher official wages.

The most important interest groups include the business community; national and sub-national regional elites and clans; the intellectual elites; members of the public administration and national security services; different social, ethnic and religious groupings; diaspora and other migrant communities; and men and women throughout society who may be differently affected by the social and economic changes wrought by regional integration and cooperation. Relevant institutions include those related to national leadership, national and sub-national governmental structures, the parliament, the courts, civil society and community groups, the media, religious bodies, and informal or illegal organizations.

Like all other key national policy dimensions, regional cooperation needs to be grounded in political interests and political consensus to be effective, rather than being rooted in a purely technocratic rationale, although good technocratic analysis of the benefits and costs and of the winners and losers can help build a broad consensus. Real and lasting consensus can only be achieved with transparency, accountability and the rule of law, with freedom of speech, access to information and respect for human rights, and with a vibrant media, a responsible executive, a representative legislature and an independent judiciary.

National institutions and interests also interact with regional and international interests and institutions. These must be understood as well, including through a sense of how they relate to the interests and institutions of individual countries. A key point is that regional cooperation or integration will only happen if it is in the national interest of the countries concerned. But as we have seen elsewhere in the world—for example, in the case of the role of the EU in South-Eastern Europe—external actors can play a significant role in helping push forward the agenda of regional cooperation.

The regional policy of each particular state is, therefore, a result of the interaction of different interest groups, institutions, and other internal and external factors. As a consequence, national policies towards regional initiatives are often uneven, and words may not be matched by actions. The general experience of regional cooperation in Central Asia so far shows that actual outcomes often do not follow the political declarations made by leaders.

To understand the real policy perspectives of the countries of the region, we will try to assess in this report the differences between the Central Asian republics in their vision of regional cooperation and integration as a whole, and their attitudes towards particular areas. We will also consider the roles of prominent neighbours and the international community.

Any regional strategy has to be grounded in a thorough understanding of what institutional obstacles could impede regional cooperative action

Outline of the report

The report is organized in three parts:

Part I sets the stage for the subsequent analysis by framing the overarching issues in *Chapter 1* and by providing in *Chapter 2* the context for the Central Asian region and the human development and human security challenges it faces. *Chapter 2* also tracks the recent economic decline and recovery, and the associated changes in human

development indicators for the five Central Asian countries since 1989/1990. It demonstrates how a decade of disintegration and economic and social collapse deeply and severely affected many people and communities in terms of their human development and human security. The chapter evaluates broad reintegration trends and reviews initiatives to date to set up institutions in support of regional cooperation.

Part II explores key sectoral and thematic issues for regional cooperation and integration.

Chapter 3 deals with the interrelated cluster of issues in the areas of trade, transport and transit, as well as related behind-the-border policies for a supportive investment climate and effective financial sector. It examines the challenges and potential benefits for Central Asian countries from cooperating in these important areas.

Since water, energy and the region's natural environment are closely linked and provide an essential natural resource lifeline, the water-energy-environment nexus has been well studied over the last few years. *Chapter 4* will pull together this research, quantify the costs and benefits of cooperation, and provide explicit links to the broader issues of human development and human security.

Chapter 5 looks at natural disasters and man-made threats, and examines the risks they pose to human development and human security. The

natural disasters discussed include earthquakes and floods, and the man-made threats comprise the drug trade, crime and terrorism.

Chapter 6 addresses cross-border linkages in migration, education, health and gender policies, and explores opportunities for regional benchmarking, learning and networking. While these areas have generally received less attention in connection with regional cooperation, they may hold promise for early cooperation because they tend to be less visible and controversial.

Part III of the report deals with two sets of cross-cutting issues that will help shape regional cooperation and integration in Central Asia—political interests and institutional constraints in *Chapter 7*, and cooperation with neighbours and the international community in *Chapter 8*.

The report ends with a set of conclusions and recommendations. *Chapter 9* first draws together the various strands of analysis and an estimation of benefits, possible costs and risks of regional cooperation and integration. The chapter reviews alternative regional cooperation scenarios in light of the political and institutional realities in the region, among neighbours and in the international community. In conclusion, the chapter presents principal recommendations for regional cooperation and integration that will lead towards sustained progress on human development and human security in Central Asia.

Chapter 2

Central Asia and its challenges in a regional context

“All forum participants agree with the viewpoint that regional integration in Central Asia could become the locomotive of socio-economic development of the countries of the region. Integration is able to solve a majority of challenges and problems of the countries of Central Asia.”

—Bakhtiyor Ergashev, moderator of the Central Asia Gateway electronic forum, 18 January 2005¹

Today's five Central Asian republics incorporate people from different historical dynasties, khanates and clans that have come together in a rich mosaic

A brief history until 1990

For centuries, there have been three common themes in Central Asia's human development.² The first relates to the intensive contact and communication among people from many countries, cultures, languages and religions. Today's five Central Asian republics incorporate people from different historical dynasties, khanates and clans that have come together in a rich mosaic. The second theme is the region's historic economic interdependence. Central Asia lies at the centre of intersecting trade routes, and for centuries has supported and relied on the flow of goods and people. The third theme is cultural integration. Central Asia has been a locus for advanced study in religion, science and the arts. The flow of artisans, techniques and tools along

the Silk Road allowed the flourishing of arts and ideas in the ancient cities of Central Asia and spread their influence far beyond.

Bordering China, India, Russia, Europe and the Middle East, Central Asia has been a geographical and political hub around which nations have fought, traded and schemed. The region has had numerous names and identities. To the ancient Greeks it was Transoxiana, the region between the Amu Darya and Syr Darya rivers. In later centuries, it became Turkestan, 'the land inhabited by Turks'. In the 19th century, the Western world dubbed it the 'back of beyond', and it became the setting for Kipling's 'Great Game'. Today, to outsiders the history of the Central Asian region is primarily associated with the great Silk Road, which once

Box 2.1

The Silk Road

In 138 B.C., a young representative from the Han Emperor Wu-ti was sent on a mission to head west out beyond the Great Wall to find allies in the struggle against the marauding Huns. He returned 13 years later with news of his discovery that there were great numbers of people and nations much farther west that were interested in trade. The trade from East to West across the great super-continent of Eurasia was to continue almost unabated for the next 1,600 years. Named the 'Silk Road' by a 19th century Austrian geologist, the 'road' was more than a single route and much more than just silk was traded. From the gates of the Great Wall around the Taklamen desert, over the Tien Shian, across the great steppe, to the mouth of the Volga River and down to the Caspian Sea, the Road with its many branches was long, arduous, dangerous and, from historical records, immensely profitable.

The desire for each other's goods, treasures and ideas from Rome to China was a driving force behind the initial trade route. The cities of Rome and the west wanted the famed silk from the Chinese. The Chinese were especially interested in the horses of Central Asia and would trade their silk for the horses. But more than silk was carried from China to the west. Hopkirk states that the caravans "leaving China bore furs, ceramics, iron, lacquer, cinnamon bark and rhubarb, and bronze objects such as belt buckles, weapons and mirrors. East-bound caravans would carry corn, wine, oil, gold, iron, woolen and linen textiles, glass and asbestos."

The tribes and people of Central Asia were important intermediaries vital to the success of the trade routes. It was almost impossible for one caravan to cover the entire distance. A single good might cover the route having changed hands hundreds of times, crossed thousands of miles, and seen a myriad of languages and cultures. Cooperation between cities, cultures and people was an important component of the efficient movement of goods. The danger of bandits and robbers was a constant threat, but the numerous caravanserais established along the route provided a vital safe haven for the travelers. Old journals from travelers indicate that the trading centres were full of people from different cultures and speaking different languages, all interacting and working together. Of course, it also opened the door to the transmittal of disease, as in the case of the Great Plague of the mid-14th century.

Mutual dependence along the route required a tolerance of different languages, religions and customs. During the rule of the Mongolian empire, the Pax Mongolica allowed the flow of goods and ideas in relative safety from the Black Sea to Far East China. With the safety on the route increased, trade flourished and religions, cultures, languages, ideas and inventions were all passed along. Buddhism, Islam and Zoroastrianism spread, changing and morphing in various degrees as they were accepted and passed along by different cultures and tribes.

Historian Edward Allworth notes that the primary components of the Silk Road, the "pattern of trade, methods of transportation, location of trading centres and identity of goods remained essentially the same in 1865 as in the 9th and 10th centuries." The decline of the Silk Road in the early 17th century was caused by a series of concurrent events. The invention of faster ships greatly reduced the cost and time for sea travel. Land travel was dangerous, time consuming and expensive. Without any overarching government authority to enforce protection along the route, cooperation among ruling khanates fell apart and the role of the great intermediaries along the route was eliminated.

The Soviet system effectively shut off all trading routes to the neighbouring states and forced all trade and transport towards Moscow. As a result, Central Asia became isolated from economic, cultural and religious interaction with the rest of the world. The great transcontinental East-West link was broken until the demise of the Soviet Union.

Sources: Allworth 1967, Elisseff 1998 and Hopkirk 1980.

stretched from the edges of the Roman Empire to the gates of China (see Box 2.1).

Central Asia's modern history can perhaps best be traced from 651 A.D., when the Arabs invaded from the south, defeating a Turkic ruler at the city of Merv (in today's Turkmenistan). The conquerors rebuilt Merv, and it became an important centre for Islamic art and study. By 705, the cities of Bukhara and Samarkand were captured, destroyed and the people converted to Islam. Islam's strong tradition of study and learning, combined with the region's own cultural wealth, prompted artistic development and scholarly knowledge (see Box 2.2). As Islamic rulers supported trade and private enterprise and provided a unifying force, they encouraged the Silk Road's continued expansion.

Box 2.2

Bukhara: heart of ancient culture, arts and human development

The city of Bukhara, located in present day Uzbekistan, was for many centuries an important centre of religious and scientific learning and training with a large number of *madrassas* or religious schools throughout the city. It was the home of Al Bokhari (810-870), the Islamic scholar and philosopher who wrote the Hadith, the interpretation of the sayings of the Prophet. From 877 to 999, with their capital in Bukhara, the Persian Samanids placed Central Asia in the centre of the art, culture, learning and trade world. From Bukhara, the great medical canons of Abu Ali ibn Sina, known in the West as Avicenna, were written. Many ancient poets, among them Narashashi, Rudaki and Dakiki, lived in Bukhara.

Source: Hopkirk 1994.

In the early 13th century, Genghis Khan and his armies drawn from nomadic tribes in Mongolia destroyed Bukhara and many other famed cities in Central Asia that resisted the advance of his horsemen. Within 12 months, the Mongols had conquered all of Central Asia, swept through what today is Russia and reached as far as the edge of present day Western Europe. With the encouragement of trade during Genghis Khan's rule, as well as a tolerant attitude towards different religions and cultures, the Silk Road continued to flourish, resulting in the economic integration of Eurasia.

Power shifted back towards the sedentary tribes of Central Asia with the ascension of Timur (or Tamerlane), whose statue stands today in the heart of Uzbekistan. Timur was born near Samarkand in 1336. While claiming to be a descendant of Genghis Khan, he overthrew the remnants of the Mongolian empire, established

the Timurid dynasty and continued on to conquer land from Baghdad to Moscow. Under the artistic and intellectual leadership of his grandson and heir, Ulugh Beg, Samarkand and Bukhara became "the seat of all learning in the decorative arts, architecture, poetry, philosophy, painting and astronomy."³ In the 1500s, a regional tribe called the Uzbeks defeated the Timurid dynasty and overthrew Babur, Tamerlane's heir, and ultimately formed three separate khanates based in Khiva, Bukhara and Kokand.

At about this time, the Russians made their presence felt in the region after Ivan the Terrible captured Kazan in 1522 from the Tatars, descendants of the Mongol tribes. The Russian influence would continue to extend into Central Asia for the next 400 years. Under Peter the Great, the Russians moved into the Caucasus and began establishing forts and towns throughout northern Kazakhstan. Aside from a general push to the East, the desire for the cotton of Central Asia and the fur and land of Siberia drove Russian expansion. From the mid-1800s, Russian forces set out on outright military campaigns to take the cities of Central Asia. Tashkent fell into Russian hands in 1865 and Samarkand in 1868.

Under Soviet rule, Central Asia was firmly and fully integrated into the Soviet political and economic sphere, even as Communist collectivization and Stalinist terror brought severe famine and hardship to the region. World War II, while very painful in terms of Central Asian lives lost on European soil, in the end had a long-term positive economic impact for the region. Large-scale industrialization and modernization significantly advanced the region's economic development as Stalin forcibly relocated hundreds of factories and millions of workers into Central Asia, which was out of the path of the conflict. Subsequently, the population of Central Asia rapidly grew due to high birth rates and the often forced migration of Russians, Koreans, Germans and others.

Stalin's rule also left a legacy of inter-republican borders in the region drawn up by Moscow (see Box 2.3). Today, this legacy still affects the Central Asian republics and the relations between them. The centrally located, fertile and very densely populated Fergana Valley sub-region has been the most severely affected by the jigsaw puzzle-like course of the new national borders that cut back and forth across the valley (see Figure 2.1).

The region's primary contribution to the Soviet economy was producing 90 to 95 per cent of the Soviet Union's cotton. This highly labour-intensive product demands great quantities of water. Soviet engineers diverted the huge rivers of Central Asia,

With the encouragement of trade during Genghis Khan's rule the Silk Road continued to flourish, resulting in the economic integration of Eurasia

Under Soviet rule, Central Asia was firmly and fully integrated into the Soviet political and economic sphere

The Fergana Valley has been the most severely affected by the jigsaw puzzle-like course of the new national borders

The creation of borders and the potential for conflict

The creation of the borders and names of the current Central Asian states was led by Moscow under Stalin's direction for the purpose of separating ethnic groups to bar any move towards cohesion or independence, and to prevent any one ethnic group from existing as a unified republic.

In 1918, the Turkestan Autonomous Soviet Socialist Republic (TASSR) was created. From 1918 to 1924 this Republic included all of the Fergana valley as well as Eastern Pamir. In September of 1920 the Bukhar emir lost his power, and in 1921 the Soviet forces won in the Khivan khanate. The Bukhar National Soviet Republic (BNSR) and Khorezm National Soviet Republic (KhNSR) were founded on the territory of these two former protectorates of the Russian empire. In 1924, the two Soviet republics, Uzbek SSR and Turkmen SSR, were formed on the basis of the existing territorial formations (TASSR, BNSR and KhNSR). The Kara-Kirgiz autonomous republic, combining today's Kazakhstan and Kyrgyzstan, was also formed in 1924, as part of the Russian Soviet Federated Socialist Republic (RSFSR). The Kazakh and Kirgiz SSRs received their status as Soviet republics only in 1936. The Tajik autonomous SSR was also formed in 1924, as part of the Uzbek SSR until 1929, when it gained an independent SSR status. By 1936, all of the countries had become full republics within the USSR with almost identical borders to the present.

Previous external rulers had attempted to unite Central Asia's tribes or clans, but the Soviets initiated in effect a serious disintegration of the region by drawing boundaries through long-established cultures and ethnic groups. The drawing of these borders decades ago has significant repercussions even today as titular ethnic majority groups in each newly independent republic continue their efforts to define a common national identity, language and political unity for very heterogeneous populations, and in the process create barriers to the historic flows of trade and people in the region. The dispersion of ethnic groups across borders, some of which are still poorly demarcated and contested, the fragmentation of traditionally integrated economic, social and environmental sub-regions, and the existence of many enclaves of territories of one republic in the territories of neighbouring republics leaves much scope for disruption and conflict.

Sources: Based on Allworth 1967, with information provided by Muzaffar Olimov.

Map of the Fergana Valley

Figure 2.1



Source: Adapted from UN Office for the Coordination of Humanitarian Affairs, ReliefWeb, www.Reliefweb.int.

the Amu Darya and the Syr Darya, for irrigation of vast new cotton growing areas in what was previously desert. We examine the long-term environmental disasters that resulted from these decisions in chapter 4.

Despite the growth of industry in Central Asia, especially during World War II, the region's economy remained predominantly based on agriculture and natural resources, with relatively low productivity even by Soviet standards. Because of high transfers from the central Government and artificial price supports, Central Asia was able to maintain a higher level of development than its productivity would have supported, even as its standard of living indicators were the lowest in the Soviet Union.

Fallout from the Soviet break up⁴

The political and economic collapse of the Soviet Union between 1989 and 1991 was in many ways a historic event of great significance—unexpected, swift, socially and economically painful, and overall surprisingly peaceable. The transition had two key dimensions. The first was *systemic*, as the political and economic systems changed from dictatorships towards democracy, and from centrally planned to market economies. The second was *spatial*, involving the disintegration of a political and economic space. One of the most striking consequences was the sharp economic decline and the pervasively negative economic impact on most people's lives. The decline was much deeper and longer lasting in the former Soviet Union than in Central and South-East Europe. Many of the economic problems faced by the new republics were rooted in the inefficient and unsustainable policies and institutions of the communist system, which actually brought about the collapse of the Soviet Union. But these problems were aggravated by the disintegration of what had been a unified economic space with integrated economic and social infrastructure unimpeded by borders.

Despite some warnings of the consequences of economic disintegration, and despite some early efforts in the region to maintain orderly economic links among the new Central Asian republics, disintegration and economic collapse proceeded rapidly after the formal political dissolution of the Soviet Union in December 1991. The process went much beyond the immediate effects of systemic economic reform (macroeconomic stabilization, price liberalization, privatization, legal and regulatory reform and more generally the building of market institutions, etc.). Some key elements were:

- The integrated payments system and the non-cash inter-enterprise settlement system collapsed, and financial flows across the new borders dried up (especially once the unsustainable ruble zone collapsed and as hard-currency settlements were required across borders). More generally, inter-enterprise linkages broke down or at least suffered severely.
- Budgetary and investment subsidies were eliminated. Table 2.1 provides one set of estimates for Central Asian countries.
- Implicit price subsidies were reduced or eliminated, including for energy. According to some estimates, Russia's price subsidies to other countries and republics amounted to \$58 billion in 1990, of which \$40 billion went to Central Asia.
- Formal customs and trade barriers were introduced. In addition, informal trade and transit barriers became common. Some borders were closed for reasons related to conflict, security or misguided economic policies.
- Transport prices were raised, and transport services reoriented. A reduced frequency of trains and longer travel times were reported between Russia and other CIS republics. Air traffic collapsed from previously high levels.
- Integrated power grids (in the South Caucasus and Central Asia) and integrated water systems (especially in Central Asia) gradually

Disintegration and economic collapse proceeded rapidly after the formal political dissolution of the Soviet Union

Table 2.1

	Russian Central Bank financing, 1992 (as % of republican GDP)	Direct transfers from the central Soviet Union budget, 1989 (as % of GDP)	Financial transfers received by the Central Asian republics
Kazakhstan	25.5	9.3	
Kyrgyzstan	22.9	7.8	
Tajikistan	90.7	8.2	
Turkmenistan	53.3	9.0	
Uzbekistan	69.9	11.3	

Source: Aslund 2001.

The transition recession was most severe for the small, landlocked republics most dependent on external links and financial transfers, especially the countries of Central Asia

deteriorated, negatively affecting the quantity and quality of essential energy and water services for industry, irrigation and human consumption.

- There was an exodus of minorities, among them about three million Russians, many of them highly skilled, who returned to Russia from other CIS republics, especially from Central Asia. They faced, and caused, significant resettlement problems in an economically depressed Russia.
- The central Soviet administration collapsed, and new republican administrations had to be created. Tight control over internal security evaporated. War and civil unrest broke out in Tajikistan in the initial years after independence, leading to destruction, border closings, and millions of refugees and internally displaced persons.

Quantification of the economic impact of disintegration is difficult, but fragmentary evidence can be cited to support the view that it was a significant factor behind the transition recession, in general and in Central Asia in particular.

First, the transition recession was most severe for the small, landlocked republics most dependent on external links and financial transfers, especially the countries of Central Asia and the South Caucasus. In contrast, the transition recession was least serious for the countries of Central Europe, which were the least integrated into the Soviet system, although they too suffered a disintegration shock.

Second, the decline in trade was dramatic: Between 1990 and 1992, exports among the CIS republics dropped from \$320 billion to \$20

Many people in Central Asia feel the impact of the new borders

billion.⁵ While over time and to varying degrees the CIS countries were able to redirect their trade flows to the rest of the world, this did not offset the trade losses from the collapse of their intra-CIS commodity exchange.

Third, there is sporadic evidence that links the collapse of individual enterprises to disruptions in the supply and demand chain as new borders went up and barriers to trade, transit and payments arose. A well-documented example is the case of the hay baler factory in Bishkek that supplied the entire Soviet Union (see Box 2.4). Similar examples exist for industrial and agricultural enterprises across the former Soviet Union.

Fourth, many people in Central Asia feel the impact of the new borders, especially those in the smaller countries. According to a World Bank Public Opinion Survey commissioned in late 2004, half of 6,000 respondents in Central Asia (except Turkmenistan) stated that the new borders have had a negative or very negative impact on trade, transit and transport, and therefore on access to friends, family and business. About 30 per cent said that borders have had a negative or very negative impact on access to water and electricity. For those who have actually crossed borders, the great majority noted problems due to loss of time, visas or other border procedures, and many reported dissatisfaction with the customs service and border guards, or said they had experienced harassment and humiliations of one kind or another. Uzbekistan was considered to have had the greatest increase in border problems. After independence, there was concern about cross-border national conflicts. Fortunately, as a great credit to the new national leaders, no serious

Box 2.4

The collapse of the Bishkek Hay Baler Company

By 1990, the Bishkek Agricultural Plant's factory was the only producer of hay baling machinery in the whole of the USSR and Comecon....The markets for hay balers were principally in the western USSR....The factory had been moved at Stalin's order to Bishkek (Frunze), ahead of the German invasion of the Ukraine in about 1942. The plant became a major employer in Bishkek (around 15,000). Not merely did it supply jobs, its process-heat boilers provided much of the surrounding district where the workers lived with heat and hot water; and in addition, the plant provided the area with schooling, health services and pensions....By 1992, sales of finished balers had collapsed by 50 per cent. Despite this, production was being maintained by manufacturing all units to the stage of virtual completion. Balers were being assembled except that they could not build into the balers the hydraulic rams needed to compress the bales of hay. The hydraulic rams arrived from only two suppliers—one from Tomsk (Russian Federation), the other in Tallin (Estonia). Estonia's move to independence and a dollar-linked economy meant that supplies of hydraulic rams from this source had to be paid *promptly and in dollars*. Those from Tomsk were to be bought in rubles with little insistence on speedy payment. But, with no dollars, purchases of rams from Tallin collapsed and Tallin had previously supplied 50 per cent of all the parts needed. Tomsk was unable to increase its production of rams. Hence overall completions and sales of balers fell by 50 per cent....In spite of desperate efforts to diversify (e.g., into household cookers, washing machines, clothes dryers and hair dryers), the factory closed its doors in 1994. It is far from obvious that the Bishkek Agricultural Plant could not have found outlets for economically viable sales of machinery, e.g. to neighbouring Central Asian countries. It is not even obvious that the exports of rams by the Estonian company were uneconomic in the short-run, had suitable trade credit arrangements been feasible. However, the inability to continue imports of a relatively small but crucial input from Estonia—or to find alternative sources of supply—meant that early closure became inevitable.

Source: Hare et al. 2000.

Box 2.5**Community conflicts across borders**

A recent anthropological study of 66 cases of community-level conflict in the five Central Asian countries revealed a high prevalence of cross-border conflicts in communities situated close to borders. Of the total of 25 cases of such conflicts, six involved disputes over shared water resources, two concerned land, 10 related to the difficulties of traders and ordinary citizens wishing to cross borders, and seven involved conflicts with migrants from outside the country. In each case, the problems originated after the break up of the Soviet Union and resulted from the fact that the new borders divided communities, impeded trade, redistributed water and land resources in a way that was perceived as unfair or did not encourage continued sharing of common resources, or encouraged people to move from their traditional homelands. In most cases, the communities found that their own local and national authorities, not to mention those of the neighbouring countries, paid little or no attention to grass-roots grievances, with the result that frustration, anger and conflict potential continued building from year to year. In one case involving systematic difficulties of access for the Kyrgyz enclave in Uzbekistan, Barak, the Kyrgyz president, personally intervened after a visit, with the result that the community's border-crossing problems subsided.

Source: Based on case studies reported by Kathleen Kuehnast, World Bank, 2005.

conflicts of this type actually occurred. However, the potential for community-level cross-border conflict is reportedly high (see Box 2.5).

While the impact of political, economic and social disintegration was similar to that in many other parts of the former Soviet Union, in Central Asia it was more dramatic in many ways. This was due to the region's landlocked location, poverty, institutional weaknesses and political conditions, and due to the fact that Soviet integration was more artificial and deeply flawed for Central Asia than for other parts of the empire. There is no more visible example of the folly of central planning than the destruction of the Aral Sea through the development of a huge and inefficient, but ruthlessly programmed and implemented regional water allocation and irrigation system.

The political changes resulted in civil war and disturbances in Tajikistan. In the other Central Asian countries, the fear of loss of political control and perceived security threats have contributed to the establishment of tightly controlled borders and governments with varying degrees of authoritarianism. The next section traces the trends in human development that have resulted.

Human development trends since 1990*A heterogeneous region*

The countries of Central Asia, while geographically contiguous and historically interlinked, are very heterogeneous. The unique geography of Central Asia—with arid deserts, vast steppes and great energy resources in one country, and with high mountain ranges and great water resources in the next—is one of the reasons for the differences among countries. Other reasons are differences in surface area, population and income (see Table 2.2).

Kazakhstan has the largest surface area and the lowest population density, but accounts for about 51 per cent of the total regional GDP, much of it due to the large oil reserves on its territory. Uzbekistan has the largest population—its 26 million inhabitants comprise 45 per cent of the region's population. Kyrgyzstan and Turkmenistan have almost the same numbers of people, approximately five million; however, the similarities end there. Turkmenistan is a desert country with large energy resources, especially natural gas, which accounts for 16 per cent of

While the impact of disintegration was similar to that in many other parts of the former Soviet Union, in Central Asia it was more dramatic

Table 2.2

	Population (millions)	Population density (per sq km)	Surface area (thousand sq km)	GNI, PPP (billions \$)	GNI, PPP, per capita (\$)	Regional indicators (2003)
Kazakhstan	14.9	6	2,725	93	6,280	
Kyrgyzstan	5.1	26	200	9	1,690	
Tajikistan	6.3	45	143	7	1,040	
Turkmenistan	4.9	10	488	29	5,860	
Uzbekistan	25.6	61	447	44	1,720	

Note: GNI stands for gross national income, PPP for purchasing power parity.

Source: World Bank 2005e.

Despite differences in geographic size, population and economic weight, the countries of the region also share a number of common characteristics

the regional GDP. By comparison, Kyrgyzstan is a small, mountainous country with no significant natural resources, aside from water, hydropower and some gold, accounting for about 5 per cent of the regional GDP. Tajikistan broadly resembles Kyrgyzstan in resource endowment and size, although it is even poorer and more isolated.

Despite these differences in geographic size, population and economic weight, the countries of the region also share a number of common characteristics, including the Soviet legacy, difficult access to markets (see Chapter 3), many environmental challenges (see Chapter 4), a severe vulnerability to natural disasters and man-made threats (see Chapter 5), deteriorating social services (see Chapter 6), and difficult political and governance conditions (see Chapter 7).

Human development indicators

Central Asia's political, economic and social transition severely affected people's human development and human security. Because Central Asia was home to the poorest and most vulnerable parts of the Soviet Union, the human impact was arguably more severe here than elsewhere. Since 1989/1990, as a result of the economic depression accompanying the transition, people's early expectations for improved economic and social conditions were quickly disappointed (see Box 2.6). During the initial period of independence, from 1991 to 1995, the economic and social indicators for each Central Asian country declined significantly. Poverty and unemployment increased, overall output decreased, and social and education expenditures suffered an extreme drop. As a result of very different economic and social policies, human development conditions substantially diverged.

UNDP's HDI offers a good starting point for a brief survey of the human condition of people in Central Asia. It is annually calculated for most of the world's countries and provides a summary

Poverty and unemployment increased, overall output decreased, and social and education expenditures suffered

Box 2.6

Disappointed expectations in Kyrgyzstan

"When collective farms were disbanded, we thought everything would be fine. We could be masters of our own land and would enjoy good profits and become rich. It turned out to be the other way around. It turned out that we were used to having problems solved for us. When we faced problems, we realized that we were not prepared for the new way of life. Formerly, jobs, salaries and prices were stable. Everything was available in the stores. When the so-called 'market' economy came down, it ruined everything old. This has resulted in poverty."

—Termirbek, collective farm worker in Tash-Bulak, Kyrgyzstan

Source: Narayan and Petesch 2002.

measure of three key components of human development:

- A long and healthy life, as measured by life expectancy at birth (life expectancy index);
- Knowledge, as measured by the adult literacy rate, and the combined primary, secondary and tertiary gross enrolment ratios (education index); and
- A decent standard of living as measured by GDP per capita (GDP index).⁶

The HDI ranks countries by their scores (see Annex 1 for yearly comparisons). Each Central Asian country, except Turkmenistan, had a lower rank relative to the rest of the world in 2003 than in 1992. Kazakhstan has traditionally ranked highest among the Central Asia countries in terms of the HDI, but still lags significantly behind Central European countries and Russia (see Table 2.3). Tajikistan has ranked the last among the CIS countries and in Central Asia, but due to its relatively high education and health achievements compared with the poorest developing countries,

The Human Development Index in Central Asia and Russia

	HDI rank*	HDI	GDP index	Life expectancy index	Education index
Kazakhstan	80	0.761	0.70	0.64	0.94
Turkmenistan	97	0.738	0.68	0.62	0.91
Uzbekistan	109	0.702	0.48	0.70	0.93
Kyrgyzstan	111	0.694	0.48	0.69	0.91
Tajikistan	122	0.652	0.40	0.64	0.91
Russian Federation	62	0.795	0.76	0.67	0.96

Table 2.3

*Out of 177 countries.

Source: UNDP 2005a.

its ranking is substantially better than when ranked purely on the basis of per capita income. The specific trends for demographics, health, education and standard of living are examined in the next sections.

One of the serious problems confronting any analysis of economic and human development and human security trends in Central Asia, including the data used to compile the HDI, is the great weakness of the statistics. Many economic and human development statistics are highly unreliable (see Box 2.7). The available data presented in this report need to be interpreted

with considerable caution. Indeed, one of the big challenges that the Central Asian countries face, and where regional cooperation, mutual support and learning from best practices would be very helpful, is in improving official statistical data-gathering and analytical capacity.

Demographics and standard of living

The Central Asian countries had significant increases in population size and life expectancy, and improvements in health, education and living standards under Soviet rule. In the early 1920s,

Box 2.7

Assessing human development in Central Asia: statistical challenges

The assessment of the impact of economic cooperation and integration on human development and security in Central Asia requires data, normally produced by national statistical agencies and international organizations. In general, however, the end of the Soviet Union reduced the quality and availability of statistical data in Central Asian countries. National statistical offices experienced a decrease in their financial and human resources, and many of the statistics produced for central planning became less and less relevant to the new social and economic environment. Cultivating capacities to produce timely and reliable statistics in compliance with international statistical standards is a major challenge still today, even as the extent of difficulties varies across countries.

In the economic area, the assessment of economic development requires good quality national accounts and exhaustive estimates of GDP. In Central Asian countries, it is hard to achieve complete coverage of economic production. Certain types of productive activities, including underground, informal and illegal activities as well as activities undertaken by households for their own use, cannot be observed and measured directly by official statisticians for the compilation of GDP figures. They represent an important part of productive activities, and require specific measurement techniques that have been described in international guidelines (such as by the Organisation for Economic Co-operation and Development or OECD, and the UN Economic Commission for Europe or UNECE). The implementation of such techniques is well advanced in some countries (e.g., Kyrgyzstan and Tajikistan), while others are lagging behind (especially Turkmenistan, whose official figures of economic growth are considered by international organizations to be unreliable).

In the demographic and social area, the cornerstone is the population census. It provides a wealth of data on the social and economic conditions of households throughout the country, at any level of geographical detail. Central Asian countries conducted a population census around the year 2000, except Uzbekistan where the last population census dates back to 1989. The problem with population censuses is that they are conducted at best every 10 years, which does not allow monitoring short- and medium-term social change at the national and regional levels. More frequent data can be obtained from administrative registers, or from statistical surveys conducted on representative samples of the population. Administrative registers on births and deaths, morbidity, unemployment, school attendance, etc., exist in all Central Asian countries, but their definitions and classifications are often not in compliance with international statistical standards. Furthermore, they are influenced by changes in legislation and (dis)incentives to register, which makes the interpretation of their data sometimes very difficult. Statistical surveys based on representative samples of households are a better, albeit more expensive source of information, because they are designed for the provision of reliable and relevant data on economic and social conditions of people, using conceptual frameworks that are comparable over time and across countries.

External donors have helped national statistical offices to conduct surveys on living standards and social conditions since the mid-1990s. They include the World Bank's Living Standards Measuring Study, the UN Children's Fund's (UNICEF) Multiple Indicator Cluster Survey, and the US Agency for International Development's (USAID) Demographic and Health Survey. All Central Asian countries have benefited from one or several surveys of this type in the past 10 years. This has resulted in valuable pictures of the social and economic components of human development. However, statistical surveys sponsored by external donors cannot replace national surveys conducted by national statistical offices, as they lack comprehensiveness and fixed periodicity. For instance, in Turkmenistan, the last UNICEF survey dates back to 1995, and the last USAID survey to 2000.

Potential solutions to the current weaknesses of data in Central Asia rely on continued statistical capacity development efforts in four main areas: complete estimates of GDP and related macroeconomic aggregates, including all forms of non-observed economy; improvement of administrative sources used for statistics of births and deaths, morbidity and school attendance; development of regular household statistical surveys on household budgets and the labour force; and preparation of a population census around the year 2010, following all international standards.

Source: Prepared by the UNECE for this report.

Table 2.4

	Population shifts			Population as % of total							
		Total population		% change	0-17		18-59		60+		
		1990	2003	1990-2002	1990	2002	1990	2002	1990	2002	
Kazakhstan	16,298	14,878	- 9	37	33	53	56	9	11		
Kyrgyzstan	4,358	5,052	16	43	40	48	52	8	8		
Tajikistan	5,244	6,305	20	49	48	44	46	6	6		
Turkmenistan	3,668	4,864	33	47	43	47	51	6	6		
Uzbekistan	20,227	25,590	27	47	44	46	50	6	7		

Sources: UNICEF 2003 and World Bank 2005e.

All countries in Central Asia have experienced a sharp decrease in life expectancy at birth since 1990

populations, especially in rural areas, were largely illiterate and had a life expectancy below 40. Over the subsequent 70 years, the entire region moved to almost full literacy, and life expectancies shot up to between 68 and 70.⁷ After independence, this upward trend reversed.

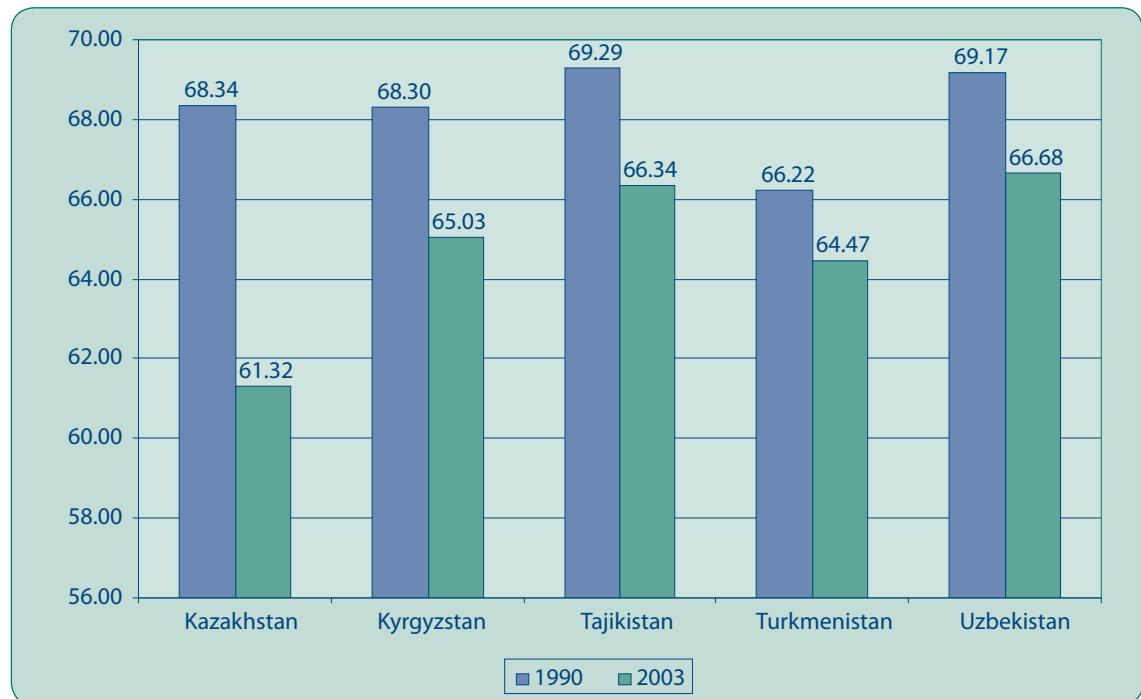
While the population of Central Asia continued to increase between 1990 and 2004, the population growth rates dropped compared to the past for three main reasons: First, out-migration occurred, especially in the early years after independence. This was particularly the case in Kazakhstan, which largely explains the drop in the Kazakhstani population (see Table 2.4). Second, each country's birth rate has fallen by at least 25 per cent since 1992. There has been a significant decline in the number of children under five. For example, in Tajikistan in

1990, this group was 18 per cent of the population, but it was only 13.5 per cent in 1998.⁸ Third, with the steady dissolution of national health coverage and a significant decrease in expenditures on social infrastructure, all countries in Central Asia have experienced a sharp decrease in life expectancy at birth since 1990 (see Figure 2.2).

All of the Central Asian countries have a higher education index than would be expected from their relative level of economic development (see Table 2.3). For countries such as Kyrgyzstan and Tajikistan that have few natural resources, human resources are one of their principal assets. However, a decrease in education funding and standards is steadily eroding this advantage. In addition, from 1990 to 1997, all of the countries faced a continuing emigration of scientists, engineers, doctors and

Life expectancy at birth (years)

Figure 2.2



Source: World Bank 2005e.

Table 2.5

	% below \$2.15 per day (PPP)	Gini index
Kazakhstan	21	0.32
Kyrgyzstan	70	0.28
Tajikistan	74	0.33
Turkmenistan*	44	--
Uzbekistan	47	0.35
Russian Federation**	9	0.34
Hungary**	0	0.25

*1998, **2002.

Source: World Bank 2005a.

other professionals to Russia, Turkey, the United States or Europe. Some anecdotal evidence suggests that Uzbekistan lost 10 per cent of its educated elite every year for the first four years after independence.⁹ Chapter 6 explores the challenges of health and education in more detail.

Despite their relatively high levels of health care and education in 1990 compared to countries of similar economic status, the Central Asian republics were still very poor next to other former Soviet countries. Through the early 1990s, as output declined and real wages dropped, a grim tide of inequality, poverty and deprivation rose among people throughout the region (see Box 2.8). Even in 2003, after a number of years of economic recovery, poverty rates still remained very high in most countries when measured by standards such as the share of people living below \$2.15 per day at purchasing power parity (PPP) (see Table 2.5). An increased inequality in incomes, as measured by the Gini index, contributed to the higher poverty levels. By 2003, Central Asian countries generally had highly unequal income distributions by international standards.

Despite these generally difficult conditions, the 2004 World Bank Public Opinion Survey

found that a majority of the 6,000 respondents in Central Asia have not given up—or perhaps have regained—a sense of well-being that may surprise the outsider (see Box 2.9). This attests to the resilience of the human spirit among Central Asian people. At the same time, a majority of people said that their countries have a long way to go to attain a satisfactory economic situation. Sizeable pockets of dissatisfaction do exist, and can be explained both by general factors related to income and status and some specific regional conditions.

Economic trends

The initial economic decline after the dissolution of the Soviet Union is a major factor behind Central Asia's dismal trends in human development, poverty and inequality. The initial sharp collapse in economic output and incomes resulted in cumulative losses in measured GDP that ranged from about 20 per cent in Uzbekistan to almost 70 per cent in Tajikistan between 1990 and 1996, with intermediate losses of about 40 per cent for Kazakhstan, 45 per cent for Kyrgyzstan and 50 per cent for Turkmenistan. Fortunately, all Central Asian

In 2003, after a number of years of economic recovery, poverty rates still remained very high in most countries

The initial economic decline after the dissolution of the Soviet Union is a major factor behind Central Asia's dismal trends in human development

Box 2.8

The shock of rising poverty in Tajikistan

The poor were unable to meet their basic needs for food, clothing, shelter and fuel. Health care, education and investment were completely out of reach, especially for the rural poor. Food was especially scarce for many families in the springtime, when their food reserves ran out before the first grain harvest.

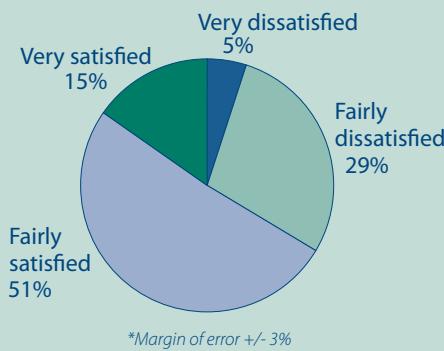
Respondents throughout the country referred to the lack of flour or bread as a criterion of poverty. Bread is a staple in the Tajik diet; its availability and quality are indicative of a household's living standard. Government-subsidized bread was provided to selected apartment residents in some secondary cities and district centres. Families with access to land produced their own flour from wheat, which they milled in the village. In the spring, when reserves were depleted, families turned to corn flour, which was perceived as less digestible and could not be cooked in the same way as the traditional Tajik flat bread.

Source: Field surveys in Tajikistan completed in 1996 as quoted in Dudwick et al. 2003.

How people in Central Asia feel about life: results of a survey

A public opinion survey conducted by the World Bank in 2004 in Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan reveals that, although people believe they have made progress in recent years, they feel that their countries have a long way to go. On the positive side, two-thirds or more say that they are at least fairly satisfied with life and have at least a somewhat good economic situation. Over half feel they are better off now than a few years ago. On the negative side, less than a third feel they currently have a satisfactory standard of living or will achieve it within five years. Unemployment is their most pervasive problem. Almost half the people find it difficult to provide for basic family needs and almost two-thirds have grievances they would like to raise with the authorities. To better understand these responses, two social scientists have taken a closer look at the determinants of subjective well-being—i.e., happiness—in Central Asia.

How satisfied are you with your life?*



Research shows that certain patterns of responses to survey questions about life satisfaction, or happiness, are consistent throughout the world. Within countries, income matters to happiness, and wealthier people are, on average, happier than poorer ones. But after achieving a minimum income (within the context of the country), other factors like health, marital status, job stability and age all seem to matter more to well-being than income. Among countries, similarly, happiness rises with income, but levels off after approximately \$10,000 per capita.

For the most part, Central Asians are like people in the rest of the world. Material success, measured by the respondent's purchasing power, is an important component of happiness, but socioeconomic status and rank (which are correlated with, but not identical to income) appear to be even more important. As in other populations, age has a U-shaped relationship with happiness in Central Asia. The low point occurs around age 51, which is similar to the other

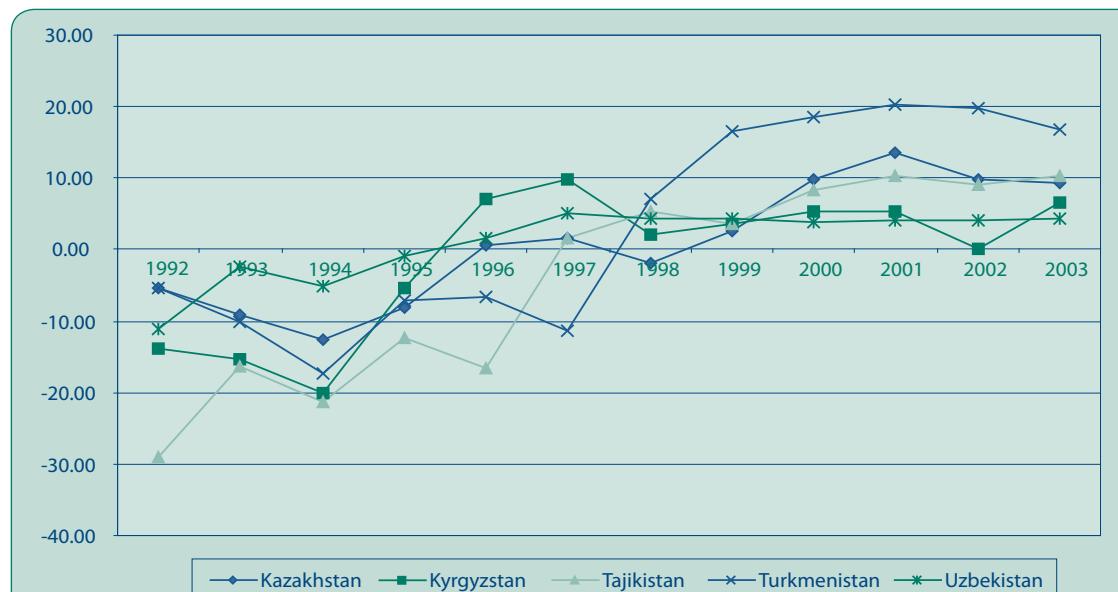
developing economies and older than in most Organization for Economic Co-operation and Development (OECD) countries. Marriage is good for and unemployment is bad for happiness. Education, once wealth and status are accounted for, does not have a strong effect on happiness.

economies have achieved relatively high growth rates since 1999, pushed along by a combination of recovery, reforms, high mineral prices and the positive spillover effects of rapid growth in neighbouring countries (especially Russia). (See Figure 2.3)

In terms of macroeconomic management, the Central Asian republics initially suffered from serious bouts of inflation, budgetary deficits and excess borrowing as governments tried to adjust to the collapse of output, transfers from Moscow and the Soviet financial settlement system. By

GDP growth (annual %)

Figure 2.3



Source: World Bank 2005e.

2003, governments had largely managed to get inflation under control and had established broadly responsible fiscal policies. However, Kyrgyzstan and Tajikistan are seriously burdened now by accumulated foreign debt (see Table 2.6), partly as a result of inappropriate public borrowing at commercial terms in the early years and partly as a result of high levels of concessional lending by the international financial institutions.¹⁰

The Central Asian republics have differed greatly in their access to FDI (see Table 2.6). Kazakhstan, with its large energy resources, has been able to attract relatively large amounts of foreign investment, both in absolute terms and in relation to its GDP, followed by Turkmenistan with lower but still significant levels, also mostly in its energy sector. The other Central Asian countries so far have not been successful in attracting substantial foreign investment, due to factors such as poor resource endowment (Kyrgyzstan), an unsettled political situation (Tajikistan) or a lack of market reforms (Uzbekistan).

Progress on market-oriented economic reforms varied widely by 2003. According to the reform indicators compiled by the European Bank for Reconstruction and Development (EBRD), Kyrgyzstan was most advanced in terms of 'initial phase' reforms,¹¹ followed by Kazakhstan and

Tajikistan, with Uzbekistan and Turkmenistan lagging far behind (see Table 2.7). Relatively little progress has been made on 'second phase' reforms¹² in any of the countries.

As a result of the variations in their approaches to reforms, the five republics now not only differ significantly in terms of their size, natural resource endowments, income levels and economic structures, but also in their economic systems. Uzbekistan and Turkmenistan approximate the former Soviet command economies, while Kazakhstan, Kyrgyzstan and even Tajikistan with its recently enhanced reform efforts increasingly have adopted the institutions of modern market economies. These differences pose a complication for regional cooperation and integration, as will be discussed in subsequent chapters.

The five republics now differ significantly in terms of their economic systems

The challenge of integration

Weaving together the many different strands of information about the history of Central Asia, the transition over the last 15 years, and the human development and human security challenges faced today, a number of features stand out:

- The countries of the region differ tremendously in terms of size—geographic, demographic,

Table 2.6

	GDP annual growth (%)	Inflation (%)	External debt/GDP (%)	Net FDI/GDP (%)	Net FDI (\$ millions)
Kazakhstan	9.20	6.4	76.8	7.4	2,188
Kyrgyzstan	6.67	3.1	102.7	2.4	46
Tajikistan	10.20	16.4	64.7	2.1	32
Turkmenistan	16.90	5.6	30.2	3.5	218
Uzbekistan	4.40	10.2	48.1	0.7	70

Source: World Bank 2005e.

Selected macroeconomic indicators (2003)

Table 2.7

	Initial phase reform index	Second phase reform index
Kazakhstan	3.8	2.4
Kyrgyzstan	4.2	2.3
Tajikistan	3.6	1.7
Turkmenistan	1.9	1.0
Uzbekistan	2.5	1.9
Russian Federation	3.8	2.6
Hungary	4.3	3.6

Progress on market-oriented reforms

Note: The indices range between 0 (no reform) and 4.3 (maximum reform).

For a brief description of reform phases, see endnotes 11 and 12.

Source: EBRD 2003b.

The biggest challenge is that the republics need to breach their geographic isolation in the middle of Eurasia

economic; natural resource endowments; and social, environmental and governance conditions.

- However, they face many similar human development and human security challenges. The most important include sustaining growth after the deep recession of the 1990s, combating poverty, rebuilding weakened social systems, dealing with environmental problems and threats of natural and man-made disasters, improving governance and lowering the risk of conflict.
- But perhaps the biggest challenge—and this is the principal focus of this report—is that the republics need to breach their geographic isolation in the middle of Eurasia. This requires them to stop drifting further apart in terms of policies and economic and human relations. They need to start finding ways to cooperate with each other, in order to overcome the legacy of disintegration and their mutual suspicions, and to forge closer economic, natural resource, social and institutional links with each other and their neighbours beyond Central Asia.

Our review of the recent history and current situation of Central Asia raises questions about how the history of disintegration and its economic and human impact is still influencing the course of events today. Three important issues relate directly to integration and cooperation challenges, and to the task of improving human development and human security.

First, the fear of further political disintegration clearly remains an important concern. This is particularly the case for those countries that have been threatened by war or civil disturbance, or have large population groups of different ethnic origin from the titular ethnic group (as is typically the case). It helps explain the importance given to nation-building as an overarching objective in the first 10 or more years after independence in all of the Central Asian countries, and the near-universal effort of authorities to establish strong, centralized executive control.

Second, partly as a result of the intention to build strong nation states, the process of disintegration of the regional economy has not yet stopped, let alone been reversed. Borders among countries have become increasingly ‘hard’, with stiffening trade and transit restrictions and visa requirements. Other barriers to mobility and networking are continuing to rise, including the growing practice of non-recognition of educational diplomas, a decline of the use of Russian as a lingua franca,¹³ and the disappearance of personal connections and networks among professionals. Many of these

Various regional institutions have been set up, but these organizations so far have had a limited impact

tendencies will be documented in the remainder of this report.

Third, against the backdrop of dramatic disintegration, integration of the transition countries with each other and with the rest of the world is essential to assure continued recovery and rapid growth. The EU accession countries of Central Europe are furthest along this path, followed by the countries of South-Eastern Europe. For the latter, it now looks as though long-term integration with Europe will provide a framework for recovery, and significant political and policy stability.

The Central Asian countries have not been oblivious to the potential of integration and cooperation. As early as January 1993, the five republics got together to form the Central Asia Commonwealth. Much lip-service has been paid ever since to cooperative initiatives on a bilateral and multilateral basis. Various regional institutions have been set up; Figure 2.4 demonstrates the membership of the most important ones. They include the original CIS and the CIS Collective Security Pact, the Eurasian Economic Community (EEC, or EURASEC), the Central Asian Cooperation Organization (CACO), the ECO and the Shanghai Cooperation Organization (SCO). (Annex 2 summarizes the origins and mandates of these and other regional organizations and entities.)

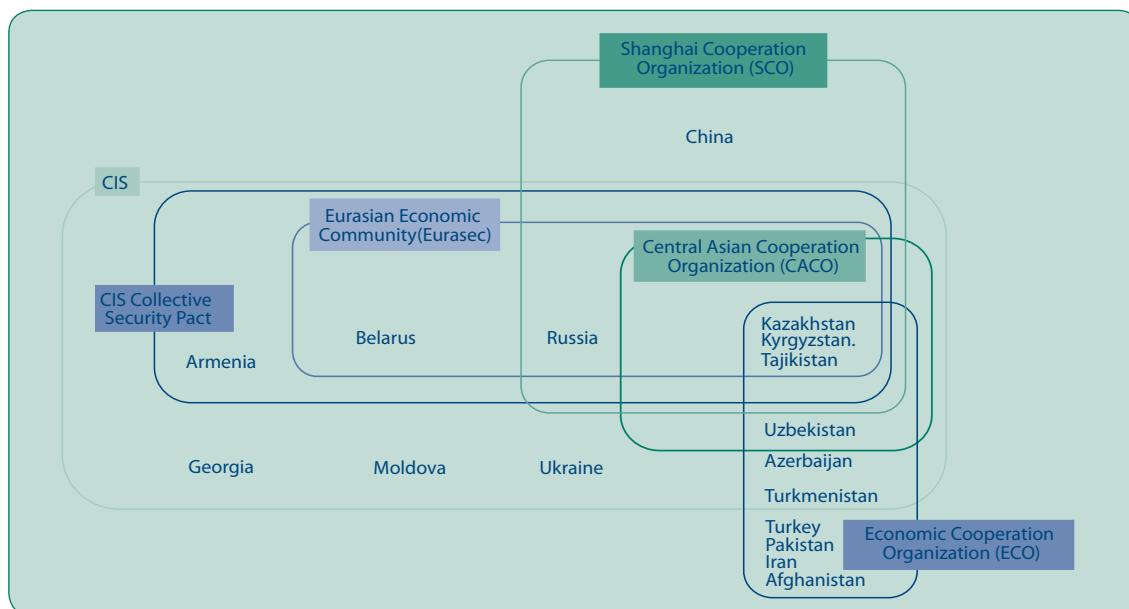
From the perspective of Central Asian regional integration and cooperation, these organizations so far have had a limited impact for a number of reasons:

- The membership is generally not complete (Turkmenistan, for example, only belongs to the CIS and ECO, and generally has not been an active participant even in these organizations).
- The mandates and objectives of the organizations are generally unclear and overlapping, and change over time.
- The organizations have only very limited financial resources and weak organizational capacities, and lack mediation or enforcement authority for the agreements reached.
- They have not been systematically supported by the international community as a vehicle for channelling financial and technical support for regional cooperation and integration.

While the Central Asian governments have paid some attention to the regional dimensions of economic recovery and political stability, it is not yet clear whether they, their neighbours and the international community fully appreciate the need for intensive cooperation. It is not yet apparent that they are willing to dedicate the kind of attention, resources and political commitment

Selected regional organizations to which Central Asian countries belong

Figure 2.4



Note: On October 5th 2005 Central Asian Cooperation Organization (CACO) and Euroasian Economic Community (Eurasec) agreed to merge into one bloc.

Source: UNDP.

to the regional organizations that would make them into effective instruments. Recently, there have been some signs that some of the regional organizations are picking up steam. First, the SCO expanded its mandate from purely security issues to economic development and cooperation. A secretariat based in Beijing and strong Chinese leadership, which has already brokered a major financial aid package for the region, might inject new energy into the economic cooperation agenda. Second, in 2004, President Karimov of Uzbekistan proposed through CACO the creation of a Central Asian Common Market. Specific time-phased proposals for a long-term introduction are said to be under preparation. In Kazakhstan in the spring of 2005, President Nazarbayev called for a unified Central Asia. Third, multilateral institutions,¹⁴ under the leadership of the Asian Development Bank and with the enthusiastic engagement of China, are jointly supporting the Central Asia Regional Economic Cooperation Programme (CAREC) to generate proposals and financing plans for regional programmes and projects in the areas of regional trade, transport and transit, water and energy for Azerbaijan, Kazakhstan, Mongolia, Tajikistan, Uzbekistan and Western China. Finally, the Special Programme for the Economies of Central Asia (SPECA) brings together Afghanistan, Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan for joint development projects under the auspices of the UNECE and the UN Economic and Social Commission for Asia and the Pacific (UNESCAP).

Perhaps the greatest hope for peaceful and productive cooperation and ultimately integration is the sense of closeness that still prevails among the peoples of Central Asia, despite their growing differences and restrictive borders. According to the 2004 World Bank Public Opinion Survey, 71 per cent of respondents maintained that regional economic cooperation in Central Asia is either somewhat or very good. Only a very small minority (less than 10 per cent on average) considered the quality of relations with other Central Asian countries as poor or very poor. Kazakhstan is generally regarded as the most important partner within the region, while Russia is regarded as by far the most important partner outside the region (see Figure 2.5).

For the future, the process of cooperation and integration will involve grappling with some important challenges. First, it will have to be different from the artificial and inefficient economic integration of the Soviet Union. Second, it will have to avoid the mistake of seeking to create regional trade blocs behind high protective barriers. Third, to the extent integration initiatives are promoted by Russia or China, they will run into suspicions that they are merely a pretext, respectively, for the rebuilding of a modern version of the Tsarist/Soviet empire or for a dominating position of China in the region. Any such suspicions aside, China and Russia will have to play a major economic role in helping to reintegrate the region, just like the United States has done in the Americas and the big Western European countries have done in the EU and in

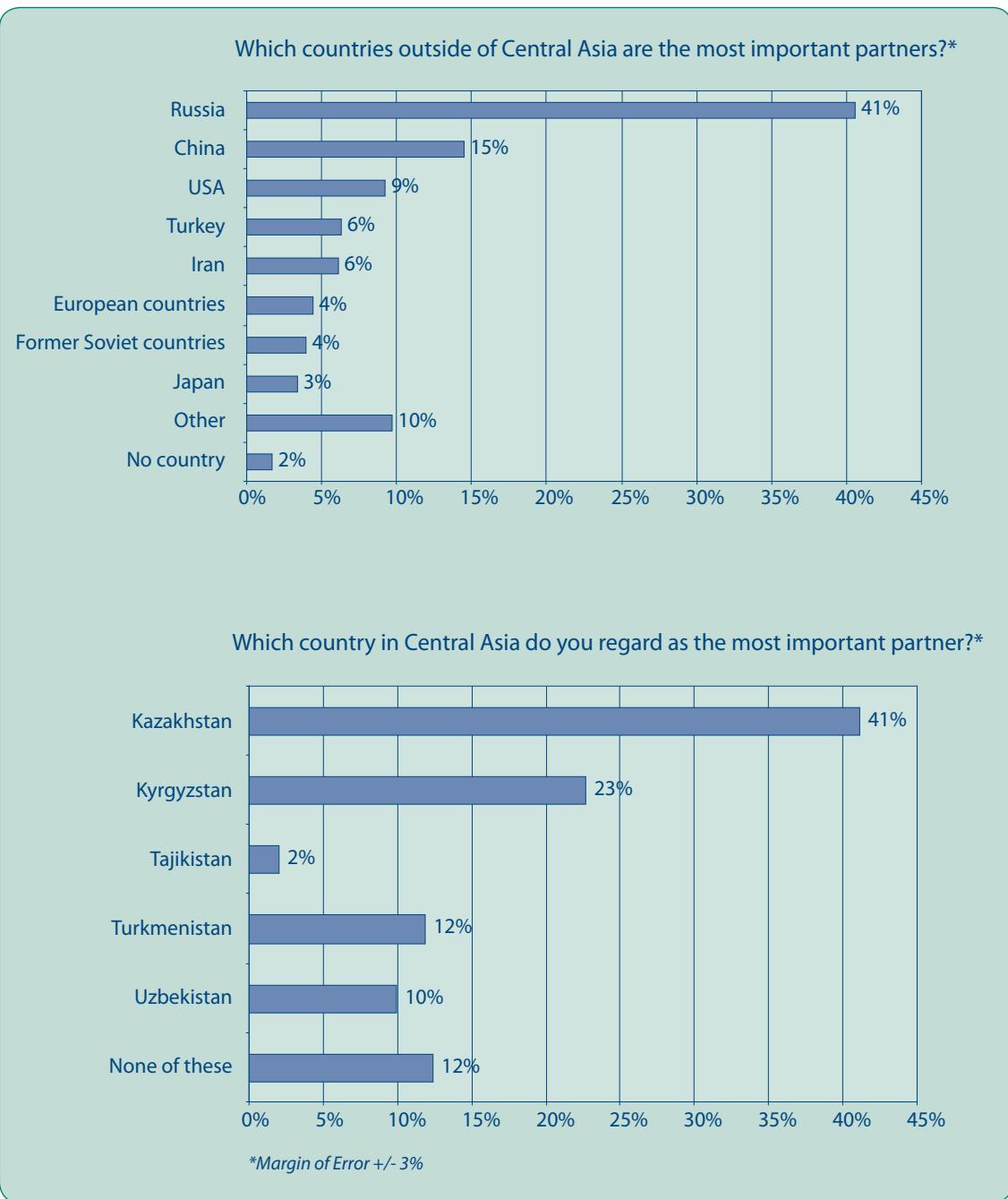
The greatest hope for peaceful and productive cooperation and ultimately integration is the sense of closeness that still prevails among the peoples of Central Asia

Central Europe. The readiness of these two key regional and global powers to assist Central Asia—along with Japan, the United States, the EU and the international institutions—could be a major factor in assuring that Central Asia develops as a stable and prosperous region, with the conditions in place for successful human

development and human security. In coming decades, the region could become a solid and stable core of a newly dynamic Eurasian super-continent. The subsequent chapters of this report explore how regional cooperation and integration can contribute to this goal and what needs to be done to make it happen.

Popular attitudes to regional partners in Central Asia

Figure 2.5



Source: 2004 World Bank Public Opinion Survey.

Chapter 3

Regional cooperation to promote trade and investment¹

“If there were no such obstacles and additional expenses [in shuttle trade], the goods would have been way cheaper. We wouldn’t have seen the sad eyes of the parents, who cannot afford an expensive piece of clothing for their child.”

—Shuttle trader in Central Asia²

The people of Central Asia depend on trade and transport as the economic lifeline that gives them access to world markets

The role of trade and investment in landlocked countries

The people of Central Asia depend on trade and transport as the economic lifeline that gives them access to world markets. But Central Asian countries are landlocked—and in the case of Uzbekistan doubly landlocked—and at great distances from the nearest ports and markets. These barriers of distance are compounded by policy, infrastructure and institutional barriers, leaving Central Asians to face high transport costs, long travel times and great uncertainties in trying to trade with the rest of the world. But with concerted action among the countries of Central Asia and their neighbours, the policy, infrastructure and institutional barriers can be lowered, resulting in greater human development and human security for the people of the region, including and especially those who live in poverty.

Trade enables nations to specialize in line with their comparative advantages and achieve economies of scale that otherwise would not be possible. This improves the allocation of economic resources and increases aggregate output in the short to medium term. In the medium to long term, trade leads to higher rates of output growth by making the policy environment more predictable, enhancing competition and increasing domestic investment. In developing and transition countries, trade also helps attract FDI and provides access to modern technologies through imports and FDI inflows.³ Investment and economic growth in turn reduce poverty and enhance human development and human security inasmuch as they raise the income and employment of the poor and increase resources available for social security, primary health care, education, water supply and other basic services. Other benefits include a greater variety and improved quality of consumer goods, and increased returns on skilled labour and education.⁴ And as trading countries become economically more interdependent, they are less prone to conflicts.⁵

There are two caveats to this general rule on the benefits from trade. First, trade may adversely impact human development and human security if it does not reflect the real economic, social and environmental costs of production and transport. For instance, if trade between two countries is generated by imposing artificial specialization on them with little regard to their comparative advantages—as was the case with inter-republican trade in the Soviet Union—this will foster inefficiencies and hinder economic growth and human development. Similarly, exports kept competitive in international markets by neglecting negative production impacts on the environment,

Landlocked countries need good transport infrastructure, high-quality transport services, and easy and secure transit across borders and through neighbouring countries

There is an important synergy between trade and behind-the-border economic conditions for business, investment and finance

by the use of child labour or by mandatory procurement at low prices—as is the case with cotton in some Central Asian countries—have an adverse effect on income, health, education and the environment.⁶ So trade needs both to be market-based and reflect the real economic, social and environmental costs of production.

Second, to be able to benefit from international trade, a country must be open to the rest of the world—in particular, it needs to have a fairly liberal trade regime. Trade liberalization, however, can have negative impacts in the short term. Most notably, increased trade and competition following trade liberalization usually lead to output declines, lower wages and layoffs in previously protected sectors that must now compete with imports. Trade liberalization generally at first increases imports more than exports, which can widen the trade deficit and necessitate depreciation of the real exchange rate with negative consequences for inflation, macroeconomic stability and output growth.⁷ Nonetheless, over time, the cumulative benefits of free-trade generally exceed the costs of trade liberalization. Countries with restrictive trade regimes can open up to international trade as a step towards advancing human development and human security, although they need to do so wisely to cushion possible short-term costs.

Moreover, trade liberalization is only part of the picture: Landlocked countries like those of Central Asia also need good transport infrastructure, high-quality transport services, and easy and secure transit across borders and through neighbouring countries if they are to integrate into world markets.⁸ Improvements in any of these areas will have little positive impact if there are no improvements in the others. For instance, liberalization of trade policy and major advancements in transport will not boost trade if transit through neighbouring countries remains very difficult, expensive and unpredictable. Likewise, a reduction in transport and transit costs will have little positive impact on trade if trade policy remains restrictive. Finally, liberalization of trade and easy transit through neighbouring countries will have no effect on trade if there are no transport links with potential trading partners.

There is also an important synergy between trade and behind-the-border economic conditions for business, investment and finance. Openness to trade helps to improve the business environment, attract FDI and increase domestic investment.⁹ It also stimulates the development of the financial sector by creating demand for financial services, such as trade finance, currency

transactions and international payments. At the same time, improvements in the business environment, major investments in infrastructure and modern technologies, and advancements in financial services are a prerequisite for Central Asian countries to enhance their economic competitiveness, ensure a strong supply response to trade liberalization and facilitation measures, and integrate into the world economy. We will therefore consider in this chapter not only the impact of trade policies, transport and transit on trade integration in Central Asia, but also how cooperation on improvement in behind-the-border conditions can contribute.

Trade patterns and potential in Central Asia

Recent patterns

Trade levels declined sharply in Central Asia in the early 1990s, reflecting the breakdown of trade links and payment mechanisms among the countries of the former Soviet Union. Trade started recovering in the mid-1990s, as the Central Asian countries partly reoriented their trade from former Soviet to non-Soviet countries, and established new trade links and payment mechanisms with the former Soviet countries, largely based on market principles. This recovery was interrupted by the Russian financial crisis of 1998, by declines in world commodity prices in the late 1990s, by devaluation of the national currency in some Central Asian countries, and, in the case of Turkmenistan, by suspension of exports of natural gas to Ukraine in 1997 (see Table 3.1). Trade levels rose consider-

ably from 2000 to 2004, due largely to increased demand and higher prices for primary commodities in world markets, and a recovery of investment and hence a strong demand for capital goods in Central Asia.

The commodity composition of trade in the Central Asia countries has not changed significantly since the break up of the Soviet Union. Exports have remained concentrated in a handful of primary commodities, such as crude oil, gas, metals and cotton fibre. Crude oil accounted for 57 per cent of exports from Kazakhstan in 2004, while gold comprised 40 per cent of exports from Kyrgyzstan. Aluminium and cotton made up 82 per cent of exports from Tajikistan in 2003. Even in Turkmenistan and Uzbekistan, which have adopted the strategy of import-substituting industrialization and have been trying to promote exports of high value-added manufactured products through extensive state intervention, primary commodities continue to dominate exports. Natural gas, cotton and crude oil accounted for 56 per cent of exports from Turkmenistan in 2003, and cotton and gold comprised 49 per cent of exports from Uzbekistan in 2004. At the same time, finished products, including machinery, equipment and consumer goods, have remained dominant imports.

During the Soviet era, the Central Asian republics had high levels of trade within the union (see Table 3.2), but it was managed as part of the command economy, not driven by market forces. Like other Soviet republics, those of Central Asia had little trade with the outside world. One of the benefits of independence was the opportunity to seek out the best markets for exports in the global economy. However, this process was constrained

Trade levels declined sharply in Central Asia in the early 1990s, but rose considerably from 2000 to 2004

Exports have remained concentrated in a handful of primary commodities

Table 3.1

	1996	1997	1998	1999	2000	2001	2002	2003	2004	% of GDP (2004)
Exports										
Kazakhstan	5,911	6,497	5,404	5,872	8,812	8,639	9,709	12,927	20,096	49
Kyrgyzstan	505	604	514	454	505	476	486	582	719	33
Tajikistan	770	746	597	689	784	652	737	797	915	44
Turkmenistan	1,893	751	593	1,187	2,505	2,555	2,710	2,949	3,144	26
Uzbekistan	4,211	4,026	3,218	2,928	2,816	2,808	2,514	3,190	4,279	44
Imports										
Kazakhstan	4,241	4,301	4,257	3,655	5,040	6,446	6,584	8,409	12,781	31
Kyrgyzstan	838	709	841	600	554	467	587	717	941	43
Tajikistan	668	750	711	663	675	688	721	881	1,375	66
Turkmenistan	1,313	1,228	1,007	1,478	1,788	2,210	1,819	1,964	2,596	21
Uzbekistan	4,712	4,186	3,125	2,841	2,697	2,815	2,426	2,663	3,392	35

Sources: Governments of the Central Asian countries and Asian Development Bank estimates.

Table 3.2

**Share of merchandise trade
with the former Soviet Union,
1988-2004 (%)**

	1988		1996			2004		
	Total trade	Exports	Imports	Total	Exports	Imports	Total	
Kazakhstan	86	57	70	63	21	49	32	
Kyrgyzstan	87	78	63	69	40	62	52	
Tajikistan	86	45	58	51	24	72	53	
Turkmenistan	89	n.a.	31	n.a.	42	49	45	
Uzbekistan	86	21	32	27	32	41	36	

Sources: IMF 1992 and 2004a, and Asian Development Bank estimates.

Gravity models suggest that the Central Asian countries could expand trade and diversify exports by reducing barriers to trade and cooperating with each other and neighbouring countries

by a variety of factors, including the need to establish new transport and trade links, the limited competitiveness of Central Asian manufactured exports in international markets and the lack of hard currency. As some of these constraints were eased or removed, the share of the former Soviet countries in Central Asian countries' trade significantly decreased. The decline was especially swift and dramatic in Uzbekistan, reflecting the fact that it was relatively easy there to reorient exports of internationally marketable commodities, such as gold and cotton, from the former Soviet countries to international markets. The reorientation of trade in Central Asia away from the former Soviet countries and towards the rest of the world was, however, partly reversed in recent years. Uzbekistan's exports to other former Soviet countries expanded considerably due in part to increased exports of transportation equipment. Imports from former Soviet countries to Central Asian countries increased substantially following devaluation of the national currency in many former Soviet countries in the late 1990s.

Today, Central Asian countries trade relatively little among themselves (see Table 3.3). There may be a statistical bias, since local trade is more likely to go unrecorded than long-distance trade.¹⁰ But even allowing for this, trade within the region is probably low. This can be explained not only by national trade and foreign exchange policies, and by the lack of cooperation in trade, transport, customs

and border management described later in this chapter, but also by the similarity of economic structures of Central Asian countries. These countries will ultimately find greater opportunities for trade with dissimilar and hence complementary economies farther away, provided they overcome the barriers that stand in the way of access to world markets. Both trade within the region and with the rest of the world, however, will depend on regional cooperation to reduce trade costs.

Potential trade

Given these patterns, is Central Asia's trade performance strong enough to realize its potential? Is the reorientation of trade to non-Soviet trading partners complete, or can new trading partners be identified? To answer these questions, economists have used an approach commonly known as the 'gravity model'. The basic idea is that potential bilateral trade flows can be estimated using a simple model factoring in two countries' relative economic size and the distance between them. These constructed flows can be compared to actual trade flows to provide rough estimates of potential trade that has been lost. Other factors, such as trade policies and institutions, can then be considered to help explain differences in trade performance.

The results from gravity models are sensitive to precise specifications and assumptions, and need

**Central Asia's trade matrix,
2003 (millions of \$)**

Importer Exporter	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan
Kazakhstan		156 (171)	76 (96)	37 (77)	138 (179)
Kyrgyzstan	57 (55)		19 (28)	2 (7)	16 (18)
Tajikistan	5 (7)	4 (3)		2 (4)	67 (16)
Turkmenistan	3 (49)	1 (0)	26 (32)		11 (9)
Uzbekistan	80 (90)	44 (39)	84 (133)	58 (46)	

Note: In each cell, the first figure is exporting country data, and the figure in parentheses is importing country data.

Sources: IMF 2004a and Asian Development Bank estimates.

to be interpreted with caution. But most results suggest that the Central Asian countries could considerably expand trade and diversify exports by reducing policy-related and institutional barriers to trade. They could cooperate with each other and neighbouring countries in improving their transport links with the rest of the world, and in facilitating movements of people, goods and vehicles across national borders and through the territories of transit countries. Moreover, most model estimates also indicate that there is still an incomplete reorientation of trade to partners outside the former Soviet Union, with Central Asian countries failing to reach their trade potential not with other CIS states, but with markets in other regions. Specifically, trade with most developed countries in East Asia, North America and Western Europe as well as with many emerging markets in South and Southeast East Asia is well below what it could be.¹¹

A human side of trade: shuttle trade

With the dissolution of the Soviet Union and the easing of international travel restrictions, individual traders started making shopping trips to neighbouring countries and to places as far away as China, Turkey and the Gulf States, bringing consumer goods home to sell in the bazaars of Central Asia. This small-scale, cash-based trade became known as the shuttle trade. It has persisted mainly because regulations and other trade costs discourage the establishment of larger, more formal trading companies that would improve trade efficiency. However, it has also provided important employment and commercial opportunities for lower-income people and helped develop new trade flows across borders. Depending on the frequently changing laws and regulations of each country, shuttle trade can be legal or illegal, making it often an uncertain and hazardous undertaking for the people involved.

As price differentials emerged in Central Asian markets due to different regulatory regimes, new opportunities opened for cross-border arbitrage, and in particular for the shuttle trade. This primarily involves the borders of Turkmenistan and Uzbekistan, the countries with the most regulated prices. There is substantial transport of goods, especially petrol, from Turkmenistan, where the price is very low, to Uzbekistan. In the Fergana Valley, by contrast, petrol is brought across the border from Uzbekistan, where the price is regulated, into the freer market economies of Kyrgyzstan and Kazakhstan, in return for consumer goods that are unavailable in Uzbekistan. In the early 2000s, the Dordoi market in Bishkek, the Kara-Suu market near Osh and markets at Chymkent in

Kazakhstan became major destinations for shuttle traders from Uzbekistan as access to consumer goods in Uzbekistan was increasingly restricted.

The shuttle trade is largely carried out by women for two principal reasons. First, men still rely more on regular earnings and are tied to their workplaces, which they cannot leave for travel to other countries in order to buy goods and sell them at home. Women are tied to their homes while their children are young, but when the children have grown up, or older children can take care of younger ones, women can earn a living outside the home—very often as shuttle traders. Second, border guards and customs officials are generally more lenient towards women than men. Yet systematic or arbitrary restrictions are often placed on the shuttle trade by the government (as was the case in Uzbekistan in 2002 and 2004, for example)¹² or by corrupt border, customs and tax officials. This makes shuttle trade a difficult business. People turn to it mainly as a coping mechanism when there are few alternative job opportunities (see Box 3.1).

Despite frequent interference in the shuttle trade by official policy or corrupt officials, its size is believed to be large. It is poorly documented and difficult to estimate, as traders try to avoid the authorities' attention and routinely under-invoice their imports (if necessary, by paying customs officials not to notice their baggage). According to estimates made by Kyrgyz experts for the Asian Development Bank, unrecorded imports of consumer goods, gasoline and diesel fuel were equivalent to 17 per cent of Kyrgyzstan's recorded imports in 2003, while unrecorded exports of the small-scale sewing industry and re-exports of imported consumer goods amounted to 20 per cent of its recorded exports. In short, shuttle trade is an essential part of trade in Central Asia and has important implications for the reduction of poverty.

Shuttle trade is an essential part of trade in Central Asia and has important implications for the reduction of poverty

Trade policies, regional trading agreements and accession to the World Trade Organization

Trade policies and barriers

Although the Central Asian countries had very similar trade policy regimes at their independence, their regimes have diverged significantly since then. Kazakhstan and Kyrgyzstan have been liberalizing their trade policies more or less steadily since the early 1990s.¹³ Tajikistan liberalized its trade regime fairly rapidly after the end of its civil war in 1997. Turkmenistan has undertaken little trade liberalization. Uzbekistan liberalized its trade

Shuttle trade is largely carried out by women

Interviews with shuttle traders in Uzbekistan

In 2002 and 2004, the Government of Uzbekistan introduced numerous restrictions on the shuttle trade.¹³ To assess how these restrictions affected businesses, journalists interviewed several shuttle traders in Tashkent in December 2004. Two of these interviews are reproduced below. (The names of the traders have been changed.)

Interview with Zebiniso

Zebiniso is originally from Samarkand. She has higher education in pedagogy, is divorced and has three children. Two are high school students and one is in second grade. Zebiniso sells knitted goods for children and teens brought mainly from China, Iran and Turkey.

Q: *How long have you been working here, and what makes you earn money in the shuttle business?*

A: My earnings have come from this so-called shuttle business for nearly 10 years. After divorcing my husband who was upset that I couldn't give birth to a boy, I couldn't make it on my savings. Child support money wasn't enough, aid from my relatives in Samarkand was not regular. I could work in a school, but you know how much teachers earn. I could do this if I had a husband, but when you need to earn enough money for yourself and your children, the modest salary is never enough. So I went into the shuttle business.

Q: *Do you have the skill required? You look like an intelligent woman. Isn't it difficult to go to other countries, trade, argue and settle things?*

A: It wasn't easy at the beginning, then things eased up a bit. I know both Uzbek and Tajik languages, so I don't face any particular difficulties in Chimkent, Bishkek, Urumqi and Meshkhed, where I used to go for goods. As for intelligence, I'd say that there are a lot of decent people with good education and manners among us.

Q: *What are the overhead charges when travelling to, say, Almaty and back?*

A: It depends! Generally all the talk that it is impossible to work due to tightened border regimes and increased taxes and tariffs are a bit exaggerated. Of course, it's more difficult to go for the stuff and sell it. But I would say it's more risky now, that it is more expensive. There are people everywhere, they have families to feed. The border and customs officers and the cops have to earn their money as well. So we settle things with them. If there were no such obstacles and additional expenses, the goods would have been way cheaper. We wouldn't have seen the sad eyes of the parents, who cannot afford an expensive, to their budget, piece of clothing for their child.

Q: *If tomorrow I decide to join the business, what survival recipe would you recommend?*

A: Don't take it personally, but don't be stupid. I'm all into this business, know some stuff and cannot leave doing this. You can earn money some other way. As for the recipe, get yourself a roof.¹⁴ Without it you'll earn nothing, with it you'll have to pay a lot, but will also have some money for your own needs.

Interview with Lilya

Lilya, 30 years old, has been a shuttle trader for 10 years. Initially, she worked with her brother, who left to go to Lipetsk one year ago. Lilya owns an outlet at the bazaar, but wants to sell it and quit the business. Her husband does the housework when she goes on shop-tours.

Q: *Why did you decide to quit? You have your own small shop. You have goods to sell and your customers.*

A: I hate this! I don't know how to get rid of it. Look what have they done: In spring, I and many others bought the newly constructed outlets at the market. At the end of summer, we have a decree that made me decide to quit such business. When I worked with my brother it was relatively okay. We used to go to the Emirates, bought teapots, coffee-makers, china and other dishes. It was civilized and quite profitable. Now they've introduced taxes and duties that make the work impossible. After shop-tours, you often end up with no money at all!

Q: *But now you have other goods. Changed the assortment?*

A: Both the assortment and the travel geography. I had to discontinue going to the Emirates, it is too expensive now. You need \$600 for tickets. That is why I want to sell the shop, but nobody wants to buy it.

Q: *What about our traditional neighbours?*

A: I went to Bishkek twice, now I can't and don't want to. Have you seen what's going on at the border with Kazakhstan? Everything is disorderly. The guards fraternize with some teens who work as smugglers or guides. The nearby territory is filthy, total insanitation. Everyone is trying to get money from you for any reason. You need visas, marks, stamps, certificates, registrations, etc. I'm tired of this!

Q: *How much is it to cross the border with Kazakhstan?*

A: Seven thousand soums there, same amount to go back, \$15 in total. This isn't it: we pay 200 bucks more to bring our goods to Tashkent.

Q: *What would you say about the 'roof' at your market?*

A: Some people do have it. Look at some shops in this and neighbouring rows. Some of them are closed because their owners are gone for the goods, some of them are closed by the tax officials due to absence of required documents. But many people who don't have these documents are working safely. Why? When a tax official comes, the owner dials a number on his mobile and gives the phone to the visitor. He gets pale and leaves immediately. That is the way businesses are run here. People try to find ways to sustain their business in a difficult environment because most of us have children, and we have to feed them...

Source: Interviews commissioned by the Asian Development Bank.

Table 3.4

	Kazakhstan ^a	Kyrgyzstan	Tajikistan	Uzbekistan ^a
Number of tariff rates	10	5	6	4
Maximum rate (%)	100.0	15.0 ^b	15.0	30.0
Non-weighted average rate (%)	7.6	5.1	7.5	14.6

^a *Ad valorem tariffs only. There are also specific and combined tariffs.*

^b *Excluding a 30 per cent seasonal tariff on refined sugar.*

Note: Information for Turkmenistan is fragmentary and has therefore been omitted.

Source: Asian Development Bank estimates.

Tariffs in selected Central Asian countries (as of August 2005)

regime considerably in the first half of the 1990s, but this has been partly reversed since then. Consequently, trade policies today range from very liberal in Kyrgyzstan and Tajikistan to fairly liberal in Kazakhstan to quite restrictive in Turkmenistan and Uzbekistan.

Tariff rates are fairly low and uniform in Kyrgyzstan and Tajikistan (see Table 3.4). Kazakhstan has a rather complex tariff schedule (with 10 ad valorem and seven specific tariff rates, and some goods being subject to both), but a relatively low non-weighted average rate. In Uzbekistan, the tariff schedule is not as complex as in Kazakhstan, but the non-weighted average rate is almost twice as high.¹⁶ In Turkmenistan, tariffs ranging from 10 per cent to 100 per cent are applied to 94 commodities when they are imported by legal entities. Imports by individuals in amounts up to \$500 are exempt from tariffs; above this amount, a uniform tariff of five per cent applies. A major problem in all the countries is that changes in tariff schedules have been frequent and unpredictable. There has been an escalation of tariffs—a rise in rates with higher degrees of processing—more so in Kazakhstan, Turkmenistan and Uzbekistan than in Kyrgyzstan and Tajikistan.

Apart from tariffs, some Central Asian countries impose other taxes on imports that are not levied on domestically produced goods or that have higher rates for imported than domestically produced goods.¹⁷ In Kazakhstan and Turkmenistan, for instance, excise taxes are imposed on both imported and domestically produced alcoholic beverages and tobacco products, but the tax rates are higher for the former. In Uzbekistan, excise taxes are levied on a wide range of imported consumer products, but not on domestically produced ones.¹⁸ Certain commodities, such as construction materials, are subject to the value-added tax when they are imported, but exempt when they are domestically produced. Non-food products imported to Uzbekistan from neighbouring countries without a certificate of origin, but not

necessarily originating in those countries, are subject to a 20 per cent surcharge.

Explicit taxes on exports are less common in Central Asia than taxes on imports, and there are no explicit export subsidies.¹⁹ Only Kazakhstan levies export taxes on a limited number of goods when they are exported to countries that are not members of the EEC.²⁰ In some Central Asian states, export prices of certain commodities are set administratively. In Tajikistan, for example, raw materials are exported at the prices prevailing at the republican commodity exchange, but taking into account world prices. In Turkmenistan, natural gas and electricity are exported at prices set in intergovernmental agreements.

All countries apply quantitative restrictions, such as prohibitions, quotas and licenses, to trade in goods that have implications for national security, public health and the environment, or are deemed to be against social norms. Some Central Asian countries use quantitative restrictions for economic and social purposes. Turkmenistan and Uzbekistan restrict imports of certain products to protect domestic producers of these products or their substitutes from foreign competition. Turkmenistan and Uzbekistan also prohibit exports of some food products to ensure their availability in the domestic market at relatively low prices. For the same reason, Kazakhstan temporarily prohibits exports of diesel fuel and fuel oil during harvesting and heating seasons, respectively.

Some Central Asian countries also use registration of international transactions as a means to regulate trade. In Turkmenistan, all exports and import contracts for all goods—with the exception of export contracts for strategic commodities, such as natural gas, oil and oil products, electricity and cotton—are subject to ex ante registration with the State Commodity Exchange. Export contracts for strategic commodities require ex ante approval of the Cabinet of Ministers. In Uzbekistan, import contracts financed from the state budget or government guaranteed credits or enterprises that are more than 50 per cent state owned are subject to ex ante registration, while all other

While formal tariffs are relatively low, there are many other policy instruments that Central Asian countries use, often in a discretionary and non-transparent manner, to regulate trade

Lowering and rationalizing the non-tariff trade barriers, as well as making them more transparent and less discretionary, should be a major goal for regional cooperation

import contracts by legal entities are subject to ex post registration.

Both licensing and registration of international transactions create opportunities for rent-seeking, and can fuel corruption and hinder international trade. Licensing of the export and/or import of some products appears to be primarily intended to create or preserve monopolies. Unfavourable foreign exchange and payment regulations in some Central Asian countries create additional impediments. In Turkmenistan, restricted access to foreign exchange constitutes a major obstacle to imports, while the requirement that certain categories of exporters surrender part of their foreign exchange earnings at the overvalued exchange rate represents an implicit tax on their exports.²¹ Some categories of importers reportedly continue experiencing difficulties in purchasing foreign exchange in Uzbekistan even after the country introduced full convertibility of its national currency for current international transactions in October 2003. In Tajikistan, a regulation requiring a 100 per cent prepayment for exports of a wide range of products makes exporting these products more difficult.

In sum, while formal tariffs are relatively low, there are many other policy instruments that Central Asian countries use, often in a discretionary and non-transparent manner, to regulate trade. Lowering and rationalizing the non-tariff trade barriers, as well as making them more transparent and less discretionary, should be a major goal for regional cooperation.

Regional trade agreements

A striking feature of trade policy in Central Asia is that many regional and bilateral agreements have been signed, often at the highest political level, since 1991. The rhetoric of these agreements has envisioned either recreating the economic union of pre-independence days, or establishing a customs union on the EU model, or at least establishing a free-trade area. But in fact, rather than actually creating a region with open trade, the Central Asian countries have mainly become involved in multiple regional organizations and signed numerous bilateral trade agreements (see Figure 3.1). Overlapping agreements have resulted in what the trade literature aptly calls a 'spaghetti bowl' effect. It tends to lead to a conflicting and confusing set of trade policy rules at any given border (see Box 3.2). Under the best circumstances, well-meaning officials and private traders have a hard time implementing these. In the worst-case scenario, mixed rules offer opportunities for ad hoc, discretionary and corrupt application. The main regional trade agreements include the following:²²

Box 3.2

An Uzbek view of regional organizations in Central Asia

The multiplicity of regional organizations with almost identical goals and objectives and the appearance of various institutions for regional integration of Central Asian states have led to fragmentation of political and economic systems within the region, and to a stretching and irrelevance of the limited administrative mechanisms and decision-making mechanisms across Central Asia.

Source: "UNDP Country Background Study, Uzbekistan."

The CIS was created after the collapse of the Soviet Union with the intent to maintain the common economic space of the Soviet Union. In fact, the new borders have become ever more disruptive economically because the CIS has been ineffectual in maintaining unimpeded regional trade.

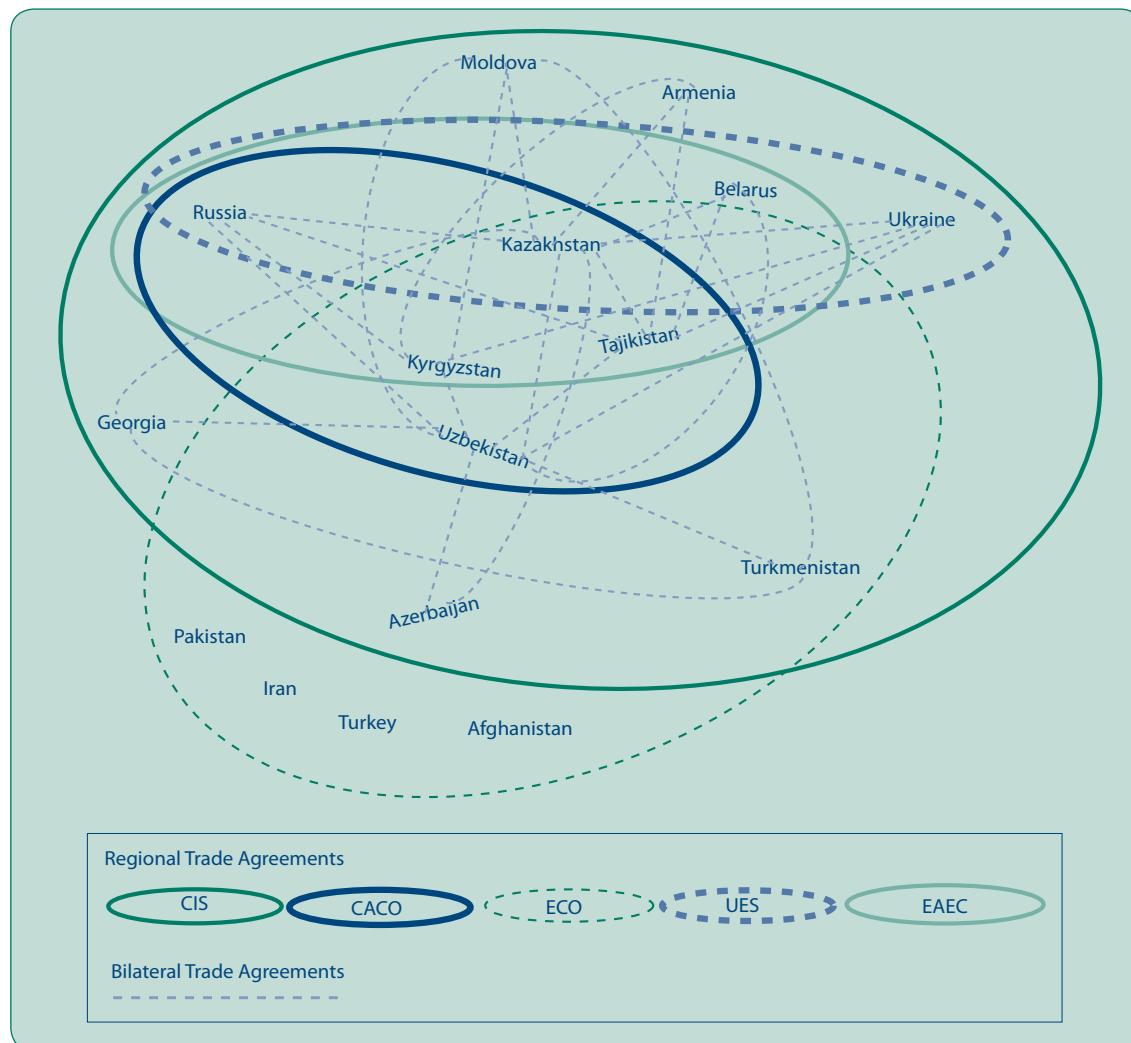
Starting in 1995, the more narrowly focused EEC (also referred to as EAEC or EURASEC)²³ was specifically aimed at creating a customs union among its five member states. It has faced many practical obstacles to establishing a common external tariff, principally because Kazakhstan and Kyrgyzstan have not accepted, and are unlikely to accept, the Russian tariff (since this would help Russian producers who are not the world's least-cost suppliers, to the detriment of domestic consumers and import users in the other two countries). Russia in turn is unlikely to accept the low Kyrgyz tariffs, which are bound by treaty since Kyrgyzstan's 1998 World Trade Organization (WTO) accession.

An alternative grouping among CIS countries was initiated in February 2003 when the leaders of Belarus, Kazakhstan, Russia and Ukraine reached a tentative agreement to create a Single Economic Space (SES). Russia promoted the concept, but there have been disagreements over suggestions for establishing supranational institutions and adopting the Russian rouble as a common currency. The outcome of the December 2004 Ukraine election makes progress with cooperation under the SES even less likely.

In an attempt to maintain a common economic space specifically in Central Asia, Kazakhstan, Kyrgyzstan and Uzbekistan created the *Central Asian Economic Union (CAEU)* in 1994. The organization was renamed the *Central Asian Economic Community (CAEC)* when Tajikistan joined in 1998. The presidents of the four countries proclaimed the *Central Asian Cooperation Organization (CACO)* as the successor to the CAEC in 2002, and Russia joined the CACO in 2004. Although the founding agreement of the CACO states high aspirations, little progress has been made in institutionalizing or implementing them. At their meeting in St.

The spaghetti bowl effect of regional and bilateral trade agreements involving Central Asian countries (as of August 2005)

Figure 3.1



Petersburg, Russia, in October 2005, the presidents of the CACO member countries decided to merge the organization with the EEC.

The *Economic Cooperation Organization (ECO)*, which the newly independent Central Asian countries all joined in 1992, also aims to be a regional trading arrangement. The three founding members (Iran, Pakistan and Turkey) offer preferential tariff treatment to one another, but the list of eligible products is extremely restricted. The five Central Asian countries, together with Afghanistan and Azerbaijan, have expressed commitment to ECO principles, but have made no move towards preferential tariffs. Trade between the five Central Asian countries and their southern neighbours has expanded since 1992, but from a low base and more slowly than many observers expected. Moreover, it has done so on a non-discriminatory (most-favoured nation) basis rather than within a regional trading arrangement such as the ECO founding members appear to have envisaged.

These regional arrangements have often been in implicit competition with each other, reflecting differing and mutually exclusive political pacts. Overall, an ebb and flow of interest in alternative permutations has inhibited the institutional development of any particular regional organization.²⁴ Progress towards a customs union has been slow or virtually non-existent over the past decade, as there have not been any enforcement or arbitration mechanisms for implementation. In fact, agreements to make internal free-trade mandatory or to harmonize external trade policies have been practically fruitless, and none has posed a threat to multilateralism in the Central Asian countries' trade policies. Their economic impact has been minimal.

Two principal reasons for this outcome stand out. First, the governments of the new Central Asian countries have been unwilling to constrain their newly acquired sovereignty by getting bound into what they fear might be regional straightjackets recreating some of the political constraints of past

Regional preferential trade agreements have not worked in Central Asia for political and economic reasons and are not likely to do so in the near future

The political leadership in Central Asia should promote early accession to the WTO and support regional cooperation that focuses on reducing the trade barriers arising from poor transport infrastructure and weak trade facilitation

history. Second, good economic reasons hinder preferential regional trading arrangements. One basic argument relates to the likelihood of trade diversion. Preferential duties on imports from a neighbour will encourage consumers to purchase some goods that appear to be better value than the tariff-inclusive price of lower-cost or higher-quality imports. The government of the importing country loses tariff revenue and consumers are worse off than they would be with non-discriminatory tariff reductions. Although the political leaders may not express their concerns in terms such as 'trade diversion', when it comes to implementation of agreements, they recognize that while they may want to expand the market for their country's own sheltered industries, they do not want to give preferential status to their neighbours' manufactured goods. Buying imports from the global least-cost supplier and selling exports in the best market makes considerable economic sense, and was clearly a key reason for the failure of the many discriminatory trading arrangements in Africa and Latin America during the second half of the 20th century (see Chapter 1).²⁵

In short, regional preferential trade agreements have not worked in Central Asia for political and economic reasons and are not likely to do so in the near future. Rather than focusing attention on creating such agreements, the political leadership in Central Asia should promote early accession to the WTO and support regional cooperation that focuses on reducing the trade barriers arising from poor transport infrastructure and weak trade facilitation.

Accession to the WTO and cooperation within a multilateral framework

Of the five Central Asian countries, only Kyrgyzstan is at present a member of the WTO (see Table 3.5). Kazakhstan's application is fairly far advanced, with an active programme of Working Party meetings in recent years. Accession is expected soon, possibly in 2006. The accession processes of Tajikistan and Uzbekistan are at an earlier stage, although progress has accelerated since 2002. Turkmenistan has not applied for WTO membership due to its

Government's reluctance to engage in multilateral endeavours.

The benefits of WTO membership for the Central Asian countries are considerable. Most importantly, membership places trade on a common basis of international trade law and potentially separates trade policy from politics. Accession by more Central Asian countries would provide a common framework for formal trade policies and dispute resolution with respect both to a greater proportion of intra-regional trade and to trade with all of the region's economically important neighbours. Pakistan and Turkey have long been WTO signatories, and the benefits to Central Asian countries of WTO membership has been accentuated by China's accession in 2001 and will be reinforced by Russia's imminent accession.²⁶ Access to the WTO's strengthened dispute resolution process is an important benefit for smaller trading nations, who have a credible recourse against large countries that bend the rules.

WTO accession could bring further benefits by encouraging liberal policies and punishing backsliding on commitments. Such an environment would help to attract FDI, make domestic investment more attractive, and ensure that a country reaps benefits from specialization and trade with diminished fear of protectionist responses in foreign markets. Membership would also grant some leverage to shift illiberal policies in other countries. Uzbekistan and Tajikistan, for example, could join WTO member countries lobbying for reduced subsidies to cotton producers in the United States and EU (see Box 3.3).

Despite its many benefits, WTO membership is no panacea, since other reforms and investments are needed, especially in terms of transport, transit and behind-the-border policies. And WTO membership has its costs, in particular those associated with negotiations and building institutions to ensure compliance with WTO codes, although bilateral and multilateral donors can assist with the latter. In some cases, however, the costs of WTO membership are misinterpreted. For example, critics have cited the economic

The benefits of WTO membership for the Central Asian countries are considerable

But WTO membership is no panacea, since other reforms and investments are needed, especially in terms of transport, transit and behind-the-border policies

Status of WTO accession

	Applied	Working Parties	Member
Kazakhstan	January 1996	7 meetings, 1997–2004	
Kyrgyzstan	1993		December 1998
Tajikistan	May 2001	1 meeting, March 2004	
Turkmenistan	Not applied		
Uzbekistan	December 1994	2 meetings, July 2002 and June 2004	

Table 3.5

Source: WTO Website, www.wto.org.

Box 3.3**Potential regional cooperation within the WTO: the case of cotton**

A major attraction of the WTO has been the formation of issue-specific coalitions to lobby against policies contrary to the WTO's spirit. Issues related to cotton are especially relevant to Central Asia.

In the 2001/2002 season, direct assistance to cotton growers amounted to \$2.3 billion in the United States and \$800 million in the EU. These subsidies raised producer prices above the world price by 91 per cent in the United States, by 144 per cent in Greece and by 184 per cent in Spain. The domestic supply response to these artificially high prices lowers world prices. A World Bank study estimates that removal of the US and EU subsidies would increase world prices by as much as 71 per cent.

The cost to Central Asia of the subsidy-induced lowering of world prices is large. With world cotton prices 71 per cent higher, the gain in export revenue would add three per cent to Uzbekistan's GDP, six per cent to Tajikistan's and three per cent to Turkmenistan's. These substantial benefits would accrue every year. Moreover, with more attractive world prices, the quantity of cotton exported would increase (by an estimated 5.8 per cent in Uzbekistan), adding to the potential benefits.²⁷

At the Cancun Ministerial Conference of the WTO in 2003, a group of West African cotton-producing countries (Benin, Burkina Faso, Chad and Mali) presented the Sectoral Initiative on Cotton, which highlighted the damage to developing countries caused by cotton subsidies in developed countries, particularly the United States, and called for the elimination of these subsidies. In March 2005, Brazil secured a final WTO ruling that most cotton subsidies in the United States were illegal under WTO rules, and in early July 2005, the US Government announced that it would ask Congress to pass legislation that would phase out these subsidies. Even if the United States fully eliminates the cotton subsidies found illegal by the WTO, considerable trade-distorting cotton subsidies will remain there and in other developed countries. Central Asian cotton-producing nations could broaden the coalition against these and help speed up their elimination.

difficulties of Kyrgyzstan in 1999 as an example of the potential costs of membership, but the Kyrgyz recession was actually due to non-WTO factors that overwhelmed any positive WTO effect. These included the Russian economic crisis of 1998–1999, Kazakhstan's 50 per cent devaluation and the collapse of three of the country's four largest banks. Regional transport and transit conditions also stymied Kyrgyz trade.²⁸

In many respects, multilateralism formalized by WTO membership remains the best framework for developing international economic relations.

At the current moment, however, despite their dismal history, proposals for regional trading arrangements in Central Asia continue unabated, whether in the form of calls for a free-trade area, a customs union or deeper economic union. In May 2004, President Karimov of Uzbekistan proposed a Central Asian common market (see Box 3.4). At the eighth ECO summit in Dushanbe in September 2004, Iran proposed committing to an ECO free-trade zone by 2015. In March 2005, President Karimov and Kazakhstan's President Nazarbayev set up a working group

Box 3.4**An Uzbek proposal for a Central Asian common market**

At the CACO summit on 28 May 2004 in Astana, President Karimov of Uzbekistan proposed the establishment of a Central Asian Common Market (CACM), based on the CACO institutional framework and including Afghanistan. The key objective of the CACM would be to improve the living standards of the Central Asian people through the optimal use of regional resources, including water and energy, and natural, physical and human capital; and by developing common strategies for creating a favourable investment climate for domestic and foreign investors. This was envisaged as a long-term initiative to be implemented in three phases:

1. Establishment of an effective free-trade area;
2. Creation of a customs union within five years after the establishment of a free-trade area;
3. Establishment of a common market within five to seven years after the creation of a customs union.

Since the proposal was made in May 2004, however, there has been little notable progress in further deepening and implementing it. Moreover, its future is uncertain now that the CACO has been merged with the EEC.

Sources: Government of Uzbekistan n.d. and UNDP.

Several obstacles related to transportation and transit stand in the way of freer trade in Central Asia

on creating a free-trade zone between the two countries.²⁹

There is room and need for regional cooperation in trade within a multilateral framework. First, the Central Asian countries may want to coordinate their trade policies and carry out non-discriminatory trade liberalization in a concerted manner, as has been done in the Asia-Pacific region by many Asia Pacific Economic Cooperation member countries. Second, they can also join efforts with each other and other countries to gain better access to markets in developed countries, and to push for the discontinuation of trade-distorting agricultural subsidies. Third and most importantly, regional cooperation should urgently focus on the issues of regional transport and trade facilitation. The barriers imposed by the current arrangements are much more serious impediments to trade than trade policy per se.

Transport, border management and transit barriers

Several obstacles related to transportation and transit stand in the way of freer trade in Central Asia. The distance from Central Asia to the closest seaports in the Arabian Sea and the Persian Gulf is between 2,000 to 3,400 kilometres, to the closest seaports in the Black Sea almost 3,000 kilometres, and to the closest EU countries about 4,000 kilometres. The region also has a difficult topology, which complicates its transport links with other parts of the world, particularly South Asia. This situation is exacerbated by the deficiencies of the regional transportation network, the poor quality of transportation services, serious problems with border crossing and customs procedures, and difficulties with transit through neighbouring countries (see Box 3.5 for an eyewitness account).

Transport infrastructure³⁰

The Central Asian countries inherited highly integrated transport networks, which were built with little regard for the administrative borders between the Soviet republics and were mostly oriented towards the Russian Federation. At the same time, transport infrastructure links with neighbouring countries such as Afghanistan, China, India, Iran, Pakistan and Turkey were poorly developed, allowed to deteriorate or shut down.

Since independence, the Central Asian countries have sought to improve their transport links with countries outside the former Soviet state, often with the support of multilateral and bilateral development agencies. Most notably, railway connections have been established between Iran and Turkmenistan and between China and Kazakhstan. Kazakhstan, the Russian Federation and Turkmenistan have reached an agreement to build a railway that would connect the Russian Federation with Iran via Kazakhstan and Turkmenistan. Kazakhstan is making efforts to build missing segments of a railway that will link China with Europe via Kazakhstan, Turkmenistan and Iran.

With the financial and technical assistance of the Asian Development Bank, the Central Asian countries have carried out or are implementing several road projects to improve their transport links with East and South Asia, a step towards re-establishing themselves as a land bridge between Asia and Europe. These projects include rehabilitation of the roads from Dushanbe to the Kyrgyz border, Osh to Irkeshtan, Osh to Bishkek, Bishkek to Almaty and Almaty to Astana. A railway that would connect Uzbekistan with China through Kyrgyzstan is under consideration, along with a railroad between Afghanistan and Uzbekistan. Central Asian countries have also been taking part in the EU's TRAnsport Corridor

Box 3.5

At the Tajik-Uzbek border

There are no commercial flights connecting Dushanbe and Tashkent. So we took a local flight from Dushanbe to Khodjand in Northern Tajikistan. Here a car picked us up at the airport and took us on bad roads to the Uzbek border and on to Tashkent. On a previous trip in the opposite direction earlier this year, I had marvelled at the padlocked double iron gates blocking the Uzbek side of the border, along with a high wire fence and watch towers marking the Uzbek border as far as the eye could see, where in Soviet days there had been no real border to speak of. This time the border gates were unlocked, but opened and closed only as each vehicle and person moved through. There was little border traffic in either direction on a late Monday afternoon. A handful of trucks were heading north into Uzbekistan. A few heavily laden single-axle donkey carts were heading south for Tajikistan. Their handlers had trouble both with the donkeys and with the Tajik border guards—the donkeys eagerly straining to go on south, the guards for some reason wanting to block them, kicking the donkeys hard with their booted feet, while little boys sitting on top of the carts screamed with fear.

Source: J. Linn, personal observations, September 2003.

Europe Caucasus Asia (TRACECA) Programme and in the UNESCAP Asian Highway and Trans-Asian Railway projects (see Box 3.6). Overall, however, a lack of financial resources and poor coordination of national transport infrastructure projects have been slowing down progress in integrating Central Asian transport networks into international transport networks.

At the same time, Central Asian countries have built a number of railways and roads primarily to avoid transit through neighbouring countries, as the emergence of national borders and the resulting border formalities increased transit costs and times. For example, Kazakhstan built the Kyzylasker-Kirovskiy road to connect the region south of the Chardara Reservoir with the rest of the country, bypassing Uzbekistan. Kyrgyzstan has upgraded the Jalal-Abad to Uzgen road at a cost of about \$12 million to link Osh and Jalal-Abad without passing through Uzbekistan. Turkmenistan has built a new railway connecting Kerkishi in the Amu Darya valley to the country's rail network, bypassing Uzbekistan, which has, in turn, constructed the Uchkuduk-Misken-Karauzak railway at a cost of more than \$10 million to

connect Bukhara with Nukus via Navoi, bypassing Turkmenistan. While these new roads and railway detours have likely had some positive impact on the development of the countries that built them, their construction would not have been justifiable if the use of existing regional transport networks had not been beset by a lack of cooperation. A better use of limited financial resources would have been the development of international transport corridors, and rehabilitation and maintenance of existing networks, together with efforts to reduce obstacles at the borders.

Central Asia now possesses an extensive transport network, which comprises a total of 21,856 kilometres of railways and 177,250 kilometres of roads (see Table 3.6). However, much of the network is in poor condition and requires rehabilitation. It is estimated that only 25 per cent of roads in Kyrgyzstan and 20 per cent of roads in Tajikistan are in good condition. The reasons include lack of maintenance due to inadequate financing; the Soviet standards under which most of these roads were built (which are inappropriate for the current level of traffic and modern trucks); and low-quality maintenance due to corruption and limited use of

Central Asian countries have built a number of railways and roads primarily to avoid transit through neighbouring countries

Box 3.6

Participation of Central Asian countries in major international transport infrastructure projects

The TRACECA Programme

The TRACECA Programme is an EU-funded technical assistance programme to develop a west-east transport corridor from Europe, across the Black Sea, through the Caucasus and the Caspian Sea basin to Central Asia. It was launched in May 1993 by the original eight TRACECA countries (Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan).

By 2005, the TRACECA Programme had financed 39 technical assistance projects totalling €57.7 million and 14 investment projects totalling €52.3 million. Technical assistance helped to attract some large investments from international financial institutions. In particular, the EBRD has extended loans to Kazakhstan (\$65 million) and Uzbekistan (\$40 million) for rehabilitation of railways on the basis of TRACECA projects. The programme also provided co-financing for the border-crossing component of Asian Development Bank loans to Kazakhstan and Kyrgyzstan, with a total of \$68 million going towards the rehabilitation of the Almaty-Bishkek road.

The Asian Highway and Trans-Asian Railway

In 1992, UNESCAP endorsed two Asia regional transport programmes: the Asian Highway and the Trans-Asian Railway.

The objective of the Asian Highway is to promote the development of international road transport in Asia; an intergovernmental agreement to that end was adopted in 2003. The agreement identified 55 routes with a total length of approximately 140,000 kilometres that criss-cross the Asian continent and reach Europe. These include eleven routes (13,189 kilometres) in Kazakhstan, four routes (1,695 kilometres) in Kyrgyzstan, three routes (1,925 kilometres) in Tajikistan, five routes (2,204 kilometres) in Turkmenistan and five routes (2,966 kilometres) in Uzbekistan. Of the 32 countries involved, 26—including Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan—have signed the intergovernmental agreement. The remaining six countries, including Turkmenistan, have until the end of 2005 to sign it.

The Trans-Asian Railway was initiated in the 1960s with the objective of providing a continuous 14,000-kilometre rail link between Singapore and Istanbul, with possible onward connections to Europe and Africa. Given the extent of the territory covered, and the differences in standards and levels of technical development among railways in the region, UNESCAP has adopted a step-by-step approach to define the network.

The challenge for the future for the TRACECA, Asian Highway and Trans-Asian Railway programmes is to convert plans into reality. This requires regionally coordinated planning, financing and construction. Moreover, institutional and technical bottlenecks have to be identified, and specific remedial measures defined and implemented.

Source: Adapted from the TRACECA and UNESCAP Websites, www.traceca-org.org and www.unescap.org

Table 3.6

Transport networks in Central Asian countries, 2004
(1,000 km)

	Railways	Roads
Kazakhstan	14.3	89.0
Kyrgyzstan	0.4	18.8
Tajikistan	0.5	12.5
Turkmenistan	2.6	13.5
Uzbekistan	4.0	43.5
Total	21.9	177.3

Source: Asian Development Bank estimates.

The availability, quality and costs of transport services in Central Asia compare unfavourably with many other countries

modern technology and equipment. Maintenance budgets are meagre partly because fuel and other road user charges are low by international standards. In the case of Tajikistan, the civil war also contributed to the destruction of existing roads.

Transport services

The availability, quality and costs of transport services in Central Asia compare unfavourably with many other countries.³¹ In particular, international rail services for small cargo (i.e., cargo of less than one wagonload or five-ton container load) are either not available, or very costly with long booking and transit times. Shipments by road are fairly expensive and unreliable. While there is substantial overcapacity in basic vehicles, specialized vehicles, such as temperature-controlled ones, are in short supply. Inter-modal piggyback operations (i.e., trailers on rail wagons) are nonexistent. Airfreight services are underdeveloped and expensive.

Lack of competition is one of the main reasons for the low quality and high costs of rail and air transport services. State-owned railways maintain monopoly positions in rail transport and continue to perform both regulatory and commercial functions, although restructuring of railways has

been underway in Kazakhstan and Uzbekistan, and is under consideration in Tajikistan. Likewise, state-owned airlines dominate the market for air transport services in all the Central Asian countries, including Kazakhstan, where major airports have been privatized and there are 47 private and only one state-owned air carrier (see Box 3.7). The lack of competition has resulted in inefficiencies in transport services and under-investment in transport infrastructure, especially in rail transport. That is why a substantial proportion of railway tracks and rolling stock is in poor condition.

By contrast, competition is high in road transport, where state-owned enterprises and vehicles have largely been privatized and transport operators from Belarus, Iran, Russia and Turkey are active. However, this sector is mostly comprised of small and micro-sized firms, which lack financial resources and skills to expand their businesses, achieve economies of scale and improve the quality of services. Road transport operators also suffer from complicated and non-transparent transport regulations and border-crossing procedures, road permit quotas for entering foreign countries and difficulties with transit through neighbouring countries.

Lack of competition is one of the main reasons for the low quality and high costs of rail and air transport services

Box 3.7

Air transport in Central Asia

During the Soviet period, the Central Asian republics had extensive air connections with each other and other Soviet republics, but few direct air links with the rest of the world. After the Soviet break up, many flights were discontinued, while some direct flights between the Central Asian countries and the rest of the world were established. As a result, it is often necessary to go via a city outside the region to travel from one Central Asian city to another by air. For example, to get from Bishkek in Kyrgyzstan to Ashgabat in Turkmenistan requires flying through Istanbul. Or there may be a need to travel overland for part of the way, as for the trip from Dushanbe in Tajikistan to Tashkent in Uzbekistan (see Box 3.5).

The Central Asian countries inherited a relatively obsolete air transport infrastructure from the Soviet Union. Soviet airplanes did not meet international standards for safety, comfort and environmental protection. Since independence, however, some of the Central Asian countries have made considerable progress in upgrading their fleets. Uzbekistan Airways and Air Astana of Kazakhstan have both leased new airplanes.

Air transport has been commercialized and partially privatized in Kazakhstan. Nonetheless, the state-controlled airline, Air Astana still dominates the market. National airlines in the other Central Asian countries are entirely state-owned. In addition to providing air transport services, they operate national airports and air traffic control. This dominance is a main reason for the relatively poor quality of air services in Central Asia. The lack of international standard airline connections seriously limits foreign investor interest, tourism and regional integration.

The limited availability of multi-modal transport operations and relatively high costs of international transport services for small cargo are due largely to the underdevelopment of logistics infrastructure and services. There are no modern logistics centres in any of the countries that could consolidate freight for the international market in sufficient volumes and allocate them to the most efficient transportation mode.³² International logistics providers have largely stayed outside the region, citing the small size of the market, unfavourable regulatory environment and corrupt practices. There has been little FDI in logistics infrastructure and limited transfer of know-how in logistics services. Local logistics companies are mostly small, and lack the facilities and expertise to provide quality services.

Border management and customs administration

Since the new international borders of the Central Asia republics are here to stay, a key challenge for the governments of the region is to create 'borders with a human face'. Borders should facilitate the movement of people and goods, rather than hamper it with time-consuming and unpredictable red tape, and expensive official fees. People should not feel threatened, intimidated, exploited, harassed or subjected to extortionary and corrupt payment requirements. Today, all too often, borders in Central Asia are without a human face (see Box 3.8). This is especially true of borders between Uzbekistan and other Central Asian countries. Over half of 6,000 people who participated in the 2004 public opinion survey conducted by the World Bank said that borders between their coun-

tries and other Central Asian states had a negative or very negative impact on trade, transport and transit. Almost 60 per cent of the respondents said that borders had a negative or very negative impact on their access to family members, friends or business associates (see Figure 3.2). Border relations between Uzbekistan and the other three Central Asian countries covered by the survey were rated the worst.

Despite the apparent increase in difficulties with border crossings, the Central Asian countries have made some headway in modernizing their customs administrations over the last several years. Kazakhstan, Kyrgyzstan and Tajikistan have enacted new customs codes, which broadly conform to the international Convention on the Simplification and Harmonization of Customs Procedures (known as the 'Revised Kyoto Protocol') and WTO standards (including the rules for customs valuation). Uzbekistan is in the process of revising its customs code in line with these. Kazakhstan has introduced a customs automated information system, and Kyrgyzstan and Tajikistan are developing such systems. Uzbekistan's customs administration has made substantial investments in information and communication technology.

Nonetheless, clearing goods through customs can still be costly and time consuming. Customs procedures are complex and onerous with extensive documentation requirements. Modern information technology is not generally used to its full potential.³³ Customs officers are paid low salaries compared to private sector employees and are not always well trained. Most customs declarations are subjected to physical checks of the consignment, delays in clearing goods are common, and unofficial payments are often

A key challenge for the governments of the region is to create 'borders with a human face'

Central Asian countries have made some headway in modernizing their customs administrations, but clearing goods through customs can still be costly and time consuming

Box 3.8

Central Asian borders need a more 'human face'

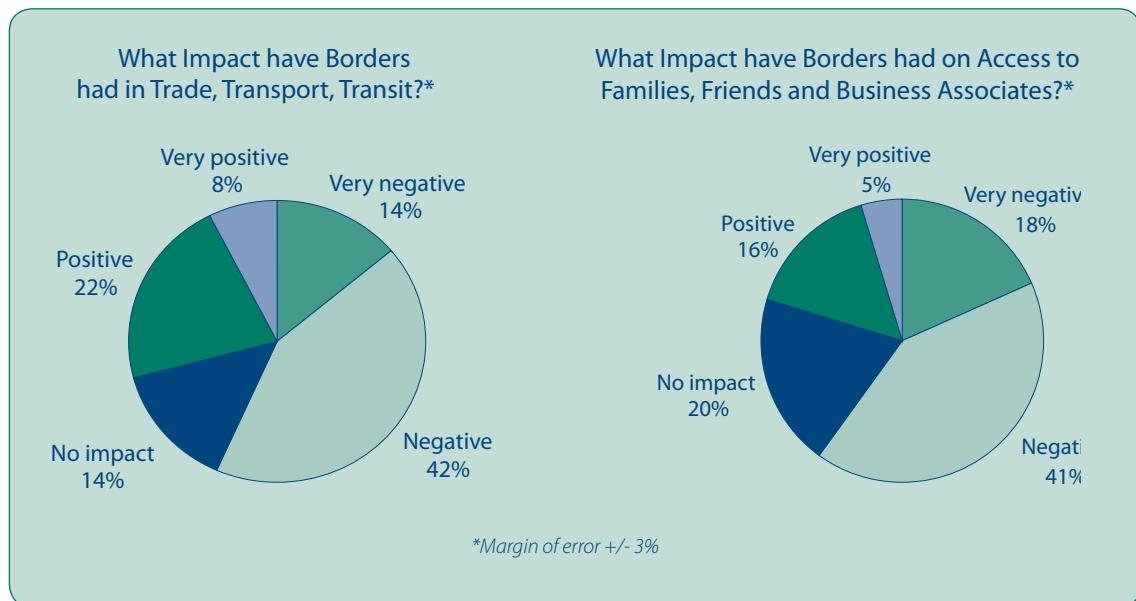
Since independence, the Central Asian countries have increasingly restricted cross-border movement, especially Uzbekistan. In the late 1990s, Uzbekistan largely closed its borders with Tajikistan and mined its borders with Kyrgyzstan and Tajikistan in an effort to prevent drug trafficking, weapons smuggling and incursions by members of the Islamic Movement of Uzbekistan. In 2002, Uzbekistan effectively closed its borders with Kazakhstan and Kyrgyzstan, officially to protect against epidemics, but in fact also preventing people from visiting, shopping or working in the neighbouring countries. For example, the Uzbek authorities ordered a bridge connecting the Kyrgyz town of Kara Suu and the Uzbek town of Qorasuv destroyed. Immediately after the violent events in Andijan, Uzbekistan, in May 2005, the border was temporarily reopened at Kara Suu and a makeshift bridge immediately constructed by local initiative, reflecting the strong interest of the local population in cross-border contacts.

Border closures have had a devastating impact on legal cross-border trade, while fuelling smuggling and corruption. They have also made very difficult the movements of people across borders for legitimate purposes, such as visiting friends and relatives, attending funerals and business meetings, etc. There are numerous reports about border guards and customs officials harassing people and extorting unofficial payments from them.³⁴ Survey data shown in Figure 3.2 confirm the individual reports.

There have also been numerous fatalities at the borders between Uzbekistan and other republics due to either shootings by border guards or land mines. According to media reports, Uzbekistan has recently removed mines from its border with Kyrgyzstan and is currently removing mines from its border with Tajikistan.

Public opinions on the effect of borders in Central Asia

Figure 3.2



Source: 2004 World Bank Public Opinion Survey.

The people of Central Asia depend on transit through their neighbours for international, regional and domestic trade

needed for timely processing. The situation is exacerbated by excessive certification requirements and weak standards institutions, as well as a multiplicity of, and the lack of coordination among, various agencies operating at borders.

Transit systems

Aside from crossing borders to get from one country to another, the people of Central Asia depend on transit through their neighbours for international, regional and domestic trade. The anomalous situation of domestic trade depending on transit through neighbouring countries arises because of how the post-Soviet borders cut across inherited railways and roads in a jigsaw-like manner. In addition, Tajikistan, Kyrgyzstan and Uzbekistan each have enclaves in the territory of the other two.³⁵

Central Asian countries have tried to resolve their transit problems via multilateral, regional and bilateral agreements. All have signed the Customs Convention on the International Transport of Goods under Cover of TIR Carnets, the most important international convention covering transit by road (often referred to as 'the TIR Convention'). Together with other CIS countries, they have also signed the Agreement on Transit through the Territories of the CIS Member Countries. Within the framework of the EEC, Kazakhstan, Kyrgyzstan and Tajikistan, together with Belarus and the Russian Federation, signed several agreements that aim to facilitate transit. Nine out of the 10 ECO mem-

ber countries, including Kazakhstan, Kyrgyzstan, Tajikistan and Turkmenistan, have signed the ECO Transit Transport Framework Agreement. The Governments of Kazakhstan and Kyrgyzstan have signed several agreements to facilitate the transit of Kyrgyz goods through Kazakh territory.

The results of these agreements have been mixed. While transit problems have not been acute for rail transport, they have remained serious for road transport. This is because the agreements concerning transit by road either have not been implemented at all or implemented only partially. The ECO Transit Transport Framework Agreement, for example, has not even entered into force, as only five countries have so far ratified it (six are needed for it to become effective). In the case of the TIR Convention, there have been a number of reports from the region that customs authorities have broken the seals and checked the cargos of trucks travelling under the TIR carnet, or required that they join a customs convoy. These actions contravene the convention. Furthermore, no separate streams for trucks travelling under the TIR carnet have been established at border posts, thus in effect slowing down TIR traffic along with the rest.³⁶

Central Asian countries need to ensure full implementation of the TIR Convention as a step towards becoming a land transit link between East and South Asia and Europe and fully integrating into the global economy. The TIR system has, however, a major drawback: Its cost is prohibitively high for many transport operators in the region. The use of the system requires purchase of customs-secure vehicles or containers (i.e., expensive European-

Central Asian countries have tried to resolve their transit problems via multilateral, regional and bilateral agreements, but the results of these agreements have been mixed

manufactured units), membership in a national association, and purchase of the TIR carnet for each movement of transit cargo from the point of origin to the point of destination.³⁷

For intra-regional and some inter-regional shipments, such as shipments to and from other CIS countries, Afghanistan, China, Iran and Pakistan, a simplified and effectively managed regional transit system, similar to the TIR Convention but less costly, needs to be developed. Many components of such a system, including transport inspection mechanisms, transport associations and a growing insurance industry, are already in place in the region. However, there is an inability or unwillingness at a regional level to combine these components into a workable mechanism. Given the difficulties in developing multilateral agreements, an effective way to establish such a system may involve progress initially on a bilateral basis, with these arrangements brought together under a multilateral arrangement at a later stage. The recent bilateral transit agreement between Kazakhstan and Kyrgyzstan and between

Kyrgyzstan and Tajikistan represent a welcome step in this direction.

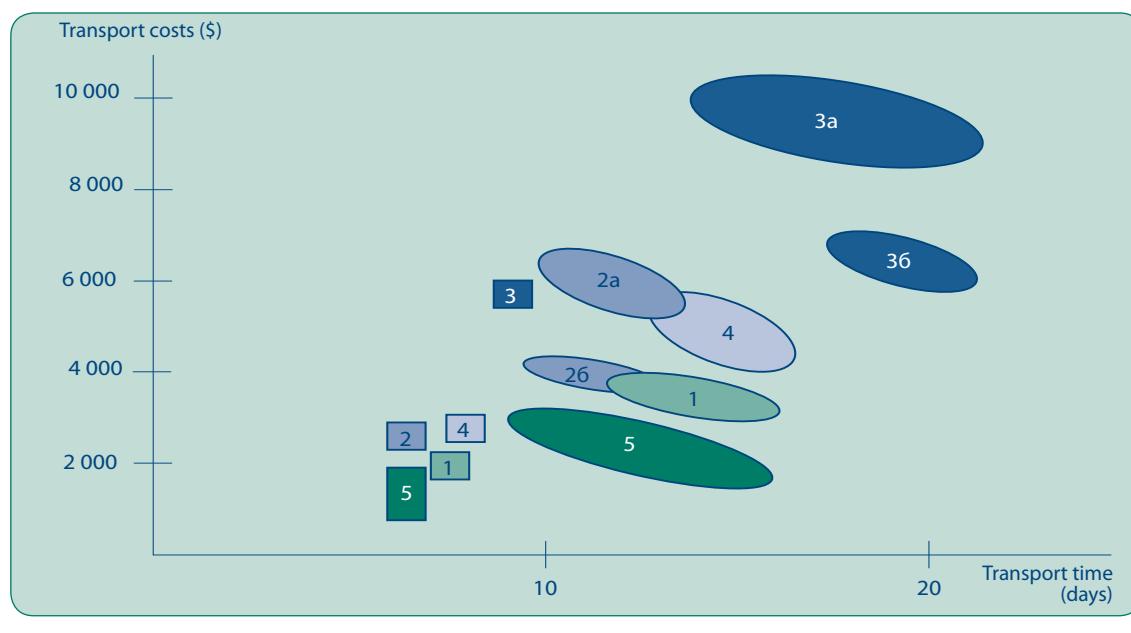
Transport costs and times

The overall effects of the Central Asian countries' remote and landlocked location; deficient transport networks; low-quality transport services; and weak border management, customs administration and transit systems are that transport costs are generally high, and transport times are long and unpredictable for international shipments, particularly small shipments, to and from the region. Figures 3.3 and 3.4 compare the actual transport costs and transport times for shipments by road between Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan, and for shipments by road and rail between these countries and selected countries outside the region with the corresponding transport costs and transport times in an 'ideal world' with balanced transport flows, competitive markets for transport services, smooth border crossings, low transit fees and no visa problems and unofficial payments.

Transport costs are generally high, and transport times are long and unpredictable for international shipments, particularly small shipments, to and from the region

Transport costs and transport times for shipments by road within Central Asia (Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan) and between Central Asia and selected countries (first quarter 2005)

Figure 3.3



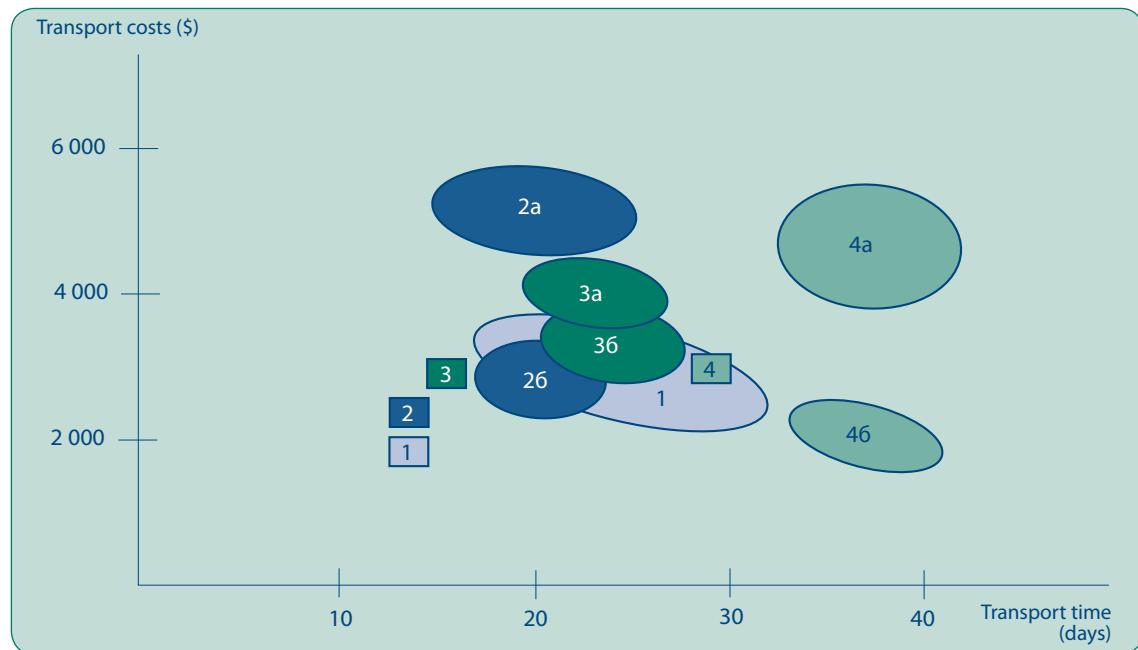
Legends:

- (Ellipsis) Actual transport cost and time
- (Square) Transport cost and time in an 'ideal world' with balanced transport flows, competitive markets for transport services, smooth border crossings, low transit fees and no visa problems and unofficial payments

- 1 For a shipment by a local truck to Moscow;
- 2 For a shipment by a Turkish truck (a) from Istanbul and (b) to Istanbul;
- 3 For a shipment by a European truck (a) from the Benelux countries and (b) to the Benelux countries;
- 4 For a shipment by a local truck to and from the Finnish border;
- 5 For a shipment by a local truck within Central Asia.

Transport costs and transport times for shipments by rail between Central Asia (Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan) and selected countries (first quarter of 2005)

Figure 3.4



Legends:

- Actual transport cost and time
- Transport cost and time in an "ideal world" with balanced transport flows, competitive markets for transport services, smooth border crossing, low transit fees and no visa problems and unofficial payments.

- 1 For a shipment of a full wagon or a 40-foot container from and to Moscow by rail;
- 2 For a shipment of a 40-foot container (a) from Istanbul and (b) to Istanbul by rail and sea;
- 3 For a shipment of a 40-foot container (a) from the Benelux countries and (b) to the Benelux countries by rail;
- 4 For a shipment of a 40-foot container (a) from China (east coast) by rail over land and (b) to China (east coast) by rail and sea via Bandar Abbas, Iran.

High transport costs and long and unpredictable transport times undermine the competitiveness of Central Asian countries' exports in international markets

There have been several regional initiatives aimed at reducing transport costs and times in Central Asia, but overall progress has been modest

The figures show that the actual transport costs are much higher and actual transport times are much longer for shipments within, to and from Central Asia than those in the 'ideal world'.³⁸ High transport costs and long and unpredictable transport times undermine the competitiveness of Central Asian countries' exports in international markets, raise the costs of imports, impede international trade and deprive the Central Asian states of potential trade benefits. They also affect the direction and composition of trade in Central Asia by constraining trade with remote countries more than with neighbouring countries, and trade in perishable and high value-added products more than in non-perishable and low value-added products. This partly explains Central Asia's limited reorientation of trade from the former Soviet countries to the rest of the world, and the continuing dominance of primary commodities and low value-added manufactured products in exports.³⁹

Figures 3.3 and 3.4 also show that there is an asymmetry in transport costs for shipments between Central Asian and Europe. For example,

it costs \$8,500 to \$10,500 to ship a truckload of cargo from the Benelux countries (Belgium, Netherlands, Luxembourg) to Central Asia, and only \$6,000 to \$7,000 to ship in the opposite direction. In the 'ideal world', shipments would cost \$5,500 to \$6,000 in either direction. This is due to the particular commodity composition of trade between Central Asia and Europe, whereby exports from Central Asia to Europe mostly consist of primary commodities transported by rail and through pipelines, while imports from Europe to Central Asia mostly consist of manufactured products transported by road and air.⁴⁰ According to estimates made for the Asian Development Bank study on Central Asia regional cooperation in trade, transport and transit, the total loss due to this problem is around \$300 million per year.

Regional approaches to improvements

There have been several regional initiatives aimed at reducing transport costs and times in Central Asia through transport and trade facilitation, and improvements in transport infrastructure and services. The major regional transport infrastructure

programmes—the TRACECA, Asian Highway and Trans-Asian Railway programmes—were presented in Box 3.6 above. Five other initiatives can be highlighted. First, the CACO members have decided to establish a transport consortium to develop services in the region and improve links with other parts of the world. Second, the Transport Sector Coordinating Committee has been set up for the same purposes under the CAREC Programme, which was initiated by the Asian Development Bank in 1997 and includes Azerbaijan, China, Kazakhstan, Kyrgyzstan, Mongolia, Tajikistan and Uzbekistan. Third, the Customs Cooperation Committee has been established under the CAREC Programme to promote concerted customs reforms in the member countries and regional cooperation in customs administration. Fourth, the Central and South Asia Transport and Trade Forum, which involves Afghanistan, Iran, Pakistan, Tajikistan, Turkmenistan and Uzbekistan, and is also supported by the Asian Development Bank, seeks to facilitate movements of goods and vehicles along two road corridors connecting the Central Asian countries with seaports in the Arabian Sea and the Persian Gulf via Afghanistan. Finally, under the umbrella of SCO, member countries are negotiating a draft Intergovernmental Agreement on Facilitation of International Road Transport.

Of special importance are initiatives designed to support regional cooperation in facilitating border crossings. One outstanding example is the collaboration between the Border Management for Central Asia Programme (BOMCA) and the Central Asia Drug Action Programme (CADAP), financed by the EU and implemented by UNDP. The programmes assist Central Asian countries in improving their security situations and easing the legal flows of persons and goods across their borders (see Box 3.9). UNDP's Silk Road

Programme, which covers China, Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan, strives to promote a favourable policy and legal environment for trade and transit, and to encourage greater private sector participation in trade and transport promotion.

Despite all these efforts, overall progress has been modest for three main reasons. First, regional cooperation has been limited so far due in part to the lack of interest and commitment by the countries in the region. Some give much higher priority to security considerations than trade and transport facilitation. Second, various regional programmes funded by external donors have not been well coordinated. Third, the low quality of institutions and the poor governance in Central Asian countries make it extremely difficult to reform border management and customs administration, and to separate legitimate security and safety concerns from excessive and often corrupt interventions in legal movements across borders.⁴¹ Creating ‘borders with a human face’ and promoting trade therefore requires great improvements in the way public institutions function.

The Central Asian countries need to make improvements also in behind-the-border conditions for business and finance if they are to expand trade and investment

Behind-the-border improvements: the business climate, finance and investment

The Central Asian countries need to make considerable improvements not only in their trade regimes, transport, border management, customs administration and transit systems, but also in behind-the-border conditions for business and finance if they are to expand trade and investment and promote human development and human security.⁴² A supportive business environment

Box 3.9

Border management and drug action programmes

Through an integrated border management approach, BOMCA and CADAP jointly seek to achieve a balance between stronger controls on illicit trafficking of drugs, weapons and people, and improved legal trade and transit. The beneficiary countries are Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan. The total budget amounts to €35 million between 2004 and 2008.

Projects under the programmes comprise legal assistance to national authorities to revise legislative and organizational frameworks in line with EU methodologies and best practices for integrated border management; development of training infrastructure and training programmes; and renovation and equipping of border crossing points, border outposts and sniffer dog units in a number of pilot regions. A consortium of EU Member States has been created to provide technical guidance and to encourage coordination of border assistance, including with the United States.

UNDP provides overall support for the delivery of technical assistance, and acts as an implementation umbrella for other UN agencies executing various components: the UN's Office on Drugs and Crime (UNODC) for legal assistance and airport control; the International Organization for Migration (IOM) for visa management at airports; and the UN High Commissioner for Refugees (UNHCR) for training border guards in human rights and international conventions. A number of specific national programmes are under preparation to support BOMCA/CADAP, such as UNDP HIV/AIDS programmes that will boost CADAP's efforts to stem demand for illegal drugs. Community development initiatives will be undertaken in the pilot border regions to encourage sustainable development, and promote cross-border contact and trade.

*From the point of view
of foreign investors,
regional considerations
can be even more
important than
national ones*

and access to finance, not only for large urban firms, but also for smaller and micro-enterprises, including rural areas, make it possible for people to respond to improved trade opportunities by increasing the production of tradable goods and services.

Currently, there are major obstacles to private business and finance in Central Asia, including barriers to market entry, underdeveloped financial sectors, and the lack of marketing institutions and skills. Much external economic activity is subject to licensing, and in most of the countries, state-owned companies monopolize the export of key commodities, such as energy products, precious metals and cotton fibre. Financial services and instruments facilitating international trade, such as short-term credit, insurance, letters of credit and bills of exchange, are not readily available. There are few specialized marketing companies, and exporters often lack skills and other resources necessary for marketing their products abroad. Businesses have limited information about export and import opportunities existing in other countries, while businesses in other countries often lack information about similar opportunities existing in Central Asia.

The business environment and investment climate

A number of studies conclude that region-wide political and economic stability resulting from regional cooperation and integration could have a positive effect on investment in general and on FDI in particular.⁴³ From the point of view of foreign investors, regional considerations can be even more important than national ones.⁴⁴ In addition to objective factors, such as an increase in the market size resulting from cooperation, the subjective image of the region may play a crucial positive or negative role in investors' decisions. Economic theory and numerous empirical observations

Investors—including foreign investors—encounter numerous difficulties in Central Asia as barriers to business entry remain high

confirm that negative signals from one country, whether political, economic or social, spill over and inform impressions of neighbouring countries.⁴⁵

Despite strong political declarations placing investment and an improved investment climate among the highest national priorities, and despite some progress in this regard, businesses and investors—including foreign investors—encounter numerous difficulties in Central Asia. Surveys conducted in the region and discussions with entrepreneurs confirm several fundamental obstacles (see Box 3.10 for an example from Kyrgyzstan). Each slows down or blocks business development.

Barriers to business entry remain high in terms of the number of procedures, time required,⁴⁶ cost and minimum required capital. Heavy burdens from state control and complex business regulations remain virtually unchanged, even where there have been reforms in business registration and approval processes. The procedures for obtaining licenses and permits remain complicated, forcing entrepreneurs to collect a large number of supporting documents, seals and signatures from numerous institutions. Time-consuming contract enforcement processes present additional obstacles. According to a recent World Bank assessment, the complexity of procedures and the burden of time spent with state officials (the so-called 'time tax') in Central Asia is above the average for all transition economies and developed countries (see Table 3.7).

Direct intervention in business operations by representatives of various official institutions and multiple layers of corruption in political and economic structures are widespread.⁴⁷ According to the Business Environment and Enterprise Performance Survey, more than 30 per cent of firms need to make bribes frequently. Around 3.3 per cent of annual firm revenue is soaked up by unofficial payments (this compares

Box 3.10

How foreign investors perceive the business environment in Kyrgyzstan

A survey of foreign investors conducted by the International Business Council in Kyrgyzstan in 2003 suggested the following priority actions for the Government to improve the business environment and investment climate in the country (in brackets is the per cent of responses referring to the item as "very important"):

- Reduce tax rates for businesses (85 per cent);
- Make business finance available at lower interest rates (77 per cent);
- Eradicate bribery among state officials (77 per cent);
- Reduce the number of state officials who make inspections (72 per cent);
- Reduce the number of permits required for business (72 per cent).

Representatives of large businesses (with over 100 employees) indicated in addition the need to reduce tax reporting to once a year; to provide information about changes in legislation; and to reform the courts to stop pressure or bribes from influencing judgments.

Source: International Business Council, Kyrgyzstan.

Table 3.7

Indicator	Average Kazakhstan, Kyrgyzstan, Uzbekistan	Average Europe and CIS	Average OECD
Number of procedures	40	29	19
Time (days)	420	412	229
Cost (% of debt)	24.8	17.7	10.8

Source: UNDP computations based on World Bank 2004*i*.

Business regulations in Central Asia: the complexity of enforcing contracts

to the CIS average, but is almost twice the EU-8, or new post-communist EU states, average of 18 per cent of firms making bribes, and 0.9 per cent of revenues spent on unofficial payments). The average bribe tax in the region has been estimated to be around five per cent; in Kazakhstan, Kyrgyzstan and Tajikistan more than one-half of the firms reported paying at least some bribes (in Uzbekistan this number is just below 50 per cent).⁴⁸ Other regional problems include delays in contract enforcement and losses from crime.⁴⁹

Unfortunately, worldwide experience shows that once inefficient government, discretionary interventions and corruption have become endemic, it is very difficult to root them out. Nonetheless, it is important that improvements be made, since without them a poor business environment and investment climate will prevail, hampering domestic and foreign investment along with trade, growth and employment creation.

Access to finance

Another important area for behind-the-border action is to strengthen financial systems. With the right policies in place, this process can be both pro-growth and pro-poor in the sense of reducing poverty and increasing human development and human security. A growing private sector and the development of trade and commerce, both domestic and trans-border, require a healthy financial sector that can provide the capital for business to invest and trade. An efficient financial sector mobilizes resources and allocates them to those investments that are capable of generating the highest returns. Developed and competitive financial intermediaries will foster economy-wide competition and openness by facilitating the entry of new enterprises and reducing the dependence on personal wealth and political connections.⁵⁰ Improved access to finance is of critical importance particularly to small, medium and micro-businesses as well as the self-employed, who make up the majority of those employed in both the formal and informal sectors in most Central Asian economies.

As in the case of measures to improve the business environment and investment climate, financial sector reforms are mostly a matter of national action. However, here too there are benefits from a regional perspective and regional cooperation. First, with the countries facing similar financial sector weaknesses and institutional shortcomings, regional cooperation would encourage the sharing of experiences, best-practice reforms, benchmarks of progress and the expertise of technical experts in the region and around the world.

Second, comparable and consistent regulatory practices will help forge cross-border banking sector links, unleash FDI flows, improve cross-border payment mechanisms (e.g., for exports and imports, and also for migrants' remittances) and in general integrate economic activities for mutual benefit. Recently, illicit cross-border financial flows, especially money laundering, have sparked international concern. Only regional and global approaches to combat these problems have any hope of success.

Third, there are so-called 'contagion effects' that can cut across borders and are mediated by financial sectors. For example, when there is a banking sector collapse in one country, this may spread to neighbouring countries, as was demonstrated very painfully in Central Asia in the wake of Russia's 1998 financial crisis.⁵¹

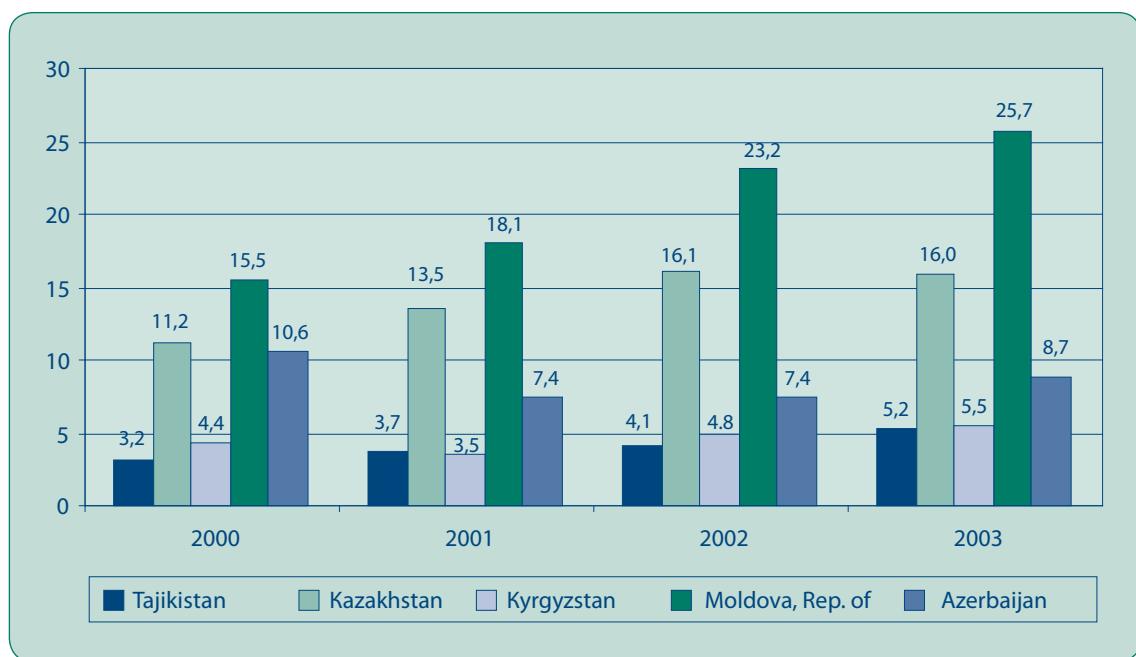
At independence, the Central Asian countries had to create functioning financial systems where none had existed before. Transition has ushered in financial development through new roles for central banks, restructuring and privatization of state-owned banks, and the development of commercial banking systems and non-bank financial institutions. While there has been progress, financial systems remain poorly developed even by low CIS standards (see Figure 3.5). Substantial reforms are needed in most countries, especially in the banking sector, given its overwhelming importance in Central Asia relative to other financial institutions. Improved banking regulation, supervision and enforcement; privatization of state banks; increased competition among banks and easier entrance for foreign banks are among the key steps countries need to take.

Improved access to finance is critical for small, medium and micro-businesses as well as the self-employed

The Central Asian countries had to create functioning financial systems where none had existed before

Ratio of bank deposits to GDP for selected countries (in %)

Figure 3.5



Source: IMF 2004b.

While there has been progress, financial systems remain poorly developed

Despite important similarities among the Central Asian countries, they are at different stages of financial sector development, and have varying needs and priorities. Kazakhstan has made significant progress in reforming and developing its financial sector and is at a much more advanced stage than the other four countries.⁵² Recently, Kyrgyzstan has also advanced the reform and strengthening of its financial system. Tajikistan is forging ahead after its civil war, but many challenges remain. The financial sectors in Turkmenistan and Uzbekistan are underdeveloped and lag behind the other countries. The Uzbek Government maintains tight reins on most of the financial sector, which is dominated by state-owned banks. Turkmenistan's financial system is small and mainly state controlled.

While the banking sectors have been developing gradually in Central Asia, non-bank financial intermediaries are growing rapidly, helping the financial system provide access to more vulnerable groups. Although they are still in their infancy, non-bank financial services, such as leasing, microfinance, rural finance and migrant remittance flows,⁵³ can make a significant difference to ensuring access to finance to otherwise commonly excluded businesses and population groups. Given Central Asia's widespread poverty and the prevalence of very small, often informal businesses, access to microfinance and hence the development of microfinance institutions is of special importance.⁵⁴ Some Central Asian countries have initiated national

programmes for microfinance reforms; external donors have provided support on a regional basis (see Box 3.11).

The microfinance industry is still at an early stage of development, but it is now the fastest growing segment of financial markets in the region. Among transition economies, Central Asia performs relatively well in this sector. Some of the leading microfinance institutions have achieved impressive financial performance and outreach—a large number have a predominantly rural clientele. However, demand for finance by far outstrips supply due to factors that include the overall weaknesses of banking sectors, limited outreach in some areas, and continued institutional weaknesses such as the lack of training and technical skills.

A special challenge for the financial sector as a whole is the development of capital markets as sources of long-term capital investment and a channel for long-term foreign investment, including more stable flows of FDI. Capital markets encourage more publicly available information and its disclosure, thereby leading to better governance. Since capital markets in Central Asia remain underdeveloped, firms rely mostly on internal finance and credits, with very little access to equity finance. Trading is concentrated on the Kazakhstan Stock Exchange, mostly in foreign exchange, repurchase agreements and government debt instruments. Kyrgyz Stock Exchange trading is minimal, and capital markets remain a small part of the financial sector.⁵⁵ In Tajikistan and Uzbeki-

The microfinance industry is still at an early stage of development, but Central Asia performs relatively well in this sector

Box 3.11**Donor support to regional microfinance initiatives**

Donors have provided funding for microfinance programmes run by non-governmental organizations (NGOs), with international NGOs offering institutional capacity building and technical expertise. Particularly notable has been the fact that in this area, donors have pursued deliberate regional strategies of institution building. One important regional initiative sponsored by USAID is being implemented in Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan. Other programmes include a World Council of Credit Unions project in Uzbekistan; loan officers' training under the EBRD micro-, small- and medium-enterprises lending programme in Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan; and the International Finance Corporation's microfinance legislation development project in Kyrgyzstan, Tajikistan and Uzbekistan. Another newly forming regional initiative is the Central Asian Microfinance Centre's Consultative Group to Assist the Poorest, which is in the process of establishing a microfinance regional centre. Its activities will include donor coordination; policy work, for example, microfinance regulation; training and capacity building for the regional microfinance industry; and dissemination of the Consultative Group's technical tools and other resources.

Despite these important regional initiatives, there remain some critical gaps in access to microfinance: fragmentation of NGOs involved in microfinance activities; the provision mainly of short-term credit, and the lack of investment credit for fixed assets; a client base mostly from the urban poor, despite the need of the rural poor for financial services; savings mobilization constrained by limited income and capacity (and because NGOs are not regulated financial institutions); and the lack of collateral among the poor in general. Finally, licensing, regulatory and supervisory capacities need to be strengthened.

Source: World Bank Microfinance Study Team, 2003.

stan, capital markets are virtually nonexistent. The Republican Tashkent Stock Exchange is extremely small, and the securities traded include a limited number of publicly listed companies and short-term government securities. Devising a regional approach to capital market development may be the quickest way to ensure that more firms have access to equity finance.

FDI and small- and medium-enterprise development

Both the level of FDI and the development of small and medium enterprises are important weather vanes indicating the quality of national and regional business and financial environments. Experience shows that both are critical for developing sustained growth in trade, incomes and employment in transition countries, and that both in turn depend on an open trade regime.

The empirical evidence suggests that for emerging market economies, a 1 percentage point increase in the ratio of FDI to GDP leads, *ceteris paribus*, to an extra 0.8 percentage point increase in per capita income.⁵⁶ FDI supports economic growth through four main channels: It brings financial capital, management skills, technology and access to export markets. At the same time, an open trade regime and rapid trade expansion create the international linkages and reputation that attract foreign investors, who generally invest in trade-oriented businesses.

Complementing a steady inflow of FDI must be the growth of a vibrant domestic private sector, especially of small and medium enterprises, and

the creation of a culture of entrepreneurship.⁵⁷ Small and medium enterprises in particular have been shown to generate employment and income, and contribute to economic growth, innovation and competitiveness not only in general, but also among vulnerable groups such as the long-term unemployed, women and youth, and people in rural areas.

Unfortunately, Central Asia has generally not attracted enough foreign investment nor fostered the development of small and medium enterprises. With the exception of Kazakhstan—which has attracted large foreign investments into its energy sector—FDI inflows have been minor (see Table 3.8 and Figure 3.6) and among the lowest for transition countries in terms of FDI per capita. FDI that has trickled into the region has mainly been resource-oriented (e.g., oil and gas in Kazakhstan and Turkmenistan, gold in Kyrgyzstan).

There has been some progress recently in foreign investment in the banking sector, including cross-border investments within Central Asia. The best example is the presence of Kazakh banks in Kyrgyzstan. This entry of foreign capital is a good development for the Kyrgyz banking sector. Foreign banks bring competition, know-how and sounder lending practices. Kazakh banks, although focused on their home market, are also actively expanding operations and making acquisitions in other CIS countries. Several Turkish banks are now present in Kazakhstan, Kyrgyzstan, Turkmenistan and Uzbekistan. In general, however, foreign investment from international banks remains relatively low. Given the problems of the financial sector, it is unlikely that, in the near term, Central Asia will attract foreign banks, perhaps with the exception of those from Kazakhstan.

Unfortunately, Central Asia has generally not attracted enough foreign investment nor fostered the development of small and medium enterprises

There has been some progress recently in foreign investment in the banking sector

Table 3.8

Stock of FDI per capita end-2003 (\$)	IMF	EBRD	UNCTAD
Cyprus	8,956	n.a.	7,384
Czech Republic	3,771	3,939	4,022
Hungary	3,697	2,335	4,241
Estonia	3,013	2,027	4,823
Croatia	2,147	1,712	2,547
Slovenia	2,028	1,875	2,184
Slovak Republic	1,647	2,161	1,904
Latvia	1,461	1,461	1,430
Poland	1,431	1,166	1,365
Lithuania	1,091	1,184	1,436
Azerbaijan	1,049	934	1,049
Kazakhstan	1,001	1,078	1,178
Bulgaria	824	676	650
Romania	482	455	572
Macedonia	476	505	500
Albania	343	351	344
Bosnia and Herzegovina	280	258	279
Armenia	279	283	275
Georgia	261	222	202
Russia	223	67	366
Turkey	216	n.a.	234
Belarus	180	222	192
Moldova	156	227	186
Ukraine	131	115	144
Kyrgyzstan	95	84	99
Turkmenistan	44	280	270
Tajikistan	11	32	35
Serbia and Montenegro	n.a.	260	410
Uzbekistan	n.a.	42	36

Sources: IMF 2004b, cumulative net FDI inflows 1990–2003; UN Conference on Trade and Development FDI database, FDI stock end-2003; and EBRD 2004, cumulative net FDI inflows 1990–2003.

As with FDI, Central Asia also fares poorly on small- and medium-enterprise development. Despite the increase in the total number of these enterprises, the density of the sector remains extremely small. The number per 1,000 inhabitants ranges from a mere 0.96 in Tajikistan and 4.58 in Kyrgyzstan to 35 in Kazakhstan, compared with approximately 48 in post-communist new EU member states (see Table 3.9).

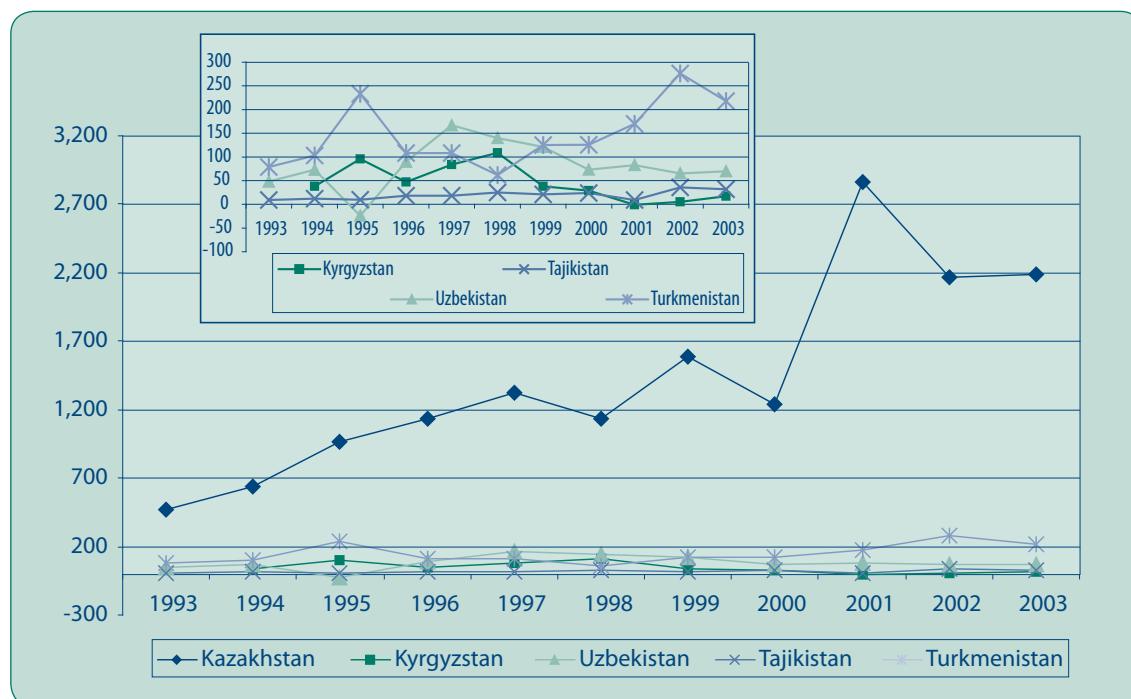
A number of problems afflict the small- and medium-enterprise sector in Central Asia. The many obstacles in the business environment discussed above tend to be especially severe for enterprises trying to operate in the formal economy. As a result, they are either discouraged

altogether or are pushed into the informal sector. According to some estimates, informal activities in the region account for close to 40 per cent of GDP and for the employment of more than 30 per cent of the labour force.⁵⁸

This situation has three well-known and undesirable side effects. First, it limits tax revenues and hence the government's ability to provide essential public services. Second, it places a substantial part of the countries' business activity, especially that conducted by the poorer and more vulnerable parts of the population, under a cloud of uncertainty, since informal enterprises are especially subject to discretionary interventions by the authorities and exploitation by criminal elements.

Net annual FDI in Central Asian countries (millions of \$)

Figure 3.6



Sources: EBRD 2001, 2003b and 2004.

Third, it makes it more difficult for these enterprises to engage in legal regional and international trade, to form business associations in support of their legitimate interests, and to form regional networks in support of regional cooperation and integration, all of which would help them expand their markets, their opportunities, and their ability to generate incomes and employment.

A regional approach to an improved environment for business, finance and investment

The experience in other transition countries, especially those in Central Europe, demonstrates that fostering a supportive business environment and strong financial sector positively affects trade, FDI inflow and more broadly economic development. This is therefore an important area for governments and civil society—business associations, chambers of commerce

and NGOs—to pursue.⁵⁹ National governments should focus on business infrastructure developments to reduce production, transportation and communication costs; improvements in the legal framework such as better contract enforcement, recognition of property rights, clear arbitration procedures, increased transparency and reduction of the possibility of different legal interpretations (which can in turn cut down corruption and consequently investment costs); simplification of complex bureaucratic procedures and improved support of private sector development.

A regional approach to improving the business environment and attracting investment should become part of national strategies. This requires explicit regional cooperation efforts among governments, business groups and other civil society organizations. So far, each country has tended to struggle with very similar problems on its own. Elsewhere, there are examples of countries

A regional approach to improving the business environment and attracting investment should become part of national strategies

Table 3.9

Country	Kazakhstan	Kyrgyzstan	Tajikistan	Uzbekistan	EU-8 average
Total number of enterprises	521,556 (2003)	22,670 (2001)	6,192 (2002)	235,800 (2002)	340,577 (2002)
Enterprises per 1,000 population	35 (2003)	5 (2001)	1 (2002)	9 (2002)	48 (2002)

Selected data for small and medium enterprises

Sources: UNECE 2003; Agency on Statistics of Kazakhstan, 2004; The National Statistical Committee of Uzbekistan, 2003; and The State Statistical Committee of Tajikistan, 2003.

Knowledge of the quantitative impacts of policy measures and public investments are a key element in convincing policy makers, the public, and potential external donors that they should offer support

working together to improve the investment climate and perception of foreign investors. The Investment Compact of South East Europe (see Box 3.12) is a case particularly relevant to Central Asia, since South-Eastern Europe also is a fractured region of relatively small transition economies.

The experience with the investment compact shows that a regional approach to FDI promotion, small- and medium-enterprise development, and reform of the business environment provides a valuable complement and reinforcement to country-specific reform initiatives. A regional approach offers opportunities for mutual sharing and learning from experience, for measuring and benchmarking progress, for establishing cross-border contacts and mutual support among business associations, and for conveying to foreign investors an improved image of the region as a whole. Of course, regional initiatives should focus not only on the large investors and business interests, but also very explicitly support the development of the small-, medium- and even micro-business sectors, since they make a vital contribution to a balanced private sector, employment, exports and more generally the conditions for human development and human security.

Measuring the potential benefits of improved regional cooperation in promoting trade and investment

Ideally, there would be a comprehensive measurement of potential trade benefits for each of the Central Asian countries from improved regional cooperation in trade, transport and transit, as well as from behind-the-border measures. Knowledge of the quantitative impacts of policy measures and public investments are a key element in convincing policy makers, the public,

and potential external donors and financiers that they should offer support. Otherwise, benefits are sometimes less than obvious, costs may be more apparent, and political implications may sometimes make it seem impossible to move forward.

Unfortunately, making such a measurement is not feasible given data constraints and the limitations of relevant quantitative techniques. In addition, measuring something that has not happened is always difficult. Three alternative approaches are employed in this section: case studies of what has happened to enterprises facing trade disruptions; a partial-equilibrium analysis of the impact of cross-border price differentials due to trade barriers; and a general equilibrium analysis of the effects of reducing tariffs and distribution margins in Kazakhstan and Kyrgyzstan. Individually, each of these approaches has its strengths and weaknesses, but together they provide a strong sense of the substantial benefits that Central Asian countries could reap from integrating more effectively into the world economy and with each other.

Case studies

Many enterprises closed down in the early 1990s as the centrally planned economy imploded and the unified Soviet economic system disintegrated. Some of these broken links were obviously uneconomic in a market-based system, such as the shipping of cane sugar from Cuba to be refined in Kyrgyzstan and then sold across the Soviet Union. Others did survive, were restructured and operated in the regional market. Lack of regional cooperation has, however, destroyed or damaged many of these productive activities.

For example, the Ak-Sut Dairy in Kyrgyzstan was privatized in 1994, and now employs 230 people in making butter, cheese and dried milk. Exports to Kazakhstan were halted in 2000 when Kazakhstan introduced a 200 per cent import

Box 3.12

The Investment Compact for South-East Europe

The Investment Compact for South-East Europe is an initiative of the Stability Pact for South Eastern Europe (including Albania, Bosnia and Herzegovina, Bulgaria, Croatia, the Republic of Macedonia, Moldova, Romania, and Serbia and Montenegro). It is intended to improve the region's economic and business environment. Members make a range of commitments to policy reform. Each country transforms these into concrete measures to create a sustainable market economy and encourage private sector investment in the region.

The Investment Compact supports and promotes policy reform in three broad, interrelated policy areas: FDI policies and promotion strategies; small- and medium- enterprise support; and governance, competition and regulatory regimes. The compact process involves the support and active participation of country economic teams from the region, donor country Stability Pact partners, international organizations and financial institutions, NGOs and the private sector. Programmes include promoting private investment, improving the climate for investment, instigating and monitoring the implementation of structural policy and institutional reforms, and involving the private sector in reform processes.

Source: The Website of the Investment Compact, www.investmentcompact.org

duty. Apart from some small-scale shuttle trade, these have not been resumed since the duties were rescinded in 2001. The apparent reason is the 16 per cent value-added tax and other taxes that together add 22 to 23 per cent to the value of the dairy products when they cross the border; any border delays would also be serious for fresh milk. The presence of shuttle traders taking Ak-Sut's products into Kazakhstan suggests that the dairy has a comparative advantage in the product, but legitimate trade is unprofitable. And since prices are heavily distorted and high border costs work strongly against Ak-Sut, large-scale, formal exports to Kazakhstan do not take place. The consequences are more expensive cheese for consumers, and threatened jobs for Ak-Sut's 230 employees.

The Tokmak glass factory in Kyrgyzstan provides a more dramatic example of a negative indirect consequence of the lack of regional cooperation. Built in the early 1970s, the glass factory was one of the biggest producers of sheet glass in the USSR. During the 1990s, as a joint-stock company, it experienced difficulties in adjusting to the marketing and management demands of the new economic system, but the fatal blow was a 1999 trade dispute with Uzbekistan, which led to a cessation of gas supplies to Kyrgyzstan. Because glass-making is a continuous process, the power cut led to a hardened glass mass covering the glass-furnace and destroying the equipment. The factory was declared bankrupt, and its 1,223 workers were laid off. Unlike other bankruptcies, this story has a happy ending. In September 2000, Steinert Industries GmbH, a German company with oil and gas interests in Uzbekistan, bought Tokmak for \$2.25 million. The factory was rehabilitated and reopened in June 2002. Steinert's Uzbek connections help it to ensure gas supplies, and under the new management the glass is exported to markets in Central Asia and Russia. The factory has become the biggest taxpayer in Kyrgyzstan. Nevertheless, the disruption had substantial costs. Rehabilitation of the furnace after the meltdown cost \$1.5 million. There was no employment in the factory in 2000. Only about a third of the full workforce was employed in 2001, and the state received no tax revenue. The losses from the shutdown are estimated to have reached about \$2.5 million.

For other producers, the disruption from new borders was dramatic and permanent. The villagers of Qostakoz in northern Tajikistan have for centuries been known for their exports of fruit, vegetables and smoked fish, which were valued for their high quality. In the 1980s, melons, dried apricots and raisins from the village were sold in Yakutsk, Leningrad, Moscow and other Soviet cities. The

biggest markets were, however, in neighbouring Uzbekistan. But these disappeared in 1992 when Uzbekistan closed the border to seal off terrorist threats. Gafur Saborov's family alone sold 15 to 18 tonnes annually of top-quality tomatoes in Tashkent during the 1980s, enabling him to marry off his three sons and two daughters in style, and provide them with houses and cars. For the village as a whole, income from sales of vegetables and dried fruit to Uzbekistan amounted to \$33 to 36 million a year. Loss of this income is a huge blow to the village's 28,500 inhabitants. The economic cost to Uzbekistan is also substantial; not only do consumers no longer have the opportunity to eat the prized products from Qostakoz, but producers in Uzbekistan have lost sales to the Qostakoz villagers, who spent at least \$10 million of their annual earnings on products available in Uzbekistan but not in their village.

These examples provide a first impression of the great economic and human costs of non-cooperation. They underscore that the price of milk or of onions is more important to poor consumers than to rich people. The employees who lost their jobs at the glass factory earned an average monthly salary of less than \$30. They were poor when they worked, but were even worse off when the factory closed down and they lost their jobs. The inability of Qostakoz villagers to export fruit and vegetable products to Uzbekistan or onwards to Russia and elsewhere has forced once well-to-do villagers to increasingly turn their fields to wheat, barley, maize, potatoes and root crops for subsistence purposes.

Case studies provide a first impression of the great economic and human costs of non-cooperation

Partial equilibrium analysis of cross-border price differentials

Stepping up from individual cases to a more aggregate assessment of the costs of trade barriers, trade costs can be expressed in terms of the difference (or 'wedge', as economists call it) between prices in different locations. Even if there are no tariffs or other formal trade barriers, the existence of such a wedge implies obstacles to arbitrage due to trade barriers or trade and transport costs or monopoly power. In Central Asia, there are large price differentials even for narrowly defined goods (see Table 3.10).

The price of a kilogramme of Kazakh first-grade flour is almost a third higher in Bishkek or Tashkent than in Almaty, and its price is even higher in the Fergana Valley towns of Osh, Kyrgyzstan, and Andijan, Uzbekistan, and still more in Bukhara. Thus, trade costs are related to borders, but they also increase with distance within a country. The price of Beta tea, imported from Sri Lanka but

Table 3.10

Prices for flour and tea in Kazakhstan, Kyrgyzstan and Uzbekistan (\$)

	Almaty	Shimkent	Bishkek	Osh	Tashkent	Andijan	Bukhara
Kazakh first-grade flour (1 kg)	0.28	0.30	0.37	0.41	0.35	0.39	0.42
Beta tea (100 gm)	0.62	0.62	0.60	0.60	0.50	0.47	0.24

Source: Data collected for the Asian Development Bank in December 2004.

Partial equilibrium analysis shows that the costs of foregone trade can be much higher than direct costs such as the value of time wasted by delays and that small and medium businesses and the poor suffer most from trade barriers

packed in Uzbekistan, illustrates that this is not the only issue—there is clearly a border effect at work as well, as the price is lowest in Bukhara, and higher in Bishkek, Osh and Almaty than in the cities in Uzbekistan.

The economic losses resulting from a price wedge can be quantified with a simple model, referred to by economists as partial equilibrium analysis. An example is the partial equilibrium analysis of the wedge between prices in Almaty and Bishkek driven by roadside checks. It is estimated that these increased transport costs in 2000 by \$2 million in delays and \$16 million in bribes.⁶⁰ These costs discouraged some mutually beneficial trade. The partial equilibrium analysis shows that, under reasonable assumptions about the responsiveness of demand and supply, the cost of foregone trade was higher than the measured costs of delays in trade. If transport costs were high enough to discourage trade altogether, then all potential gains from trade would be foregone. In cases where trade does not take place, there are no measured costs of delays, nor any redistribution via bribes, but calculations of the loss of consumer and producer surplus due to foregone trade suggest that, if demand responsiveness is high, such foregone trade could be very costly.

The general point to be made from this type of analysis is that the costs of foregone trade can be much higher than direct costs such as the value of time wasted by delays. The burden of trade impediments is heaviest in markets where supply and/or demand are highly responsive to price changes and where relatively small impediments can reduce trade volumes considerably, perhaps to zero. This is the case with markets for many goods, such as agricultural and textile products, generally exported or imported by small and medium businesses and consumed by the poor. Therefore, small and medium businesses and the poor tend to suffer most from trade barriers.

General equilibrium analysis of reduced trade costs in Kazakhstan and Kyrgyzstan

Partial equilibrium analysis, as the term indicates, does not allow for all the links and feedbacks in

an economy in response to trade barriers. To overcome the limitations of partial equilibrium model estimates, economists have developed broader model frameworks that compute the overall impacts. Such so-called 'computable general equilibrium' models are being developed by the Asian Development Bank for Kazakhstan and Kyrgyzstan to assess the likely impact of a reduction in trade costs in a general equilibrium framework. For this report, initial versions of these models have been used to assess how improved regional cooperation in trade policy, transport infrastructure and trade facilitation would impact the economies of Kazakhstan and Kyrgyzstan, including individual sectors, regions and population groups. The effects of improved regional cooperation in the three areas have been captured through a uniform reduction in tariffs and commodity-specific domestic distribution margins, consisting of trade and transportation margins.⁶¹ The general equilibrium framework permits assessment of both direct and indirect effects of reducing tariffs and trade costs, including impacts on individual sectors, regions and population groups within the two countries, as well as the cumulative effect on the two economies as a whole. It also implicitly reflects assumptions about the business environment and investment climate, even if these have not been explicitly explored in the models summarized here.

Simulations of how uniform reductions in tariffs and trade margins of different magnitudes would affect the economies of Kazakhstan and Kyrgyzstan have produced the following preliminary qualitative results:

- *International trade would expand considerably.* After an initial worsening, the trade balances would improve, as increases in exports resulting from improved competitiveness of domestic producers in international markets would exceed increases in imports resulting from lower tariffs.
- *Significant sector adjustments would occur in both economies.* Equal reductions in tariffs and trade margins would increase the profitability of export-oriented industries and decrease the profitability of import-substituting industries. As a result, resources would shift from the latter

Table 3.11

	Kazakhstan	Kyrgyzstan
Real GDP	19.5	54.5
Consumer price index	-20.1	-6.4
Real consumption	12.6	65.8
Real investment	9.5	21.3
Exports	48.2	42.1
Imports	37.5	13.6

Source: Asian Development Bank estimates.

Estimated effect of a 50 per cent reduction in tariffs and distribution margins on selected macroeconomic indicators in Kazakhstan and Kyrgyzstan in 2015 (% change compared with the base-case scenario)

to the former, and the share of the former in the economy's aggregate output would increase. In Kazakhstan, mining and the production of machinery and equipment stand to benefit most from the improved regional cooperation in trade, transport and transit, and resulting reduction in trade costs, while agriculture, food, textiles and apparel would be the biggest winners in Kyrgyzstan.

- *Aggregate output and living standards would rise considerably over the medium term.* The shift of resources to sectors in which the two countries have comparative advantages, expanded trade and enhanced competitiveness would improve the efficiency of resource allocation, raise productivity and foster economic growth. This would make more resources available for domestic consumption and investment. In addition, a reduction in trade costs would put downward pressure on consumer prices and increase real incomes.
- *The rise in aggregate output and living standards induced by a reduction in distribution margins would be pro-poor.* Distribution margins are much higher for rural areas than for urban areas, especially as a percent of the commercial value of traded goods. Consequently, a reduction in distribution margins would boost output in rural areas more than in urban areas, and thus benefit rural populations more than urban ones. Since the majority of the poor in both Kazakhstan and Kyrgyzstan lives in rural areas, the reduction in trade costs would be particularly beneficial to the poor.

Table 3.11 summarizes the macroeconomic effects of a 50 per cent reduction in 2002 tariffs, and in distribution margins in Kazakhstan and Kyrgyzstan. It shows that halving tariffs and distribution margins would increase real GDP in 2015 by about 20 per cent in Kazakhstan and by 55 per cent in Kyrgyzstan, compared with the base-case scenario. Both exports and imports would increase substantially, with exports increasing more than imports and trade balance improving

in each country. Real consumption would be 13 per cent higher in Kazakhstan and 66 per cent higher in Kyrgyzstan.

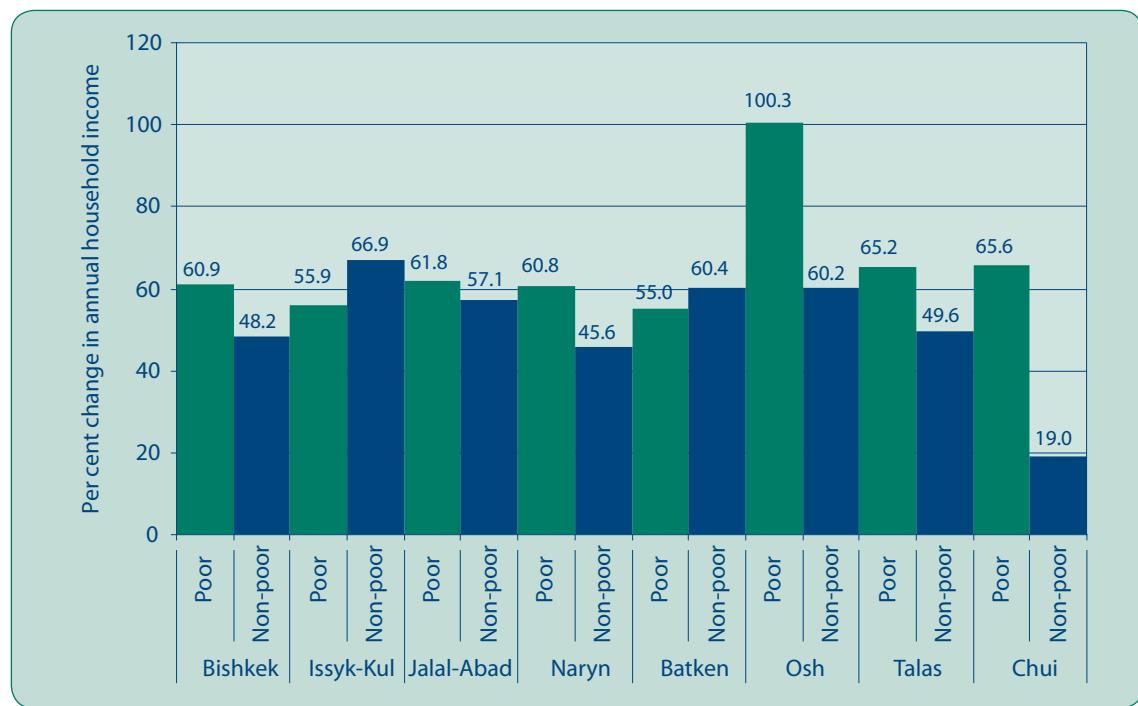
While the distribution of additional real income across regions would be fairly even, the poor would benefit more than the non-poor, as mentioned above. In Kazakhstan, the real income of rural households would rise by 27.2 per cent, while the real income of urban households would rise by 8.4 per cent. In all 14 administrative units with both urban and rural populations, nominal rural incomes would increase more than those in urban areas. In Kyrgyzstan, which has a lower per capita income and a higher incidence of poverty than Kazakhstan, the reduction in trade taxes and costs would benefit the poor more than the non-poor in six out of eight regions (see Figure 3.7). For the country as a whole, the real income of the poor would increase by 65.7 per cent, compared with an increase of 50.9 per cent in the real income of the non-poor.

Quantitative estimates of the effects of reducing trade costs are always somewhat speculative, and especially so in Central Asia where detailed data are scarce. Nevertheless, the results from a variety of approaches are mutually reinforcing. The costs of barriers to trade are high, their reduction would bring substantial benefits, and poor people would benefit most. And reducing trade barriers would benefit not only one country, but also its neighbours. For example, easing border crossing and transit restrictions by Turkmenistan and Uzbekistan, the two countries in the region with the most restrictive trade regimes, would yield substantial benefits for the general public not only in these countries, but also in the other three Central Asian countries as well as Afghanistan and Iran. The positive impact of reducing trade costs on trade, economic growth and poverty reduction is likely to be even larger in Turkmenistan and Uzbekistan than in Kazakhstan and Kyrgyzstan. Any reforms that promise to raise the per capita income in a poor region by half over a period of 10 years deserve serious attention.

General equilibrium analysis shows that halving tariffs and distribution margins would increase real GDP in 2015 by about 20 per cent in Kazakhstan and by 55 per cent in Kyrgyzstan, compared with the base-case scenario

The poor would benefit more from reducing margins than the non-poor

Estimated effect of a combined 50 per cent reduction in tariffs and distribution margins on real household income in Kyrgyzstan (percentage change over base-case scenario in 2015)

Figure 3.7

Note: An individual is considered poor if average expenditure per capita in his/her household is below the absolute poverty line. The line includes food and non-food components. Simulations were done for 2002, when the line value was equivalent to \$2.30 per day at PPP.

Source: Asian Development Bank estimates.

Conclusions and recommendations

Conclusions

International trade and investment can make a major contribution to human development and human security in Central Asia by helping to raise productivity and employment and boost economic growth, reducing the probability of political conflicts between countries, and increasing the variety and improving the quality of goods available to consumers. It is therefore regrettable that the Central Asian countries' trade and investment performance has been less than satisfactory by international standards. Although there has been a considerable cumulative shift in the direction of trade away from the CIS to the rest of the world, the reorientation of trade from traditional to new markets has been smaller than in many other transition countries. FDI and local business development, especially of the crucial small and medium enterprises, remain very low, hindered mainly by a plethora of barriers to trade, investment and business activity.

Lowering and removing some of the more important of these barriers—such as difficulties

with border crossings and customs clearances, high transport costs, long and unpredictable transport times, and interference with business behind borders—requires improved domestic policies and regional cooperation among the Central Asian countries and their neighbours in the areas of trade facilitation, transport, transit and investment climate. Regional cooperation in the form of benchmarking and sharing of knowledge and information would help reduce other obstacles to trade, such as weak institutions, and the lack of marketing skills and information. The Central Asian countries could also act together to end the trade-distorting policies of developed countries, such as cotton subsidies, that adversely affect them.

Liberalization of trade policy on a multilateral basis within the WTO framework is a better option for the Central Asian countries, at least in the short to medium term, than discriminatory liberalization within existing or new regional trading arrangements. Membership in the WTO places international trade on a common legal basis and provides an effective mechanism for settlement of trade disputes. It also helps further liberalize trade and prevent policy reversals. An effective regional trading arrangement might be worth pursuing in the long run as part of broader and deeper

economic integration among the Central Asian countries and some of their neighbours, but will require a high degree of political will. However, improved regional cooperation in trade facilitation and transport—including joint efforts to develop the region's transport links with the rest of the world, improve the quality of transport services and facilitate transit—are essential. This will pave the way for Central Asian countries to take full advantage of WTO membership, integrate more closely into the world economy, and resume their historical significance as a land bridge between East and South Asia and Europe.

Measures to promote trade and investment throughout the region do not only have economic benefits, but directly and indirectly make a difference in people's lives. World Bank surveys show clearly that people in the region view the borders as a significant problem. Creating 'borders with a human face' is therefore a major challenge and opportunity. In addition to developing better links through improved trade policy, transport infrastructure and trade facilitation, the behind-the-border conditions of the business environment and financial services play an essential role in realizing the full benefits of expanded trade potential.

Quantitative estimates, using a variety of methods, paint a consistent picture of substantial costs from regional non-cooperation and benefits from improved cooperation in trade, transport and transit. Table 3.12 pulls together some of the more notable quantitative estimates. The main conclusion they point to is that the current losses are very significant and the potential benefits are huge. Besides reducing trade costs and promoting trade, improved regional cooperation in the three

areas will have a positive impact on governance, FDI inflows, human capital development and other factors that have indirect but powerful influences on economic performance. Adding up all the quantifiable and non-quantifiable potential benefits from cooperation in trade, transport and transit, as well as from substantial reforms of behind-the-border business and finance conditions in Central Asia, per capita incomes could increase between 50 to 100 per cent over the next 10 years, compared to a continuation of current policies. Given that the benefits would most likely be distributed more towards poorer population groups, chances are that the incomes of the poor in Central Asia, who make up about half of the population overall, could well double. The human impact, in terms of better lives for farmers and rural populations, for small traders and micro-entrepreneurs, and for their families and children, would be extraordinary.

The key constraint to regional integration and co-operation, despite these large potential benefits, is what is often called 'a lack of political will'. In reality, however, this simply reflects a preponderance of political interests in the region determined to maintain the status quo of limited cooperation and integration. Linked to this is the simple fact that as long as governments have weak administrative capacities, and as long as corruption and poor governance remain pervasive, it will be very difficult to pursue effective regional cooperation and integration in ways that will seriously reduce the impediments to trade and do away with the behind-the-border obstacles to enterprise development, investment and access to finance. We consider these important issues at greater depth in Chapter 7. Despite the political constraints, we

Quantitative estimates indicate that the potential benefits from regional cooperation are huge

Table 3.12

Costs of non-cooperation (examples only)	Benefits of cooperation	Summary of indicative costs of non-cooperation and benefits of cooperation
Costs of detour transport construction: \$12 million for road from Osh to Jalal-Abad \$10 million for railroad from Bukhara to Nukus Loss from shut down of Tokmak factory: \$2.5 million Loss of income in Oostokaz village: \$33 million to \$36 million per year Loss from unbalanced truck cargo traffic between Central Asia and Western Europe: \$300 million per year	Gains from 50% reduction in trade costs: 55% of GDP per year in Kyrgyzstan 20% of GDP per year in Kazakhstan Gains from cotton price increase as result of negotiated reduction in subsidies: 6% of GDP per year in Tajikistan 3% of GDP per year in Turkmenistan 3% of GDP per year in Uzbekistan	

Note: Costs and benefits are estimates; they are not necessarily additive. For explanations and caveats see text.

If some countries are unwilling to cooperate, then more limited gains could stem from bilateral, trilateral or quadrilateral arrangements among contiguous countries

believe that efforts must be and will be made to promote better regional trade and cooperation—the potential benefits are simply too large to ignore.

The best outcome would be to drop obstacles to trade all across Central Asia, slashing trade costs for all five countries. If some countries are unwilling to cooperate, then more limited gains could stem from bilateral, trilateral or quadrilateral arrangements among contiguous countries. If Turkmenistan refuses to cooperate, then Uzbekistan can cooperate with Kazakhstan to obtain access to Caspian Sea ports, and with Afghanistan to gain access to Iran or Pakistan. Kyrgyzstan can send its trade through Kazakhstan if Uzbekistan closes its borders. Table 3.3 suggests that this is in fact happening, as almost a quarter of Kyrgyz imports come from Kazakhstan and only five per cent from Uzbekistan (and this is primarily the gas-for-water barter arrangements).⁶² These options suggest that even if one or two of the countries are non-cooperative, none has a long-term monopoly over neighbours' transit trade. Competition could spur the alleviation of the problems described in this chapter.

The Central Asian scene is not an unchanging one. During the first decade following independence, the top priority for all five countries was nation-building. It is not surprising that governments strongly emphasized policy autonomy. In the 21st century, this is changing. The more positive attitude towards WTO membership is one element. Others, as seen from a Kazakh perspective, are summarized in Box 3.13. Joint declarations by the presidents of Turkmenistan and Uzbekistan in November 2004 and by the presidents of Kazakhstan and Uzbekistan in March 2005 on the desirability of greater cooperation on border and trade issues are also harbingers of new, more cooperative attitudes among the region's leaders. While the political events in Kyrgyzstan and Uzbekistan in early 2005 may have reinforced the focus on national security rather than regional economic cooperation, the need for regional cooperation to promote trade and investment remains. Moreover, many aspects of this cooperation—border management, customs administration, transit systems and

cross-border payments—will not only promote trade and investment, but also enhance security in the region.

Recommendations

For the governments of the Central Asian countries:

- Give priority to multilateral trade liberalization within the WTO framework. Join efforts with neighbours and other developing countries to gain better access to markets in developed countries. Push for discontinuation of policies and practices currently in place in developed countries, such as cotton subsidies, that hinder international trade and harm the economies of Central Asia.
- Cooperate more closely with each other and neighbouring countries to create 'borders with a human face', and facilitate cross-border movements of people, goods and vehicles through:
 - Simplification and harmonization of customs and border crossing rules and procedures;
 - Improvement of governance at customs, police and border protection services;
 - Facilitating, rather than interfering with shuttle trade;
 - Full implementation of the TIR Convention;
 - Introduction of a simplified and effectively managed regional transit system for road transport.
- Cooperate in upgrading regional air transport infrastructure and services by providing mutual access to each others' principal airports, encouraging international carriers to serve the region, and creating competitive national airline and infrastructure businesses.
- Harmonize and simplify legal and regulatory frameworks for the transport sector, enhance competition in rail and air transport—in particular, by restructuring state-owned railways and airlines, and separating regulatory and commercial functions—and facilitate the emergence of strong regional road transport operators.

Box 3.13

A Kazakhstani view of the outlook for regional cooperation

Among the encouraging signs is the formation of the SCO as well as Russia's accession to CACO. The major limitation is the inability of the ruling regimes to maintain a fruitful dialogue and to reach compromises linked to the growth of national patriotic ideas focusing on national exclusiveness. Modernization of the political systems, growth of the national economies and effectiveness of the supra-regional institutions may become the guarantee of success.

Source: "UNDP Country Background Study, Kazakhstan."

- Improve the business environment and investment climate for all enterprises, with special attention to small and medium businesses, financial institutions and foreign investors.
- Improve governance and strengthen institutions as key prerequisites for lasting improvements in the trade regime, transport, border management, customs administration, transit systems, business climate and financial sectors in each country, as well as for improved regional economic cooperation and integration.

For regional organizations in Central Asia:

- Clarify which organization has the principal mandate for promoting regional dialogue, information exchange and cooperation in trade policy, transport, trade facilitation and investment, and coordinate ongoing and future activities of the various regional organizations active in these areas (CACO, ECO, EEC and SCO). CAREC should provide support for the regional lead institution(s).
- Support the WTO membership accession process of Central Asian countries and develop specific programmes for regional cooperation in transport and trade facilitation, building on existing initiatives.
- Develop and implement a comprehensive regional transport sector development programme that would help:
 - Better coordinate national road and rail transport infrastructure projects, focusing them on improving the region's transport links with other parts of the world—in particular, through the TRACECA, Asian Highway and Trans-Asian Railway projects;
 - Upgrade and integrate the regional air transport infrastructure;
 - Avoid new transport infrastructure projects primarily aimed at avoiding transit through neighbouring countries;
 - Allocate adequate funds to rehabilitation and maintenance of key existing transport networks;
 - Harmonize and simplify legal and regulatory frameworks for the transport sector, including cross-border transport rules and procedures.
- Develop and help implement simplified and effectively managed regional transit systems for road transport.
- Develop regional approaches to key financial sector improvements, including financial sector

regulation and supervision, capital market development and microfinance institution development.

- Create regional forums for academic, business and banking institutions, NGOs and local communities to exchange information, build regional networks and articulate concerns regarding regional trade, transport and investment.

For multilateral institutions and the rest of the international community:

- Support the Central Asian countries in their pursuit of multilateral trade liberalization within the WTO framework, while encouraging them also to cooperate more closely at the regional level in facilitating trade and gaining better access to markets in other countries.
- Integrate technical and financial assistance in the areas of trade policy, transport infrastructure and trade facilitation, for example, by tying funding for transport projects to requirements aimed at facilitating transit.
- Better coordinate technical and financial assistance in trade facilitation on a regional basis, preferably by using one of the existing regional programmes or organizations as a coordinating mechanism.
- Better coordinate technical and financial assistance in financial sector reform on a regional basis (including microfinance), preferably by using one of the existing regional programmes or organizations as a coordinating mechanism.
- Increase technical and financial assistance in improving the quality of transport services in Central Asia. Help regional organizations develop and implement a comprehensive regional transport sector development programme.
- Help the Central Asian countries and their neighbours develop and implement a simplified and effectively managed regional transit system for road transport.
- Continue providing assistance for improvements in the business environment and in building financial sector institutions, with a special focus on regional approaches, networking, benchmarking and training initiatives.
- Support the development of relevant regional training and capacity development programmes, and undertake more analytical work that demonstrates the benefits of improved regional economic cooperation and helps build supportive constituencies.

Chapter 4

The natural resource lifeline for Central Asia: water, energy and the environment

"The example of the energy and water system of Central Asia indicates that it is not self-sufficiency, but only integration of all countries of the region into a common economic space that can address the issue of sustainable human development both in individual countries and in the region as a whole."

—“*UNDP Country Background Study, Tajikistan*”

Central Asia is blessed with abundant natural resources, including oil, gas, coal, metal ores and fresh water, as well as areas rich in biodiversity

A brief history and the current situation¹

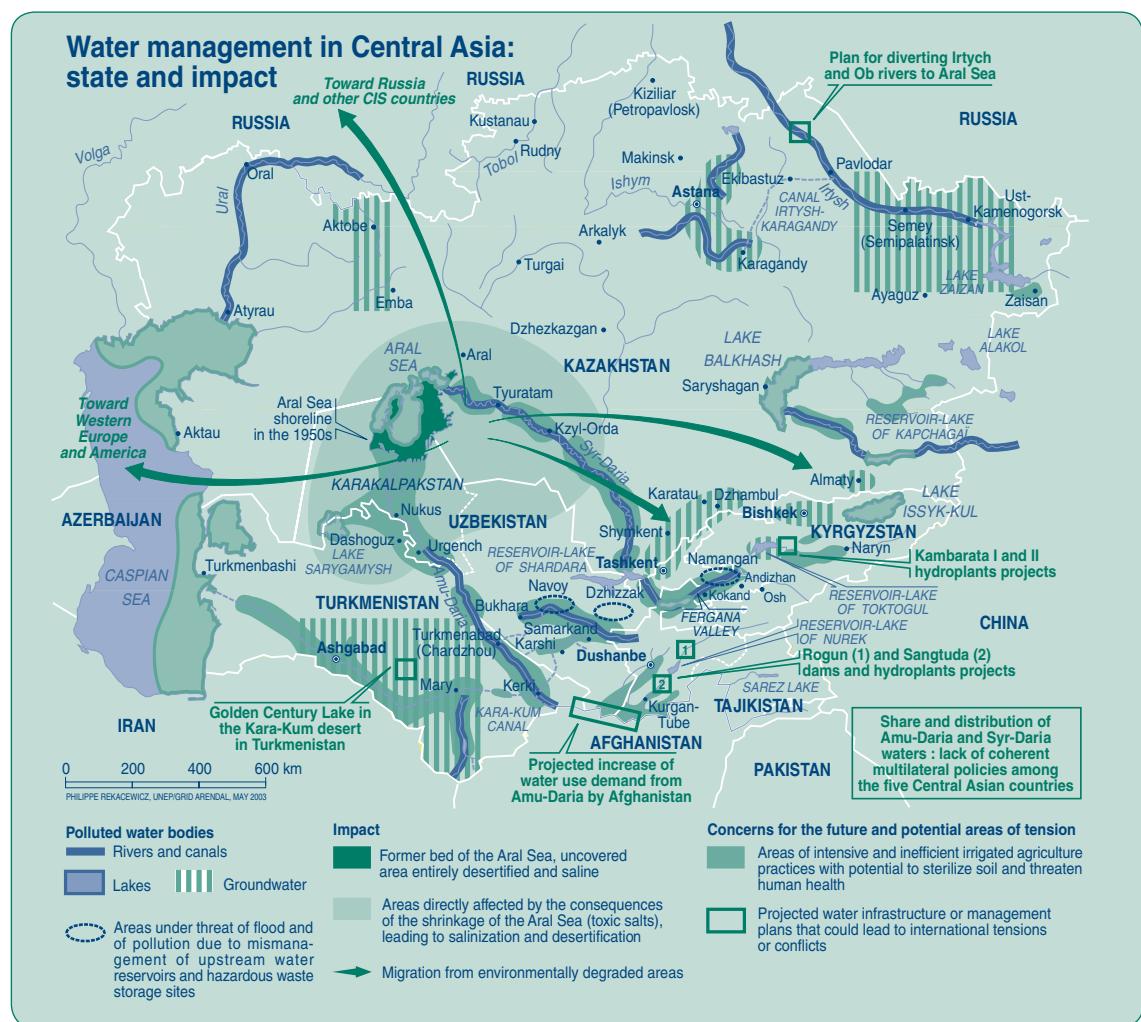
Central Asia is blessed with abundant natural resources, including oil, gas, coal, metal ores and fresh water, as well as areas rich in biodiversity. These resources are, however, unequally distributed across countries, and their extraction, transportation and use in landlocked Central Asia require significant logistical effort and regional cooperation. Moreover, resources such as fresh water and fertile land, essential for human survival, are in increasingly short supply. Most of the region is located in arid and semi-arid zones, where natural evaporation significantly exceeds precipitation. Virtually all fresh water originates from permanent snowfields and glaciers in the mountains of Kyrgyzstan and Tajikistan. The Amu Darya and Syr Darya rivers carry this precious resource to Kazakhstan, Turkmenistan and Uzbekistan, and into the Aral Sea (see Figure 4.1²). Arable land for agriculture and high-density settlements are

limited to the irrigated flood plains of these major rivers, and to parts of northern Kazakhstan crossed by the headwaters of two large Siberian rivers, the Ili and Irtysh. Across the region, the winters are harsh and hence people need energy for heating to survive.

Until the 20th century, the larger part of Central Asia could only support semi-nomadic pastoral agriculture (in the steppe, semi-desert and foothill areas), whereas some areas (the high mountains and deserts) could not sustain human life at all. Human survival was complicated by the continental climate of high summer and low winter temperatures, fragile ecosystems and generally poor soils. Traditional lifestyles had for centuries adjusted to these natural constraints. Nomadic herders in the steppe avoided overgrazing and destruction of dry grassland ecosystems by constantly moving with their herds. Settlers in the

Water management in Central Asia

Figure 4.1



Source: UNEP et al. 2005.

Amu Darya delta relied on fishing and hunting in the dense *tugai* (arid flood plain forests). Irrigated agricultural plots, permanent settlements and trade routes were set up where water was available, mostly near rivers or in isolated oases. In the sparsely populated mountains, communities heated their houses in winter with firewood and dried dung. Collecting rainwater for domestic needs was a universal practice. Each locality or sub-region was largely self-sustainable, with generally a low population density.

The development of industry, commerce and associated state institutions in Central Asia had been slow until the onset of Tsarist Russian and Soviet modernization campaigns. They created infrastructure for extraction and redistribution of natural resources and commodities throughout the region and to other parts of what became the Soviet bloc. This infrastructure took the form of mines, oil and gas wells and pipelines, dams, hydro- and thermal power stations, canals and irrigation systems, electricity transmission lines, roads, railways and other facilities linking previously isolated localities into a unified and interdependent economic system. It spanned natural, ethnic and cultural borders, and integrated Central Asia with other regions of the Soviet Union. As urban centres grew, piped water supplies and wastewater facilities were introduced. Unified environmental and public health standards and institutions protected people from outbreaks of infectious disease, droughts, floods, famines and other risks common in non-industrialized societies. As a result, living standards significantly improved and populations expanded. Modernization came to mean radical changes in traditional economies, social structures and lifestyles. Humans did not depend upon local environmental systems any longer.

But Soviet development also largely disregarded natural constraints, the economic costs, and the social and environmental consequences of the rapid development of the region. For example, when Soviet leaders realized, in the 1960s, that large-scale production of cotton was killing the Aral Sea and threatening fishing communities, they simply decided to import fish from the Far East for processing in the factories that had been built on the Aral Sea and to prepare for the transfer of Siberian river waters to Central Asia. In many other instances as well, the lack of political and economic incentives for resource conservation and innovation resulted in staggering risks to human security and development. Some prominent examples include the radioactive contamination of the nuclear test site near Semipalatinsk in Kazakhstan, the opening of the so-called Virgin Lands in north-western Kazakhstan for grain

production, the uranium and hard-rock mining in Kyrgyzstan, the polluting industries of north-east Kazakhstan, and the aluminum plant in Tursunsade, Tajikistan.

With the break up of the Soviet Union, and with the ensuing disintegration of political and institutional links, however, the regional and national water and energy infrastructure in Central Asia itself began to suffer. The republics did not have enough resources of their own to operate their systems efficiently or invest in rehabilitation. This resulted in declining levels of service delivery and environmental safety, lack of water in summer, and floods as well as a lack of heat for people's homes in winter. Moreover, the integrated Soviet command structure for regional water and energy allocation, exchange and management disappeared with the independence of the individual republics.

Fortunately, the new governments in Central Asia were aware of the need to maintain some basic elements of cross-border cooperation in water and energy management, and they were able to avoid hostilities and open conflict between their countries over the scarce and unevenly distributed natural resources of the region. At the community level, however, there has been increased tension over land, water and energy, both among communities within countries and across the new borders. The shortage of water, energy and land causes hardships that can easily lead to disputes, often overlaid by ethnic differences (see Box 4.1). While the significance of this risk shouldn't be overstated, there remains a potential for wider conflict in areas where poor communities are struggling to cope with economic turmoil and rapid social change. Clearly, Central Asia faces a critical human development and human security challenge in the peaceful, productive and sustainable use of its natural resources. In addition to an appropriate national response at the country level, regional cooperation is also essential to meet this challenge. In this chapter, we review the opportunities for cooperation in three areas that form the region's natural resource lifeline: water, energy and the environment.

Soviet development largely disregarded natural constraints, the economic costs, and the social and environmental consequences of the rapid development of the region

Managing Central Asia's water resources

Linkages in regional water management

Central Asia's water resources are of critical importance to the region's economy, people and environment. Due to the arid regional climate, irrigation water is an indispensable input for agricultural production. In 2003, agricultural output supported by irrigation accounted for eight per cent

Central Asia faces a critical human development and human security challenge in the peaceful, productive and sustainable use of its natural resources

Community-level impacts of water, energy and land shortages

A recently completed anthropological study of 66 communities in the five Central Asian countries carried out by the World Bank has yielded new insights into how frequently and seriously local communities are affected by hardships and resulting conflicts over local access to water, energy and land. Of the 66 communities, half had experienced a degree of hardship and conflict, some of it violent, over these resources. Nine of these 33 cases involved cross-border problems.

One typical case in Jalal-Abad Oblast in Kyrgyzstan has involved farmers in upstream and downstream villages served by an irrigation system that had largely broken down since Soviet days, due to lack of maintenance. While paying the same amount for water, the downstream villagers received less than those upstream, with violations of the irrigation schedule adding to the tension. Over time this led to frequent quarrels and even physical attacks. Despite eventual resolution of the most violent case in court, conflicts have continued.

A second case involved access to land by a Tajik community in Sugd Oblast bordering Kyrgyzstan. Tajik farmers had invested in land improvements and planted fruit trees on disputed border lands. Five years later, when the trees had matured, Kyrgyz officials cut the trees down claiming the use of the land was illegal.

A third case concerned an Uzbek community in Fergana Oblast and its cross-border conflict with Kyrgyz villagers over water resources. Starting in 1993, the Kyrgyz villagers, who are located upstream along a shared irrigation water canal, started using most of the available water, leading to poor downstream harvests.

Source: Adapted from information provided by Kathleen Kuehnast, World Bank, 2005.

Appropriate management of water resources is a basic prerequisite for preserving the region's environment

of GDP in Kazakhstan, 39 per cent in Kyrgyzstan, 23 per cent in Tajikistan, 25 per cent in Turkmenistan and 39 per cent in Uzbekistan.³ In Tajikistan, Turkmenistan and Uzbekistan, agricultural products, particularly cotton, constitute 20 to 40 per cent of exports. An estimated 22 million people depend directly or indirectly on irrigated agriculture in these countries.⁴

Water is also important for energy production, contributing more than 90 per cent of total domestic energy generation in Kyrgyzstan and Tajikistan. In the region's large cities, millions of people rely on water supplies, often piped over huge distances and pump-lifted over substantial elevations, for domestic, industrial and commercial uses. Meeting the water and sanitation target (target 10) of MDG 7 in Central Asia will also require special attention to the water sector.

Appropriate management of water resources is a basic prerequisite for preserving the region's environment. Water-related environmental problems include increased salinity and water logging due to poor irrigation practices and drainage management. The vanishing Aral Sea and the horrendous human legacy that it has left behind is a particularly extreme example of the environmental damage caused by inappropriate water management.

While major issues of cross-border water, energy and environmental resource sharing and management prevail in many parts of the world, the complexity of these issues in Central Asia is exceptional. This stems not only from geography, but also from the relatively recent creation of national borders and the lack of precedents for international negotiations over resource sharing.

And of course, the regional water and energy infrastructure, created during Soviet days without any attention paid to the Soviet republics' borders, forms today's regional resource management systems. In straddling international borders, these by their very nature require regional cooperation to be sustained.

Trans-boundary water infrastructure as a regional public good

The Soviets left behind a lot of regionally significant water infrastructure. Especially prominent are a large number of dams and canals, many of which were developed as part of the Soviet programme of expanding irrigated agriculture and generating regional electricity resources. A majority of the major dams and canals are located on trans-boundary rivers, which implies that the benefits of their operation and maintenance accrue to the host and downstream users, and that the latter cannot be excluded. This makes the dams into a typical regional public good.⁵ Optimal provision of a regional public good requires cooperation in managing the regional infrastructure and in covering the costs of its operation, maintenance and investment.

During the Soviet period, the regional water infrastructure was managed centrally and its costs were mostly borne by Soviet Union-wide agencies. As the republics became independent, dam and canal management and maintenance became the responsibility of the individual republics, and suffered from poor coordination and inadequate spending due to severe fiscal constraints and lack of regional cooperation. In the short to medium term,

the infrastructure remains reasonably functional despite this systematic under-investment. In the medium to long term, the lack of maintenance increasingly undercuts the operational ability and safety of the dams and canals, and it increases the risk of disasters. The collapse of a dam can instantly release enormous water flows, with the resulting shock wave causing tremendous downstream damages for humans, animals and infrastructure, as illustrated by the threat posed by Lake Sarez in Tajikistan (see Box 4.2).

The principle of regional public goods provision applies to many other aspects of regional water infrastructure, including major canals that have to be maintained for the benefit of more than one country (e.g., the Kairakum Canal, which supplies irrigation water for both Turkmenistan and Uzbekistan). Even pumping stations can require at least bilateral agreements and cooperation, as has been the case with the Turkmen-Uzbek dispute over rehabilitation of the giant Karshi pumps (see Box 4.3).

Optimal provision of a regional public good requires cooperation in managing the regional infrastructure and in covering the costs of its operation, maintenance and investment

Box 4.2

Averting regional disasters from high-risk dams—the case of Lake Sarez

Central Asia has several naturally formed, rock-dammed lakes. The largest of them, Lake Sarez in Tajikistan, has a volume of nearly 16 billion cubic metres. It was formed in the Pamir Mountains in Tajikistan following an earthquake in 1911 at a site located 3,200 metres above sea level. This natural dam, 600 metres high and five kilometres wide, has all but blocked the Murgab River.

In recent years, geological processes have considerably complicated the situation in the Lake Sarez area. Seepage through the dam has increased significantly, and the canyon is eroding at a rate of 30–40 metres a year. There is a risk that the right bank could partially collapse, generating an enormous wave that could sweep over the top of the natural dam and possibly wash it away. The resulting flood could affect up to 6 million people living along the Bartang, Pyandzh and Amu Darya rivers, along a path traversing Afghanistan, Tajikistan, Turkmenistan and Uzbekistan.

To mitigate the risk of this potential natural hazard, the Tajik Government, in collaboration with international donors, has launched an international safety programme to develop early-warning systems, along with a joint international programme and organizational framework to work on the Lake Sarez problems overall. By 2005, the monitoring and early warning system was operational. In July 2005, the monitoring equipment detected an unusual rise in the lake's level, which prompted an immediate response by an emergency observation team. As it turned out, the event did not necessitate a general alarm among downstream communities, but it represented a good test case for the system's readiness.

Sources: UN Special Programme for the Economies of Central Asia (SPECA) 2004a, World Bank 2000a and Eurasianet.org 2005.

Box 4.3

Intergovernmental disagreement over the Karshi Pumps—a risk to the human security of millions

The Karshi Pumping Cascade shared by Turkmenistan and Uzbekistan consists of seven pumping stations—six of which are located on Turkmen territory. These pumps lift water from the Amu Darya to irrigate around 400,000 hectares of the Karshi Steppe in the Kashkadarya province of southern Uzbekistan and to provide drinking water for some of the main Uzbek cities. About two million people live in the area and depend on this water for their livelihoods.

The cascade was constructed in the early 1970s, and the equipment is now near the end of its lifespan, requiring significant investments in maintenance and refurbishment. A bilateral agreement concluded in 1996 specifies the condition for management of the irrigation and drainage facilities crossing the territories of the two countries and defines mechanisms for resolving problems. According to this agreement, Uzbekistan is to operate the cascade in return for a yearly payment of about \$12 million for leasing a narrow strip of land on which the cascade has been built (the amount also includes a lease for lands for the Amu-Bukhara and Tumayun reservoirs); and for diversion of about 10 per cent of the pumped water for the irrigation of some 25,000 hectares of irrigated lands on Turkmen territory, free of cost to Turkmenistan. A major drawback is that this does not address issues related to the investments necessary for rehabilitating the Karshi Pumping Cascade. Donor plans to fund a major rehabilitation project had to be stopped due to the inability of the Turkmen and Uzbek authorities to agree on how to resolve longstanding disputes relating to the management of the pumping station. Serious human security risks remain from a potential breakdown.

On 17 November 2004, Presidents Karimov and Niyazov signed a declaration of friendship in Bukhara, and entered into new intergovernmental agreements on the joint use of water resources and cross-border travel. It is a hopeful sign that the relations between the two countries can be normalized and that progress can be made towards rehabilitating the Karshi pumps.

Sources: World Bank 2002d and 2004h, and "UNDP Country Background Study, Turkmenistan."

Water and hydro-based energy in Central Asia are inextricably linked

But the most significant example of the need for cooperation relates to the ‘water-energy nexus’—the intersectoral and region-wide linkages, tensions and tradeoffs involved in the joint provision of water and hydropower from the two major rivers in the region, the Syr Darya and the Amu Darya.

The water-energy nexus⁶

Water and hydro-based energy in Central Asia are inextricably linked, especially in the Syr Darya river basin (see Figure 4.2) The huge Toktogul Reservoir, constructed in the mid 1970s in the Kyrgyz region on the Naryn River (a major tributary of the Syr Darya), is a multi-year water storage facility originally built to even out the dry and wet year flows to enable irrigation of lands for cotton, fodder, wheat, rice, fruits and vegetables in Uzbekistan and the southern regions of Kazakhstan. The operating regime called for the release of 75 per cent of the annual water flows from the reservoir in the summer months (April–September) and for restricting flows to 25 per cent during the winter season (October–March). Surplus electricity generated in the summer fed into the Central Asian Power System for use by the south Kazakh and Uzbek regions. Since the Kyrgyz region lacks significant fossil fuel resources, these were transferred from the Kazakh and Uzbek regions to help meet the Kyrgyz winter demand for electricity and heat.

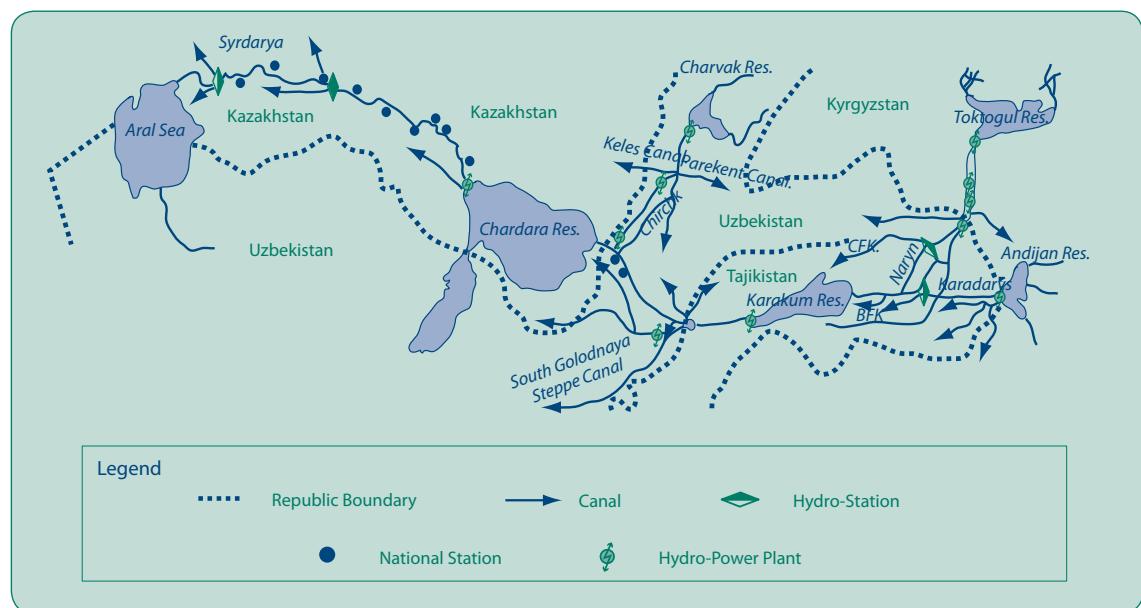
Upon independence, the regional cooperative arrangement for water and energy sharing came under great strain

Upon independence, this regional cooperative arrangement came under great strain. Energy trade was put on a commercial footing, fossil fuel prices rose swiftly to world price levels, and demand grew for payments in hard currency. Customers quickly switched from expensive fossil fuel-fired heating to electric heating, thus increasing winter electricity demand. Kyrgyzstan could not afford to import fossil fuels and started to increase winter discharges of water from Toktogul to meet its power demand; it also reduced summer releases to store water for the following winter. As a result, farmers in Uzbekistan and south Kazakhstan faced irrigation water shortages. In winter, the frozen waterways and canals were unable to handle the larger volume of water, some of which was diverted wastefully into the Arnsai Depression (a low-lying desert area). During 1990 to 2000, summer releases declined to 45 per cent and winter releases increased to 55 per cent of the annual discharges.

To address this problem, the Central Asian states had entered into an agreement in 1992 to maintain the Soviet-era arrangements. But this proved ineffective in arresting the increasing power production of the Toktogul operation. By 1998, Toktogul water storage had reached a record low level. The Central Asian states consequently entered into a new Long-Term Framework Agreement, which explicitly recognized that annual and multi-year irrigation water storage

Main reservoirs and hydropower facilities in the Syr Darya basin

Figure 4.2



Source: World Bank 2004g.

has a cost requiring compensation either through a barter exchange of electricity and fossil fuels or in cash. The implementation of the annual agreements made under the new framework, however, proved unsatisfactory, and the reservoir once again reached an unsustainably low level in 2002.

Contrary to a specific provision in the Framework Agreement, the annual agreements did not make any explicit compensation for water storage services. They provided only for an exchange of surplus summer electricity from Kyrgyzstan for an equivalent amount of fossil fuels in winter from Kazakhstan and Uzbekistan. Yet even when the agreed summer discharges were made, the supply of fossil fuels fell short of stipulated quantities and quality, forcing Kyrgyzstan to boost winter discharges. In wet years, downstream states did not need the agreed volumes of summer discharges. This affected the export of electricity and the compensating quantities of fossil fuel transfers to Kyrgyzstan, which was exposed to a serious risk in meeting its winter demand for heat and power. Regional cooperation efforts were dealt a further blow when the republics failed to conclude annual agreements in 2003 and 2004. This situation was partly a consequence of above-average precipitation rates, which diminished the downstream reliance on irrigation water released from Toktogul, and partly a result of changes in the interests and approaches of water users.

While there are similar elements of the water-energy nexus to be found in the Amu Darya river basin, the situation for now is less subject to cross-border tensions (see Box 4.4). However, if in the

future Tajikistan completes major new dams on the Amu Darya, the situation might well become more like the one currently prevailing in the Syr Darya basin.

It is important to understand national interests in order to appreciate the complexity of the Central Asian situation and the potential obstacles to regional cooperation on water and energy. Each country's interests are primarily shaped by the following factors:⁷ its geographical position, relative political power in the region, options for pursuing unilateral initiatives and natural resources endowment. Below we illustrate how these factors play out for the three principal countries along the Syr Darya basin.⁸

Kyrgyzstan: Due to its geographical position upstream, Kyrgyzstan can control the timing and availability of water downstream. In the absence of an agreement with downstream water users, it prefers to operate the Toktogul Reservoir in 'power mode' to maximize winter electricity generation. The extent to which this is tolerable to downstream water users determines their willingness to make side payments through annual barter agreements to secure increased summer releases. From the Kyrgyz perspective, one of several problems with the barter agreements has been that side payments were not only unreliable, but also too low.⁹ The Kyrgyz demand for higher payments from Kazakhstan and Uzbekistan expressed itself in the 2001 Parliamentary Law, which declared that water resources created on Kyrgyz territory are the property of the country. Neighbours should therefore pay to use them. Kazakhstan's and Uzbekistan's objections to the law led to a

It is important to understand national interests in order to appreciate the potential obstacles to regional cooperation on water and energy

Box 4.4

The water-energy nexus in the Amu Darya basin

The Amu Darya shares a number of features with the Syr Darya, notably its trans-boundary nature and its division into upstream hydropower use and downstream irrigation use. One major difference between the two is the extent to which they can be regulated. While up to 70 per cent of the annual flow on the Syr Darya can be stored, the equivalent figure for Amu Darya is merely 30 per cent. This lack of storage capacity reduces the Amu Darya's potential for the kind of upstream/downstream dispute over hydropower and irrigation that characterizes the use of the Syr Darya.

During the Soviet period, the republics sharing the Amu Darya were also involved in water-energy transfers directed from Moscow. Tajikistan received Turkmen and Uzbek gas in return for electricity produced to power irrigation pumps in summer. Tajikistan also received electricity from Uzbekistan during winter. After the Soviet collapse, bilateral trade replaced this arrangement. Tajikistan, for instance, unable to cover domestic energy demand through hydropower production, continues to import Uzbek electricity and gas. Bilateral trade is not without its problems, though. Uzbekistan has several times cut gas supplies to Tajikistan due to the latter's inability to pay in cash, and Uzbek gas supplies are often unreliable due to low pipeline pressure.

There are other sources of actual or potential conflicts involving the waters of the Amu Darya. First, Tajikistan's plans for expanding upstream hydropower capacity by completing a number of dams unfinished from Soviet days may rouse concern in Turkmenistan and Uzbekistan. Second, the downstream water-sharing arrangements between Turkmenistan and Uzbekistan over the former's diversion of water into the huge Kairakum Canal have been an issue since independence. For the future, a recovery of irrigated agricultural production in northern Afghanistan may also increase water use by Afghan farmers and reduce the flow of Afghan tributaries into the Amu Darya.

Sources: World Bank 2004a and 2004c, and International Crisis Group 2002a.

softened Kyrgyz stance of demanding that the downstream users share the maintenance costs of delivering water rather than paying for water per se.¹⁰

Uzbekistan: Despite a high demand for irrigation water, Uzbekistan has a limited direct ability to influence the timing and volume of cross-border water inflows because it is located midstream. In the short term, its best policy option is to cooperate over water and energy. Uzbekistan has followed this strategy in the past by participating in the annual barter agreements, although in recent years it has taken a decisive unilateral stance in not agreeing to these. Uzbekistan has objected to the Kyrgyz notion that water is a commodity that should be paid for and has referred to relevant international water agreements.¹¹ Furthermore, Uzbekistan is trying to achieve self-sufficiency in water by constructing new regulating dams on its own territory. These dams could provide additional storage of about 2.5 billion cubic metres within the next few years, which could replace the equivalent additional discharge from Toktogul in winter and summer in years of normal water flow.¹² Though they alleviate Uzbekistan's problems in low-water years, albeit at considerable costs, the reservoirs do not appear to be sufficiently large enough to achieve Uzbek self-sufficiency in irrigation water.¹³

Kazakhstan: As a downstream user of irrigation water, Kazakhstan depends not only upon Kyrgyzstan but also on the water withdrawal rate in Uzbekistan. It has potentially conflicting interests with both countries. In practice, however, Uzbekistan has generally preferred to respect Kazakh claims to summer water allocations as stipulated in the annual barter agreements. As the limitations of these became apparent during the 1990s, Kazakhstan contemplated a range of alternative options for providing cheap winter electricity to Kyrgyzstan—projects also aimed at covering the Kazakh winter electricity deficit. These plans were effectively shelved, however, when feasibility studies revealed that the hydropower produced at Toktogul was considerably cheaper than any of the Kazakh options. Kazakhstan has been exploring the unilateral option of building a three-billion-cubic-metre regulating reservoir at Koserai near Shymkent. But the Kazakh authorities also appear to agree with the notion of compensating upstream countries for water storage services, if not paying for water per se, as evidenced by the agreement it already has with Kyrgyzstan on the smaller trans-boundary rivers of the Chui and Talas.¹⁴ Kazakhstan has insisted that if it is to help meet the costs of maintaining and developing the Kyrgyz hydro-engineering facilities from which it benefits, then these facilities should be jointly

managed.¹⁵ Kyrgyzstan, on the other hand, has rejected this offer on the grounds that it does not wish to surrender its sovereign control over Toktogul, which is one of its few sources of regional political influence.

The inability to agree on a cooperative solution for the Syr Darya basin has increased the relevance of alternative infrastructure investments, such as the construction of dams, and hydropower and thermal power plants. Such investments can contribute to addressing regional water imbalances, enhance region-wide welfare and reduce cross-border tensions if they are optimally planned and managed from a regional perspective. For instance, if winter electricity generation could be increased by alternative means in Kyrgyzstan, this would lessen the need to store summer inflows in the Toktogul Reservoir and offer benefits downstream. If ways could be found to export surplus Kyrgyz electricity beyond the region during periods of low domestic demand, much needed revenue could be gained to pay for winter fuel imports.

The Kyrgyz Government is currently exploring the construction of two new dams and hydropower plants on the Naryn cascade, Kambarata I+II, which will have a combined capacity of 2,260 megawatts.¹⁶ Since Kambarata I would be located upstream of the Toktogul Reservoir, water could be released to generate almost all of its annual power output in the winter, thus avoiding the release of water from Toktogul. The project could be completed by 2020, but the high capital cost of construction—\$2.3 billion, which is 1.2 times the 2003 Kyrgyz GDP—and the resulting high economic cost of power (0.0717 \$/kilowatt hour) are likely to put this project beyond the reach of the Kyrgyz Government unless it finds international partners.¹⁷ If secure export markets could be found, this would create a greater justification for such an investment. This option is further explored below.

An alternative project to increase winter power generation in Kyrgyzstan and reduce the need for winter water releases from the Toktogul Reservoir involves the completion of a 400 megawatt thermal power plant, Bishkek II. At a cost of \$200 million, or 0.0255 \$/kwh, this project has better prospects of attracting external financial support.¹⁸ However, it would increase Kyrgyz dependency on Uzbek natural gas. Since the Kyrgyz Government has been pursuing a policy of energy self-sufficiency—understandably perhaps, since Uzbekistan has in the past cut off gas shipments to Kyrgyzstan (e.g., in August 2005)—it may hesitate to pursue this investment as its top priority.

With different country perspectives on water- and energy-sharing arrangements and investment

options, what could be the benefits from regional cooperation? Apart from the political payoffs, such as improved regional stability and the possibility of positive spillover to other issues, there could be tangible economic rewards, especially under an improved version of the annual barter agreements. The World Bank has calculated that Uzbekistan's incremental benefit from the operation of Toktogul in irrigation instead of power mode is \$35.8 million per year. Kazakhstan's annual incremental benefit is \$31.5 million, yielding a combined downstream benefit of \$67.3 million per year.¹⁹ Since the annual incremental costs borne by Kyrgyzstan only total \$35 million, the net basin-wide benefits of cooperation are \$32.2 million per year. This cooperative surplus can effectively be shared by the three countries provided that those downstream compensate Kyrgyzstan with an amount in the range of \$35 million to \$67.3 million per year for its water storage services.

If the economic benefits of cooperation are so substantial, why do the Central Asian republics find it so hard to cooperate? This question has already been partly addressed in the analysis of national policies and interests. More fundamentally, however, national responses to existing cooperative opportunities are essentially driven by a policy of national self-sufficiency in energy and water. Upstream countries aim for energy self-sufficiency, and those downstream for self-sufficiency in irrigation. While one might appreciate the divergent objectives of policy makers in newly independent countries concerned about national security and safeguarding newly acquired national sovereignty, it is critical to understand that a policy of non-cooperation that minimizes reliance on other countries extracts a substantial cost from all. Effective trans-boundary water management requires more intensive regional cooperation and a willingness of downstream countries to compensate their upstream neighbours for the water-related services they provide. As long as self-sufficiency dominates the policy agenda, the benefits of cooperation will not materialize.

Challenges outside the region

Central Asia's water resource connections extend to its neighbours, especially for rivers that rise in Afghanistan, China and Russia, and flow through the region. Afghanistan²⁰ borders Tajikistan, Turkmenistan and Uzbekistan, and shares a number of rivers with these countries, notably the Amu Darya. Concerns have increased in recent years among downstream riparian states that renewed Afghan agricultural development will lead to increased water withdrawals from the

Panj River, which is a major tributary of the Amu Darya. The total area of irrigable lands in this part of the country exceeds 1.5 million hectares. In the past, nearly 500,000 hectares of land were under irrigation, but much of this area has fallen fallow because of the long period of civil unrest.

Around 8 per cent (11.6 billion cubic metres) of the Amu Darya's flow is generated on Afghan territory, and Afghanistan is entitled to withdraw up to nine billion cubic metres from the Panj according to an agreement with the Soviet Union signed in 1946. At the moment, Afghanistan diverts only about two billion cubic metres to feed irrigation networks in the Afghan portion of the Amu Darya basin. It is conceivable, however, that the country could divert as much as 10 billion cubic metres in the future if development plans are realized. Higher water withdrawal in Afghanistan would adversely affect Turkmenistan and Uzbekistan, the two other main irrigation water consumers on the Amu Darya. To lessen the downstream impact and defuse potential regional tension, it is therefore essential that efficient water use technologies and sound water management practices be introduced in Afghanistan as widely as possible. The participation of Afghanistan in meetings and forums dealing with the Amu Darya should be ensured, along with improvements in information and data exchange on water flows originating in the country.

The Irtysh and Ili Rivers rise in China and subsequently flow into Kazakh territory. In early 1999, China announced plans to divert water from the Irtysh River into the Tarim basin in Xinjiang Province using a 300-kilometre canal. An annual flow of up to one billion cubic metres is projected to be diverted when the canal is fully operational in 2020, compared with the total average annual flow of nine billion cubic metres. Similarly, China has plans to divert water from the Ili River to the Tarim River via a tunnel through the Tien Shan mountains. Runoff of the Ili has been falling due to inefficient uses, extensive water losses and increasing absorption of resources in China. Large-scale pollution from municipal wastewater and agricultural discharges and drainage water has curtailed clean water supplies.

China's river diversion plans are related to its needs to develop the Xinjiang Uighur Autonomous Region. On the other hand, some of Kazakhstan's main industrial regions are dependent on Irtysh and Ili waters, so diversion would carry negative ramifications for economic growth and living standards there. China's proposals also have broader environmental implications. These include increased salinity and water loss for the rivers and the Balkhash and Zaisan lakes, as well as adverse microclimate changes akin to the

National responses to existing cooperative opportunities are essentially driven by a policy of national self-sufficiency in energy and water

Central Asia's water resource connections extend to its neighbours, especially for rivers that rise in Afghanistan, China and Russia

It is also essential that Central Asian countries pursue domestic reforms to enhance efficiency in their water and energy sectors

problems already evident around the Aral Sea. These issues will certainly have to be managed carefully to avoid longer-term economic, social, environmental and political problems.

Some 80 per cent of western Kazakhstan's water resources come from rivers that originate in Russia, including the Ural River. Based on a 1992 intergovernmental agreement, water resources are shared across borders, and Kazakhstan reportedly pays Russia on a regular basis for the cost of water management in the region. A Kazakh-Russian commission on the joint use and protection of trans-border waters has met repeatedly and made good progress on joint activities, including the monitoring of common water resources, inspection of polluting enterprises, water testing and management of water reservoirs for flood control.²¹ This example of successful cross-border regional cooperation could be emulated elsewhere in the region.

Regional approaches to national water policy challenges

It is critical that the Central Asian countries and their neighbours succeed in improving regional cooperation in water allocation and infrastructure investment. But it is also essential that they pursue domestic reforms to enhance efficiency in their water and energy sectors. There is a widespread perception that there is an overall scarcity of water. While it is true that shortages do occur, they are often a direct consequence of inefficient and wasteful management of the region's otherwise plentiful water resources. Put simply, water shortages are predominantly a management and incentive problem, not a resource problem. To illustrate, per hectare water consumption levels in Central Asia are 30 per cent higher in the Aral Sea basin than in countries such as Egypt and Pakistan. Unless more balance is brought to incentive structures, the outcome will be a 'tragedy of the commons', where Central Asian water resources continue to be wasted, rural economies contract and relations between the republics become further strained.

Since many of the consequences of poor water management are shared with neighbouring countries, regionally concerted action by all countries would achieve maximum benefits for everyone. This would allow for mutual learning of good practices, and help to establish and monitor benchmarks of conservation achievements. Four areas of national policy are particularly relevant: maintenance of irrigation infrastructure, water pricing, increased reliance on groundwater resources and the engagement of communities in water management.

Governments have increasingly taken steps to introduce payments for water and establish cost accounting in district irrigation departments

Falling levels of maintenance in all the Central Asian states have led infrastructure to deteriorate and the distribution of water to become unreliable. In a regional field assessment carried out by the World Bank in 2002, villagers observed that irrigation systems had not been maintained for five years or more. Significant problems in operation and maintenance had already developed before the demise of the Soviet Union, but since 1991 Central Asian governments have scaled down the agencies that used to oversee irrigation infrastructure. Expenditure on operation and maintenance in Kazakhstan, for instance, dropped by a factor of 21 during the 1990s; only 31 per cent of the required maintenance in Kyrgyzstan actually receives funding. At the local level, district irrigation departments now have very low salaries, small operational budgets and almost no equipment. Qualified staff have left in large numbers.

Recognizing that cost recovery is necessary, governments have increasingly taken steps to introduce payments for water and establish cost accounting in district irrigation departments. The basic rationale behind introducing a price for irrigation is that this encourages efficiency because farmers have an economic incentive to minimize wasteful practices. Concerns that poor farmers may not be able to afford water charges are legitimate, however. Ways to protect these farmers through subsidized irrigation infrastructure maintenance and investment should be explored.²²

As in many countries with river-based systems of irrigation, groundwater has been neglected in Central Asia. Out of an estimated 31 cubic kilometres of annually available and usable ground water in the Syr Darya basin, for example, less than 10 cubic kilometres is presently used. While in many parts of the region groundwater is brackish or saline, this is not the case in the Fergana Valley. Here groundwater could provide a supplementary water resource that local users could control to mitigate seasonal shortages or unreliable delivery in the large-scale systems. Modest investments in groundwater management, combined with improved drainage, could improve the reliability of irrigation, increase incomes for local users, reduce the potential for local or cross-border community conflict and conserve regional water resources.

Governments have started to divest themselves of the responsibility of maintaining secondary irrigation networks by encouraging farmers to organize themselves into water users associations. According to a recent report on privatization of irrigation management,²³ some 300 associations have been established in Kyrgyzstan, operating over 40 per cent of irrigated areas. While some of associations have been successful, others have

Table 4.1

Country	Syr Darya basin	Amu Darya basin	Aral Sea basin *
Kazakhstan	206	0	206 (0.7%)
Kyrgyzstan	81	0	81 (4.3%)
Tajikistan	58	112	170 (10.6%)
Turkmenistan	0	378	378 (6.1%)
Uzbekistan	390	529	919 (9.3%)
Total	735	1,019	1,754 (3.6%)

Estimates of total agricultural losses due to poor management of irrigation systems (millions of \$/year)

*Percentage figures in brackets are total losses expressed as a per cent of GDP in 2003.

Note: Annual agricultural losses are due to inadequacy in water availability, salinity, poor weed control, cultivation practices, soil compaction, leaching water, drainage problems and land abandonment.

Sources: International Fund for Saving the Aral Sea 2003 and World Bank 2005e.

failed. The main reasons for negative experiences include an overly burdensome tax system, legal constraints on charging water management fees at the community level, lack of financing for even minimal investments in on- and off-farm improvements (such as the installation of hand pumps, maintenance of secondary canals, etc.) and excessive bureaucracy. Experiences elsewhere have demonstrated that water users associations, when properly supported, do have the potential for major sustained improvements in local irrigation system management.

Through these and other concerted water management measures to ensure more efficient irrigation and drainage management practices, along with better agricultural policies, Central Asian countries collectively could save an estimated \$1.75 billion per year in lost agricultural yields (see Table 4.1). This amounts to 3.6 per cent of regional GDP. Tajikistan could gain the equivalent of over 10 per cent of its GDP. Over half of the estimated absolute savings would accrue to Uzbekistan.

Managing Central Asia's energy issues

Regional energy endowments and linkages

Economic and human development in Central Asia is greatly dependent upon the energy sector. Energy-related activities contribute directly to economic growth, employment generation and foreign exchange earnings. These benefits are reinforced through the energy sector's contributions to other economic activities, such as irrigated cotton production in Kazakhstan and Uzbekistan, and aluminium mining in Tajikistan—both of which depend on electricity. The energy sector contributes directly to government

revenues, thereby enabling social sector spending programmes that assist the population at large. Households benefit from the lighting and heating generated at Central Asian power and heating plants, especially during winter. A reliable electricity supply is also an essential input for the provision of many public services, such as the operation of hospital equipment, as well as a critical foundation for industrial development. More generally, improvements in living standards within a country over the long run require steady advances in labour productivity, which ultimately implies the replacement of human and animal power by electric power obtainable from primary energy resources such as water, oil and gas (Gillis et al. 1992).

As for water, the distribution of fossil fuel resources in Central Asia is highly skewed. Kyrgyzstan and Tajikistan have abundant hydropower potential but negligible amounts of commercially exploitable fossil fuels (see Table 4.2). In contrast, Kazakhstan has significant reserves of oil, gas and coal; Turkmenistan has substantial gas reserves and some oil; and Uzbekistan has large gas reserves as well as some oil and coal. Central Asia is, in fact, poised to become a major world supplier of energy, especially in the oil and gas sectors.²⁴

Energy issues in Central Asia also have a strong regional dimension, because the republics are tied together by a web of electricity transmission systems, as well as oil and gas pipelines developed during the Soviet period. The legacy of regional economic specialization fostered an interdependence still partly reflected in today's energy trading patterns. Energy systems were designed to take account of the location of various energy sources and resulted in the following configurations:²⁵

- Oil refineries were located in the more significant oil producers (Kazakhstan, Turkmenistan and

Through water management measures, along with better agricultural policies, Central Asian countries could save an estimated \$1.75 billion per year

Economic and human development in Central Asia is greatly dependent upon the energy sector

Table 4.2

Primary energy resources			Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	Total
Fossil Fuel reserves	Unit							
Crude oil	MTOE	1,100	5.5	1.7	75	82	1,264	
Natural gas	MTOE	1,500	5	5	2,252	1,476	5,238	
Coal	MTOE	24,300	580	500	Insignificant	2,851	28,231	
Total	MTOE	26,900	591	507	2,327	4,409	34,734	
Percentage	%	77.4	1.7	1.5	6.7	12.7	100.0	
Hydro-potential	GWh/year	27,000	163,000	317,000	2,000	15,000	524,000	
	MTOE/year	2.3	14	27.3	0.2	1.3	45.1	
Percentage	%	5.2	31.1	60.5	0.4	2.9	100.0	

Note: MTOE stands for million tons oil equivalent, GWh for gigawatt hours.

Source: World Bank 2004a.

The energy-rich countries of Central Asia are implementing or exploring substantial new investments in energy pipeline construction

- Uzbekistan) with refined products being transported into Kyrgyzstan and Tajikistan.
- The regional gas pipeline network was designed to allow delivery of gas from Turkmenistan and Uzbekistan to the southern portion of Kazakhstan, Kyrgyzstan and Tajikistan.
 - Coal consumption was largely tied to local availability and the ability to use the rail network for coal transportation.
 - The Central Asia Power System was designed as a regional power grid, using hydropower exports from Kyrgyzstan and Tajikistan and allowing interchanges of power among all the countries. The dispatch centre for this system is located in Uzbekistan.

These forms of specialization were underpinned by extensive investments in regional energy transport and transmission infrastructure, with continued operation requiring a strong degree of regional cooperation. Given Central Asia's landlocked location, an expansion of existing power grids and pipelines for energy exports will depend on additional cooperation with neighbouring countries inside and outside the region.

This section reviews the regional energy issues first for oil and gas and then for electricity, and closes by considering some key constraints and risks.²⁶

Oil and gas

Central Asia has proven gas reserves amounting to 6.6 trillion cubic metres—2.9 trillion cubic metres in Turkmenistan, 1.9 trillion cubic metres in Uzbekistan and 1.8 trillion cubic metres in Kazakhstan. This represents about one-tenth of the known gas reserves of the CIS.²⁷ Turkmenistan and Uzbekistan are the two leading gas producers (see Figure 4.3) with a world market share of around 2 per cent each, while Kazakhstan has a share of around half a percent.²⁸

In terms of oil production, growth in Kazakhstan is expected to far outstrip increases in demand during the coming years. If present plans are realized, the contribution of Kazakhstan to the world's oil supply by the year 2010 could be up to two per cent (see Figure 4.4). This would place Kazakhstan among the leading oil producers and exporters of the world.²⁹

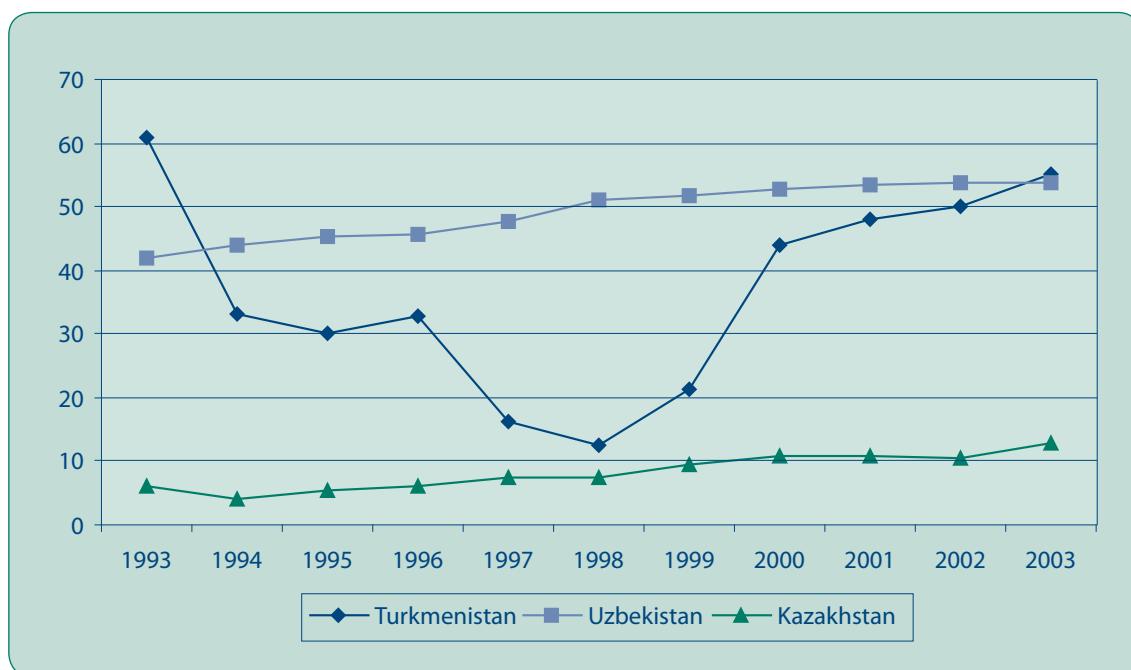
The energy-rich countries of Central Asia are implementing or exploring substantial new investments in energy pipeline construction to meet high world demand and to reduce the historical dependence on Russia for oil and gas transit routes. For oil from Kazakhstan, there are a number of potential options, including pumping through the existing Russian pipeline network to the Black Sea port of Novorossiisk; sending shipments via tanker across the Caspian Sea and via the recently opened pipeline from Azerbaijan through Georgia to the Mediterranean Sea port of Ceyhan in Turkey; pumping through a pipeline planned from Atasu to Xinjiang to the Western Chinese market;³⁰ and striking oil swap deals with Iran.³¹ For gas, existing export routes include north through Russia to markets in Europe; proposed pipelines to the Mediterranean through Iran and Turkey; and options to expand east into China, and south-east to India and Pakistan. Despite these potential alternatives, resource-rich but landlocked countries face a number of difficulties in trying to access world markets for their energy products, as Turkmenistan demonstrates (see Box 4.5).

Electricity³²

The Central Asian states' move towards self-sufficiency after independence led to a considerable reduction in the regional electricity trade, which fell by around 70 per cent between 1990 and 2000, despite an 80 per cent rise

Natural gas production (billions of cubic metres)

Figure 4.3



Source: BP 2004.

in consumption levels over the same period. However, intra-regional electricity trade will be required to meet the region's energy demands in the near to medium term. In the long term, the potential to export electricity outside the region is worth exploring. Figure 4.5 provides a schematic presentation of the possible sequencing of

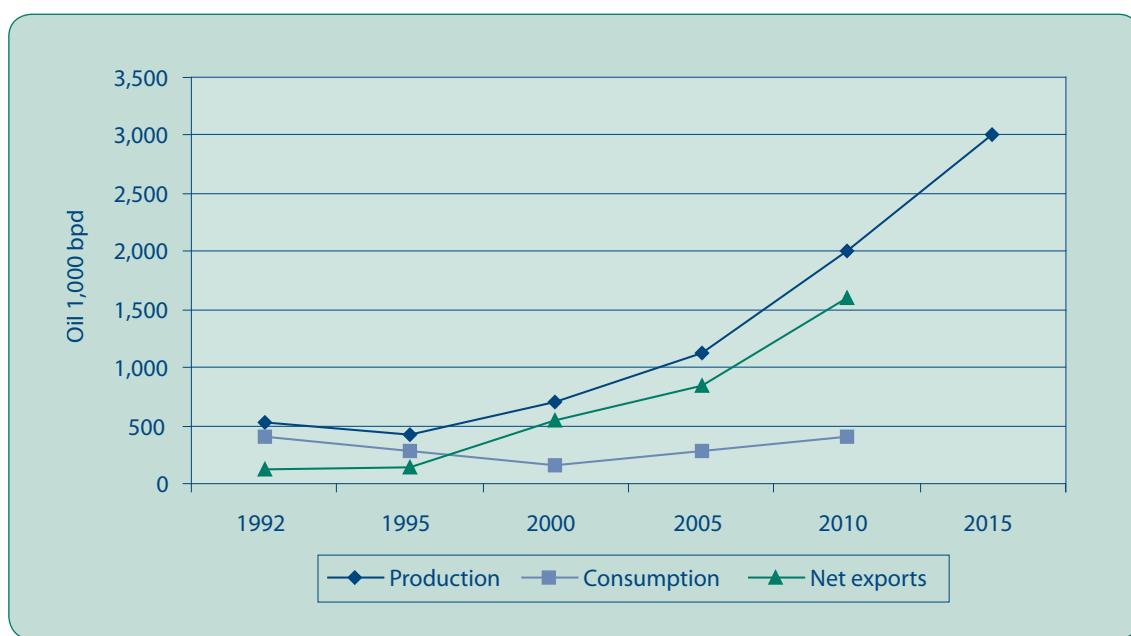
policy measures and investments in prospective electricity markets in the region and beyond over a 15-year time horizon.

Bolstered by loss-reduction measures and rehabilitation of existing generation capacity, the existing regional electricity trade could

Intra-regional electricity trade will be required to meet the region's energy demands in the near to medium term

Kazakh oil: production, consumption and exports, 1992-2015 (1,000 bpd)

Figure 4.4



Note: 2005 to 2015 figures are projected; bpd stands for barrels per day.
Source: Tsalik 2003.

Turkmenistan's gas export issues and options

Turkmenistan has the fifth largest reserve of natural gas in the world and the second largest reserve of oil in Central Asia. Gas exports comprise Turkmenistan's principal source of foreign exchange and the bulk of government revenue. However, Russia maintains near monopoly control over the marketing of Turkmenistan's gas exports, which it buys at well below world market prices. Recurrent disputes with Russia over take-off price and transit conditions have led to repeated interruptions in exports.

Due to its reliance on Russian pipelines, Turkmenistan is anxious to pursue other export routes, including the Trans-Afghan Pipeline project, which, if built, would carry Turkmen gas through Afghanistan to South Asia. The pipeline project has, however, not gone past the stage of an Asian Development Bank-sponsored study, due to regional instability and lack of investors. While not completely off the drawing board, the project faces two critical challenges: lack of uncommitted gas reserves in Turkmenistan to support a 30-year project life, and the security of the pipeline segment traversing Afghanistan.

Recently, Ukrainian President Yushchenko proposed creating an international consortium to build, own and operate a new large-capacity gas pipeline from Turkmenistan via Kazakhstan and Russia to Ukraine and on to Western Europe. With a throughput capacity envisaged at 60 to 70 billion cubic metres annually, this pipeline would provide an internationally controlled outlet for Central Asian gas. The proposal includes forging an alliance of producer, transit and consumer countries, extending from the Central Asian upstream to the European downstream, and based on a long-term supply strategy that would harmonize the interests of all. President Yushchenko called for major Western European countries or even the European Union to take part.

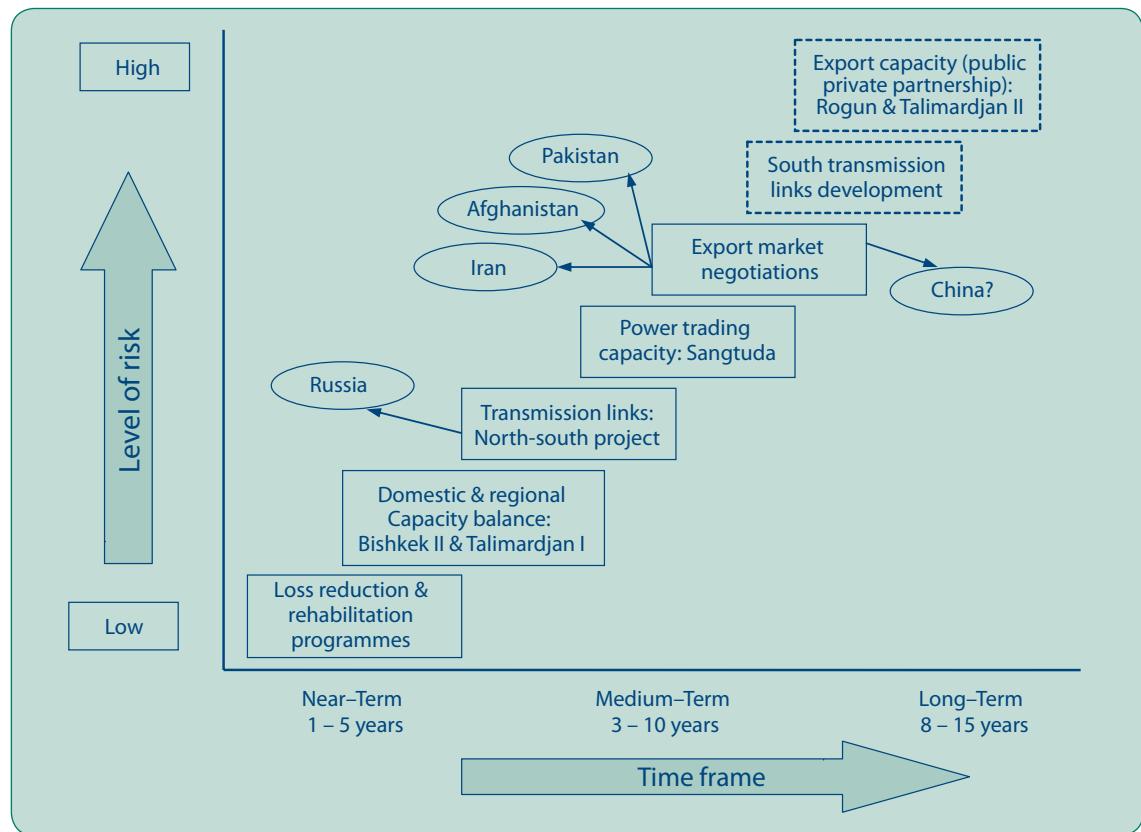
Sources: Taslik 2003 and Interfax 2005.

meet domestic demand in Central Asia until about 2020. New generation facilities, often promoted by national governments, are needed only to cover winter supply shortages, especially for Kyrgyzstan. To improve intra-regional trade beyond that point would require

some upgrading of transmission facilities, including the construction of the North-South Transmission Line in Kazakhstan (which would also support exports to Russia), and the reduction of transmission bottlenecks in the southern part of the Central Asian grid.

Power development and trade strategies for Central Asia

Figure 4.5



Source: World Bank 2004a.

Table 4.3

Season	2005	2010	2015	2020	2025
Summer	11,066	18,396	28,142	27,819	19,545
Winter	-1,637	6,942	15,521	15,564	3,633
Annual	9,429	25,338	43,663	43,383	23,178

Note: Includes all Central Asian republics except Turkmenistan.

Source: World Bank 2004a.

Increased intra-regional trade could provide significant benefits by allowing individual countries to meet future demand at a lower cost than if they were to rely solely on their domestic resources. For example, Kazakhstan and Uzbekistan could both benefit from importing hydroelectricity from existing hydropower stations in Kyrgyzstan and Tajikistan during the summer, rather than generating power in their own thermal power stations. The exploitation of differences in the marginal cost of production across countries and seasons, however, requires a much greater level of transparency in the electricity sectors of the various countries.

Appropriate trading agreements will also be required. Due to the difficulties of reaching multilateral consensus, a series of bilateral agreements are likely to emerge. Existing bilateral agreements include one between Kyrgyzstan and Tajikistan on the Batken-Kanibodom line, and another between Kyrgyzstan and Kazakhstan on Kyrgyz exports to Russia. Among the issues these agreements need to address are the legal and policy frameworks for third-party access to transmission systems, and transmission pricing arrangements. Other prerequisites for effective trade, as underscored in the discussion of the water-energy nexus, are careful coordination between the management of electricity resources and the management of water resources, along with intensive consultation and coordination with neighbouring countries.

Central Asia's considerable electricity export potential is illustrated above and in Table 4.3. Possible markets such as Pakistan and Iran have the added attraction of experiencing their peak demand in the summer, when the largest electricity surpluses exist in Central Asia. Access to these markets will particularly benefit Kyrgyzstan and Tajikistan, since they could develop the capacity to export significant quantities of electricity. Uzbekistan and to some extent Kazakhstan could export thermal power in the winter, and also serve as transit countries and power traders.³³

Accessing export markets, however, runs into a number of constraints. Afghanistan is limited in its ability to pay. Reaching Pakistan's market would involve construction of transmission facilities through Afghanistan. Demand in China

Surplus electricity available for trade (GWh)

is concentrated in eastern population centres, a considerable distance from Central Asia. Access to the Russian market will require completion of Kazakhstan's North-South Transmission Line, and would likely be dependent on the willingness of the Russian Joint-Stock Company Unified Energy System (RAO UES) to purchase supplies.³⁴ Supplies to Iran from Kyrgyzstan and/or Tajikistan will likely have to compete with those from Turkmenistan,³⁵ and will have to transit Afghanistan, Turkmenistan or Uzbekistan, subject to appropriate agreements.

Major new power generation projects in Central Asia will likely only be justifiable if there is assured access to export markets outside the region. This will be predicated on the alleviation of supply security concerns on the part of the importing countries, the existence of transmission infrastructure to access the markets and political stability—all factors that will determine access to financing from private or public sources. Perceptions of risk among potential investors and importers vary. Western investors currently view the new generation of projects as high-risk ventures. RAO UES, on the other hand, believes that it can mitigate many of the risks and provides the best opportunity in the medium term to implement at least one large-scale hydropower project. The issues that Tajikistan faces in trying to develop its hydropower capacity with two sizeable investment projects (see Box 4.6) point towards the reasons for concerns about ambitious projects in the region.

Increased intra-regional energy trade could provide significant benefits

Constraints and risks in regional energy market management

While highlighting the potential economic benefits of regional energy trade and the broader political benefits of regional cooperation, it is important also to appreciate the constraints and risks in regional energy market development. In Central Asia, these start with the region's landlocked location and the physical challenge of transporting energy commodities to the export market. In short, electricity trade depends on the existence of an interconnected power grid.³⁶ Oil and gas have to be transported via pipelines over

Major new power generation projects in Central Asia will only be justifiable if there is assured access to export markets outside the region

Hydropower generation potential in Tajikistan

In an attempt to reduce its energy dependence on Uzbekistan, Tajikistan is currently contemplating how it can exploit its huge hydropower potential—only 10 per cent of which has been developed. Tajikistan is actively pursuing the completion of two hydropower schemes initiated during the Soviet period. The less contentious option, Sangtuda I+II, involves two run-of-river schemes (670 MW and 220 MW) at the incremental cost of \$560 million. These could start partial operations as early as 2009 and would produce electricity at the low cost of 0.0197 \$/kWh. This project may receive Iranian and Russian financial support, and Uzbekistan has also responded favorably. However, considering Tajikistan's limited financial capacity and the uncertain market outlook for incremental electricity capacity in the country and beyond, the prospects for mobilizing the required funding remain uncertain.

The other project, Rogun I+II is a 3,600 MW storage scheme at an incremental cost of \$2,455 million that could start producing electricity in 2014. Rogun I+II is considerably more controversial than Sangtuda I+II, basically because it enables Tajikistan to control the flow of water to Uzbekistan's Surkhandarya and Kashkadarya Provinces, while potentially expanding irrigation at home. Uzbekistan is strongly opposed to the completion of Rogun I+II. International donors are also hesitant. The project has a favorable economic cost of 0.0283 \$/kWh, but if pursued it could create exactly the type of upstream/downstream irrigation/hydropower conflict that plagues the Syr Darya.

Source: World Bank

Regional energy cooperation can pool public resources, secure firm markets, and establish predictable transit routes and political conditions

great distances and multiple borders to faraway ports or continental markets.

The construction of new transmission infrastructure poses difficulties partly because it is costly and can take several years to complete, and partly because it relies on cooperation with transit countries that do not directly benefit from the end product, but have an interest in extracting a rent for the transit service. Occasionally, relations between the exporting and transit countries suffer strain and block transit. Other problems relate to the extraction of monopoly rents, or the theft of electricity, gas or oil in the transit country.

The financing options available to Central Asian countries as they consider upgrading their energy infrastructure are generally few in number. Most governments in the region work with limited fiscal resources and are constrained in contracting new debt (especially the smaller and poorer countries). Private investors face not only the commercial risks of high costs and uncertain markets, but also political and security risks. This places a premium on regional cooperation to pool public resources, secure firm markets, and establish predictable transit routes and political conditions. External partners and international financial institutions can help in providing financial resources and guarantees that will facilitate public and private engagement in regional solutions.

Because energy is fundamental to the ways that modern societies work, it is not surprising that Central Asia, like the rest of the world, views energy issues as a matter of national security. This perception may be even more pronounced in Central Asia because energy issues are so regionally embedded, and because international relations between some of the republics can be tense at times. The policies encouraging self-sufficiency

that have resulted may be politically rational in an environment of mutual suspicion and distrust. However, this does not undermine the potential benefits of cooperation. It serves instead to explain in part why cooperative outcomes to date have been so hard to attain.

Finally, Central Asian energy-rich countries—whether now with oil and gas resources or in the future once their hydro-power potential is realized—will have to struggle with the well-known paradox that energy wealth does not automatically translate into national wealth and prosperity. On the contrary, countries rich with natural resources consistently under-perform resource-poor countries on almost every indicator of progress ranging from human development, economic growth, democracy and good governance, and preserving the peace. A part of the problem, known as 'Dutch disease' occurs when the foreign exchange earnings from the export of a country's natural resources are converted into local currency, raising the value of that country's currency. As a result, its labour-intensive tradable goods become more expensive and hence less competitive, creating unemployment and increasing dependence on natural resources. Another problem relates to the relationship between price volatility and public spending. With high oil prices governments tend to increase spending rather than saving for times with lower prices. When prices subsequently fall, they often choose to borrow instead of cutting spending, leading to sizeable debt accumulation. A third problem is that corruption tends to flourish in countries with abundant natural resources, since they generate large financial flows that can easily be siphoned off in the absence of transparent and accountable budget and accounting practices. This in turn weakens governance pervasively throughout the country. To some extent these problems

Countries with abundant natural resources generate large financial flows that can easily be siphoned off in the absence of transparent and accountable budget and accounting practices

can be alleviated by setting up a natural resource fund, as Kazakhstan did in 2000. In addition to collecting excess revenues when prices are high and channelling them back to the budget when prices fall, this kind of fund can 'sterilize' revenues by using foreign denominated accounts to keep export earnings out of the domestic economy. But in Central Asia, the fundamental challenge of 'good governance' remains.

Environmental challenges and opportunities

Key issues

Many of the environmental challenges in Central Asia are closely linked to regional water and energy issues. The massive diversion of water for irrigation has resulted in the widespread destruction of ecosystems, especially in the Aral Sea and the river deltas. Mismanagement of irrigation infrastructure has caused land salinization, swamping, desertification and declining ecosystems. Environmental changes such as deforestation and climate change are in turn affecting the formation of river flow and availability of water throughout the region. And environmental pollution aggravates water scarcity by making water resources unsuitable for agricultural or domestic use.

Similarly, extraction, transportation, transformation and use of all forms of energy have had significant environmental impacts, caused for example by oil drilling, coal mines, pipelines, dams and thermal power stations. While many of these investments were made in Soviet times to permit exports of natural resource-based commodities to the rest of the Soviet Union, and to support rapid increases in the region's population, they also sowed the seeds

of environmental destruction, as documented by the great Central Asian author Chingiz Aitmatov (see Box 4.7). In a region where 60 per cent of the population is engaged in agriculture, land has been a central component of development. Soviet policy was to bring more land into cultivation by extending the irrigated area by more than 70 per cent between 1960 and 2000. Population growth largely negated this development, however, with per capita land availability actually decreasing by more than 40 per cent over the same period (see Figure 4.6). Land is in particularly short supply in the mountainous countries of Kyrgyzstan and Tajikistan, and in the densely populated regions of Uzbekistan (Samarkand and Khorezm Provinces, and the Fergana Valley).

Since 1991, regional agricultural yields have reportedly declined by 20 to 30 per cent, causing annual losses in agricultural production of as much as \$2 billion.³⁷ A major contributing factor has been poor management of water. Between 1990 and 2000, the share of land in Central Asia with high groundwater levels increased from 25 per cent to 35 per cent of the total irrigated area.³⁸ The area of salinized territories in the Amu Darya basin increased by 57 per cent and in the Syr Darya basin by 79 per cent from 1990 to 1999.³⁹ More than 30 per cent of irrigated land is salinized in Tajikistan and up to 40 per cent in Kyrgyzstan.⁴⁰ In addition, some 51 per cent of agricultural lands are suffering from erosion in Kyrgyzstan and some 97 per cent in Tajikistan.

In Central Asia, as elsewhere, people depend not only on cultivated land, but also on natural and semi-natural ecosystems for food and various other life support functions. Today, the useful productivity of such ecosystems is under significant threat, most notably in the degradation of the ma-

While many investments were made in Soviet times to permit exports of natural resource-based commodities, they also sowed the seeds of environmental destruction

Chingiz Aitmatov on the environmental threats facing Central Asia

In his novel *Plakha*, Chingiz Aitmatov writes about the life and death of humans and animals in the Moyun-Kum steppe of southern Kazakhstan and in the Kyrgyz mountains. He captures the impact of humanity on nature in his inimitable way:

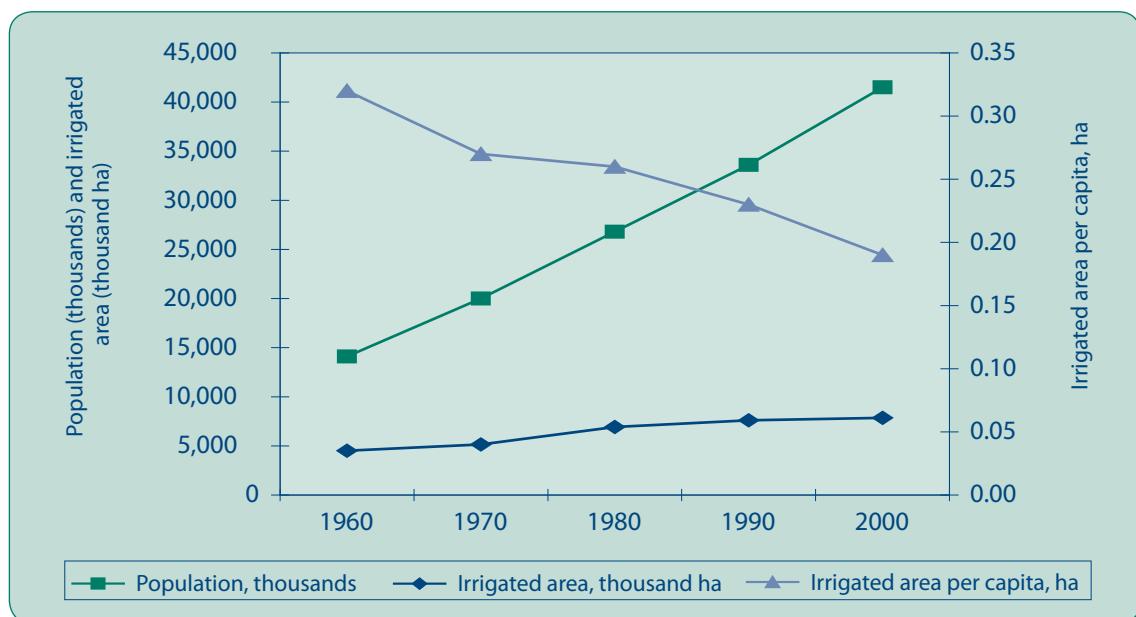
None of them [the animals of the Moyun-Kum] had any inkling of what was afoot. None of them could imagine that the seemingly endless savannah, however great, however broad its sweeping expanses, was no more than a tiny island in the Asia sub-continent; a thumb-nail printed yellowish-brown in the atlas, nibbled away from year to year as the virgin lands were put to the plough, trampled further and further in by the countless herds of domestic animals which roamed where artesian wells had gone before them, opening up new areas of grazing. The savannah was under attack from canals and roads built on the periphery because of the huge gas pipeline that passed close to the edge of the savannah; and, finally, there were more and longer visits from men with more and more technology at their disposal—men on wheels and men with motors, men with walkie-talkies and water-tanks who could penetrate any desert or semi-desert, including the Moyun Kum.... How were the creatures of the unique Moyun-Kum savannah to know that in the ordinary deeds of men lie hidden the sources of good and evil on this earth? And that everything depends upon the men themselves, on how they direct these ordinary deeds, towards good or evil ends, to build or to destroy? No idea had the four- and two-legged creatures of the Moyun-Kum savannah of the complexities crowding in upon a humanity that had been struggling to understand itself since the moment when man became a thinking animal, struggling in vain with the eternal riddle of why evil almost always triumphs over good..."

Box 4.7

Source: Aitmatov 1989, p. 12.

Water and land use in the Aral Sea basin, 1960-2000

Figure 4.6



Note: ha = hectare

Sources: Kipshakbayev and Sokolov 2002, and SPECA 2004a.

In Central Asia today, the useful productivity of ecosystems is under significant threat

rine and coastal ecosystems of the Aral Sea. Other regionally important ecosystems—such as dry grasslands, river deltas and the mountains—are also declining at an alarming rate.

Greatly impoverished saline deserts, *solonchaks*, have developed over an area of four million hectares affected by drainage waters. Flooded meadow soils in the deltas have dried up and transformed into *takyr* desert soils on over 1 million hectares. In recent decades the area of natural lakes in the Amu Darya and Syr Darya deltas declined from 640 and 833 square kilometres to 80 and 400 square kilometres, respectively, leading to the disappearance of once profitable fishing and musk-rat hunting and the complete loss of marshy areas for commercial use.⁴¹ In the Syr Darya delta, the biological productivity of commercially valuable reeds decreased by a factor of 30 to 35.

Between 1970 and 1999, the area of old-growth *tugai* delta forests shrank by almost 90 per cent. Whereas in 1960 more than 70 species of mammals and 319 species of birds (including the Khivin pheasant, raptors, the wild boar, the *khangul* or Bohara deer, and the reed cat) lived in river deltas, nowadays there are only 32 mammal and 160 bird species left.⁴²

Mountains are another category of regionally important ecosystems, occupying 93 per cent of Tajikistan, 87 per cent of Kyrgyzstan, 23 per cent of Uzbekistan, 20 per cent of Turkmenistan and 12 per cent of Kazakhstan. More than 5.5 million people live in mountains in Central Asia.⁴³ The main causes of mountain degradation include

deforestation, overgrazing, unmanaged tourism and hunting, and poorly designed development projects. It is important that efforts to protect mountain ecosystems run concurrently with those to alleviate rural poverty.⁴⁴

Central Asia is also experiencing climate change, which affects water resources. In low-water years, the water flow in the Syr Darya basin can already be 37 per cent less than average, and in the Amu Darya basin about 26 per cent less than average.⁴⁵ Many experts believe that the Central Asian climate will significantly warm up, resulting in major environmental, economic and social disruptions.⁴⁶ Glaciers are already shrinking, which may eventually decrease water flows. From the 1950s to the 1990s, the Pamir-Alai glaciers lost 19 per cent of their ice, with the process now gaining in intensity. For several decades, the area of glaciers in different regions of Tien Shan, Gissaro-Alai, Pamirs and Dzhungarskiy and Zailiyskiy Alatau has decreased at the average rate of about 1 per cent per year.⁴⁷

According to some model predictions, the availability of water in Syr Darya may decrease by up to 30 per cent and in Amu Darya by up to 40 per cent. Some other models do not predict such dramatic declines, but no scenario shows an increase in water flow; in all models, the demand for water grows faster than the natural supply. Increasing occurrence of droughts and decreased grain productivity are also widely predicted.⁴⁸

Given high uncertainties over these projections and the potentially serious consequences for

Central Asia is also experiencing climate change, which affects water resources

human security and development in the region, it is necessary to constantly update and improve the knowledge (and its use in policy decisions) of natural processes in glaciers and mountain areas. No single country is capable of conducting such research on its own; as it stands, the last estimation of regional water resources using a common methodology was made 40 years ago.⁴⁹ Scientific research in high mountains based on a network of monitoring stations and regular expeditions practically terminated with the collapse of the Soviet Union. Given the rapid changes in critical natural systems, such research and monitoring is an important regional priority that should be undertaken on a cooperative basis.⁵⁰

While climate variations and changes in the mountain ecosystems seriously affect water quantity, environmental pollution reduces its quality, often making it unsuitable for irrigation, drinking or commercial purposes. Since the 1960s, the water quality in Central Asia has drastically deteriorated. The main reason for this has been the discharge of heavily polluted water through drainage systems currently making up to 15 per cent of the river flow volume of the Aral Sea basin.⁵¹ Effluent from municipal and industrial sewers and runoff from waste disposal sites and mining industries are other significant sources of pollution.⁵²

The most visible result of pollution is the increasing salinity of water, especially in downstream areas. In the Republic of Karakalpakstan,⁵³ for example, river water is unsuitable for drinking 10 months a year due to excessive mineral residues.⁵⁴ Since the 1960s, mineralization of water in the lower reaches of the Amu Darya and Syr Darya has at least doubled, and water has also become unacceptable for drinking

or harmful to health in the medium reaches of Syr Darya. The decline in industrial production of the 1990s did not significantly change the high levels of water pollution.⁵⁵

Water contamination by metals (including mercury, copper, zinc and chromium), organics and other substances also poses significant risks. In Uzbekistan, only about two per cent of the population lives in an area with good water quality, while some 50 per cent live in areas with bad or very bad quality. Sources of such pollution include primarily industrial and mining wastes. Issues for human security and regional stability associated with trans-boundary environmental pollution are well illustrated by the situation around the Tajik Aluminum Plant (TADAZ) in Tursun-sade, in south-western Tajikistan, 10 kilometres from the Uzbek border (see Box 4.8).

If there is a common thread that runs through all the major environmental issues in Central Asia, it is the allocation, use and protection of water resources. With the region connected through its rivers, lakes and seas, a regional approach to protecting these resources is essential. We discussed above appropriate ways to allocate and manage the use of regional water resources efficiently. In addition, the quality of water needs to be protected by limiting sources of pollution, improving the treatment of industrial and residential effluents, and protecting mountain, desert and savannah ecosystems in terms of their sustainability, biodiversity and survival of endangered species. But there are other important environmental issues facing Central Asia, many centred on 'hot spots' of regional significance.

Since the 1960s, the water quality in Central Asia has drastically deteriorated

Water contamination by metals, organics and other substances poses significant risks

Box 4.8

Environmental pollution from TADAZ

Between 1982 and 1989, TADAZ annually emitted up to 40,000 tons of pollutants into the air, including 300 to 400 tons of toxic hydrogen fluoride. Agriculture in the densely populated Sarassiya valley of Uzbekistan suffered severe damage, including almost complete destruction of silkworm cultivation, pomegranate orchards and vineyards, as well as significant harmful effects on cattle. Negative impacts on people's, and especially children's, health were also widely reported. Following increasing concerns over these problems, the plant installed pollution control equipment in the early 1990s that, together with declining rates of production, resulted in a reduction of fluoride concentrations.

In November 1994, the governments of Uzbekistan and Tajikistan signed an agreement to improve the environmental situation in the area affected by TADAZ. Bilateral working groups of experts and environmental officials conducted joint inspections and analysis, and elaborated concrete action plans. Most of these activities were to be funded by TADAZ. However, at the end of the 1990s, the activities stalled partly because of a deteriorating security situation and partly because funding fell short. The mistrust of neighbours that can be stirred up by a trans-boundary environmental issue is well illustrated by a 2000 interview with a medical officer from Uzbekistan:

"Recent reports say that the [TADAZ] plant is experiencing shortages of raw materials and is therefore operating at only 38 per cent of capacity. And I suppose you could say that for us, that's great news. But it would be better yet if they would shut the place down entirely. There's not much chance of that, though, because the plant accounts for as much as 25 per cent of [Tajikistan's] budget revenues. Meanwhile, the killer aluminium plant is still operating. Maybe not at full capacity, but operating nonetheless. And of course, it ought to compensate for the harm it has inflicted. Up through the end of 1991, Tajikistan was doing certain things to help us: Walk-in clinics and a school were built, and payments of monetary compensation were made. But all that came to an end in 1992. . ."

Source: Yegorov 2000.

Fully alleviating the threats of environmental hot spots will only be possible through extensive cooperation

Environmental hot spots

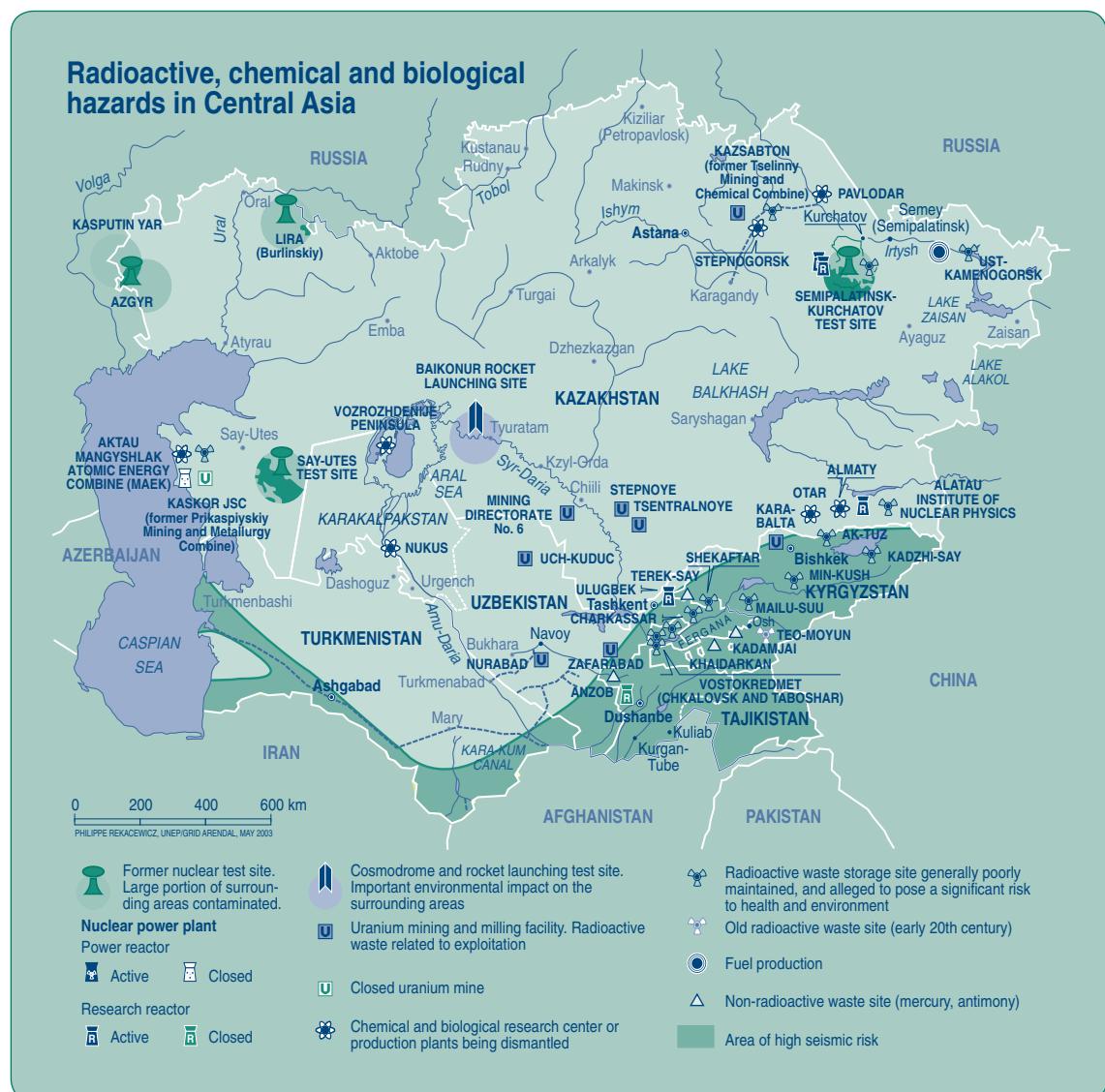
The link between human development, human security and environmental degradation in Central Asia is most obvious in several hot spot areas that have a concentration of severe environmental problems. Some are the legacy of Soviet military and industrial activities (see Figure 4.7). They include, for example, deposits of tailings from uranium and other toxic metals mining in Kyrgyzstan, Tajikistan and Uzbekistan in the vicinity of the Fergana Valley. Many of these radioactive tailings dumps are located on flood plains and are sensitive to landslides, floods, erosion and other natural factors threatening their integrity. There have been cases when protective dams were destroyed and radioactive materials spilled into trans-

boundary water courses (see, for example UNEP et al. 2005).

The Central Asian states have yet to agree on the significance of these threats, however, despite consensus on the need for long-term monitoring and sharing of information.⁵⁶ But fully alleviating them will only be possible through extensive cooperation, both within and outside the region, because the resources this will require are not available in individual countries. These sites—some so large that they are referred to as environmental disaster zones—deserve particular international attention due to their implications for human security and regional stability. The best known among them is the Aral Sea and its surrounding territory, although the Caspian Sea also represents a major ecological challenge.

Radioactive, chemical and biological hazards in Central Asia

Figure 4.7



Source: UNEP et al. 2005.

Box 4.9**The Aral Sea disaster**

The Aral Sea is fed by the two great Central Asian rivers, the Amu Darya and the Syr Darya. During the Soviet period, a substantial expansion in cotton cultivation was behind the mass diversion of water from these rivers for irrigation. In Uzbekistan alone, starting from a level of 441,600 hectares in 1913, the acreage planted with cotton grew from 1.0 million hectares in 1940 to 1.4 million hectares in 1960 to 2.1 million hectares in 1987. Between the diversions and inefficient usage, less and less water was available to replenish the sea, which started shrinking rapidly. Between 1960 and 1990, the Aral Sea retreated to half its size (from 66,900 to 36,500 square kilometres) and its volume dropped by two-thirds (from 1,090 to 310 cubic kilometres). By the late 1990s, the sea had reportedly lost 90 per cent of its volume.

The drying out of the Aral Sea, once the fourth largest lake in the world, has had far-reaching consequences for the climate and biodiversity of the surrounding region. Desert winds are transporting sand and salt over long distances, depositing millions of tons of (often polluted) salts on agricultural fields all over the basin area, and reportedly endangering the glaciers of faraway mountain ranges. Because of insufficient drainage systems, water logging is widespread, and soil and water salinity is increasing. The worsening ecology of the region makes living conditions in previously heavily populated areas quite inhospitable, such as in Karakalpakstan in Uzbekistan and Qyzlorda in Kazakhstan, where poverty, deteriorating health and degradation of the environment are linked together in a vicious downward spiral. With continuing evaporation and insufficient inflows from river water, the Aral Sea today is not only disappearing, splitting into separate smaller bodies of water, but also transforming into a salt water sea, in which most of the fish have died out.

Sources: Spor and Krutov 2002, World Bank 2004c and Pala 2005.

The Aral Sea

The Aral Sea is sometimes dubbed the worst contemporary man-made environmental disaster in the world. The diversion of water for irrigated agriculture since the 1950s is widely believed to have resulted in the drying up of what was once one of the world's largest inland seas. By the late 1980s, the Aral Sea split in two—the northern Small Sea in Kazakhstan, and the Big Sea with a deep western portion in Uzbekistan. As it recedes, the sea has become increasingly a dead water body, leaving behind a harmful layer of chemicals, pesticides and natural salts blown by the wind into noxious dust storms.⁵⁷ The process has destroyed marine, coastal and delta ecosystems, altered the local climate and stolen livelihoods from tens of thousands of people (see Box 4.9). The so-called Aral Sea disaster zone extends to Kazakhstan, Turkmenistan and Uzbekistan, while activities in Kyrgyzstan and Tajikistan affect the vital inflow of water from the Syr Darya and Amu Darya.

In the early 1990s, the Aral Sea problem was among the key issues stimulating the creation of active regional cooperation institutions in Central Asia. In March of 1993, heads of state established the Interstate Council for the Aral Sea basin, the International Fund for the Aral Sea Salvation and the Intergovernmental Sustainable Development Commission. The Interstate Commission for Water Coordination, which incorporated the Center of Scientific Information and the two Watershed Administrations for the Syr Darya and Amu Darya basins, was brought under the International Fund.⁵⁸ These institutions have played important roles not only in attempting to save the Aral Sea, but also in coordinating other regional environmental and

water initiatives.⁵⁹ With significant external donor support they embarked on a major programme to stop the destruction of the Aral Sea, known as the Aral Sea Basin Programme.

The first phase of the programme began in 1994, following the mobilization of over \$280 million in loans and \$50 million in grants. The programme initially focused on the environmental and health issues around the sea itself. Later, a range of water and sanitation projects began in the three countries abutting it. Technical assistance and pilot investments in better water management were provided in several areas. As part of this overarching programme, the Water and Environment Management project, financed by the Global Environment Facility (GEF) and other donors, supported the development of regional and national water management strategies, pilot investments in dam safety, water flow monitoring and wetland restoration, and public awareness campaigns. Other assistance went towards river basin management, including irrigation and flood emergency projects. The first water resource management project—the Syr Darya/Northern Aral Sea control project for Kazakhstan—was only approved in 2000. The first significant drainage improvement project for Uzbekistan was approved as late as in 2003.

The results of regional and international actions to address the Aral Sea problems have been mixed. Regional cooperation institutions have not functioned effectively, and the complexities of regional projects have hindered donor effectiveness. On the positive side, a road map for addressing urgent water management issues in the basin has been developed, key wetlands have been restored, and dam safety has been

The Aral Sea disaster zone extends to Kazakhstan, Turkmenistan and Uzbekistan

A road map for addressing urgent water management issues in the Aral Sea basin has been developed

improved. The Aral Sea Basin Programme is likely to continue focusing on better water management, largely through improved irrigation and drainage management, but also through more suitable river basin management, taking account of the needs of different users, and through integrated land and water management in the upstream watershed areas of Kyrgyzstan and Tajikistan. Key to success will be prioritizing projects with widespread regional benefits and funding them adequately, especially from countries' own resources.

Unfortunately, mega-projects in the Soviet tradition with potentially disastrous environmental implications are not entirely a matter of the past in Central Asia. The Turkmen initiative to construct a major new drainage basin on its territory, the so-called Golden Century Lake, could result in another major environmental disaster and add to the existing problems of the Aral Sea (see Box 4.10). It is being developed without much regional consultation, and despite major concerns by its neighbours, especially Uzbekistan.

The Caspian Sea

The Caspian Sea, the world's largest inland lake, is home to significant environmental resources shared among Azerbaijan, Kazakhstan, Iran, Russia and Turkmenistan. Its environmental problems include⁶⁰ a decline in commercial fish stocks, especially sturgeon; degradation of coastal landscapes and ecosystems, including threats from the rising sea level; a decline in the overall water quality and degradation of marine ecosystems; and environmental contamination from offshore gas and oil exploration and extraction.

The Caspian Sea is home to 115 fish species. Many are commercially valuable, including sturgeon, the most prized. At one point, the sea was the habitat of 80 per cent of the world's sturgeon stocks and supplied up to 90 per cent of sturgeon meat and caviar. However, the catches have sharply declined: from 30,000 tons in 1985 to 5,000 tons in 1995 and by a further two-thirds from 1995 to 1998. This was due primarily to over-fishing, poaching, environmental pollution and the damming of the Kura and Volga rivers, which are the primary spawning routes.⁶¹ Poaching in the Caspian Sea has triggered the application of the Convention on Endangered Species to the trade of caviar from Caspian sturgeon.⁶² However, this and other measures have not reversed the decline of the population, which is now supported largely artificially.

The western and southern shores of the sea, bordered by Azerbaijan and Iran, are densely populated and feature the world's oldest oil fields in Baku. Oil and gas reserves in the Caspian Sea are estimated at 200 billion barrels and 640 trillion cubic metres respectively, constituting about 15 per cent of the world's total estimated oil and gas reserves.⁶³ The division of oil and gas-drilling rights among the Caspian countries remains disputed since the break up of the Soviet Union, but exploration and production of oil and gas are proceeding rapidly nonetheless. Despite the use of advanced drilling and transportation technologies, tanker and pipeline accidents as well as regular oil spills are inevitable. These pollution risks are in addition to agricultural and industrial run-off and, most importantly, the pollution transported by the Volga River, which

Box 4.10

The Golden Century Lake—a regional environmental disaster in the making?

On 20 October 2000, President Niyazov of Turkmenistan initiated a \$9 billion project to build a huge artificial lake, the Golden Century Lake, in the Karashor natural depression in the north-western part of the Karakum desert. The depression covers 3,500 to 4,000 square kilometres and has a maximum depth of 70 to 100 metres. Once completed, the lake would contain some 132 to 150 cubic kilometres of water. Drainage water is to be diverted to the lake from the surrounding five provinces through two major collector canals. According to official information, the lake is designed to collect wastewater, provide emergency water and alleviate a host of agrarian and ecological problems faced by Turkmenistan and neighbouring countries. By early 2005, the project was in its fourth year of construction with the engagement of various international contractors. However, completion may take several decades.

Uzbekistan is concerned about this project, since Uzbek experts fear that in addition to drainage waters, the Turkmen lake would also draw on water from the Amu Darya. This would divert water from the already over-used river at the expense of Uzbekistan, and could further aggravate the ecological problems around the Aral Sea and in Central Asia more generally. In addition to a potential ecological crisis, the Turkmen Government's unilateral decision to build the lake without regard for its neighbour's vital interests, could fuel tensions between the two.

Foreign experts and international organizations have also cautioned that due to factors such as an arid climate, the lake's huge size and the resultant enormous evaporation rates, the lake would be quite inefficient and do little to alleviate Turkmenistan's problems. They fear that the project has the potential to turn into another regional environmental disaster.

Source: "UNDP Country Background Studies: Turkmenistan and Uzbekistan."

drains about 20 per cent of Europe's land area (including north-western parts of Kazakhstan) into the Caspian Sea.

Irrespective of the legal status of the Caspian Sea, it is clear that its environment should be protected by regional efforts. The Caspian states signed a number of joint resolutions and treaties in the 1990s, including under the framework of international environmental conventions. In 1995, several international organizations, including the World Bank, UNDP and the UN Environment Programme (UNEP), along with the governments of the Caspian states created the Caspian Environment Programme. It was designed to identify and address ecological problems for the next 20 years. The programme was officially launched during the Ramsar Convention on Wetlands meeting in Iran in 1998. It covers issues such as effective regional environmental management, sustainable management of fish resources, prevention of oil spills, improvement of human health, land degradation and desertification, and public participation in environmental decision-making.

Institutional development and external assistance for regional water, energy and environmental development

Regional cooperation in natural resource management in Central Asia requires strong institutional underpinnings as well as political motivation and engagement by both the authorities and civil society. External assistance can provide a political anchor, technical know-how and financial resources for helping to develop regional institutional capacities.⁶⁴ Investments in regional public goods, such as dams, can provide a rationale for development aid, in addition to improving regional cooperation.⁶⁵

The role of regional institutions and external assistance in water and energy⁶

In the water sector, the need for a mechanism for regional water resources management was recognized early after independence. The Interstate Commission for Water Coordination was established in 1992 to determine water management policy for the region, allocate available water resources for different purposes, determine future water supply programmes and coordinate construction of major works. Supported by a secretariat located in Khodjent, the commission comprises officials (generally

ministers or deputy ministers) from the Ministries of Water and Water Resources Agencies of all the member countries. Under it, the two basin water management organizations take responsibility for allocating water and monitoring water flows in the Amu Darya and Syr Darya rivers. The Center of Scientific Information provides scientific and information support at the interstate level.

In the electricity sector, the Central Asian Power Council, composed of representatives from the electricity or electrical grid companies in the Central Asian states, formulates quarterly power exchange schedules. In Tashkent, the Unified Dispatch Centre, Energia, is responsible for maintaining the balanced and synchronized operation of the power transmission and distribution system, including the balance of irrigation and hydropower requirements.

Despite the efforts of these institutions to promote regional cooperation, they confront a number of limitations. The water commission focuses purely on water, with no representation from the energy or environment sectors. The basin management organizations and Energia lack an international character, consist almost exclusively of staff and officers of the nations where they are located, and do not give the impression of functioning impartially among the constituent member countries. None of these organizations have any power or mechanism to enforce regional agreements.

Given these limitations, the proposal to establish a Water and Energy Consortium under CACO is welcome. As envisaged, the consortium would operate under a broad framework agreement, under which secondary level agreements would be developed for water use, reservoir operations, power trading, etc. The framework agreement would provide the overall institutional, legal and financing mechanisms, including the means for dispute resolution, a critical area that has been given insufficient attention in previous agreements.⁶⁷ Ultimately, however, for the consortium to become effective, it will need to require member countries to focus much more on the mutual benefits of regional water and energy cooperation than solely on each country's specific interests.⁶⁸

Several bilateral and multilateral donors have provided assistance to Central Asian countries to study the issues and address the problems related to water and energy sharing. They include programmes covering Aral Sea basin environmental mitigation efforts, water resource planning, rational and effective use of water and energy, a comparative review of the riparian rights issues in a wide range of countries, and, notably, the USAID-funded water management issues study relating to the Toktogul

The environment of the Caspian Sea should be protected by regional efforts

Regional cooperation in natural resource management requires strong institutions as well as political motivation and engagement by both the authorities and civil society

None of the regional organizations in Central Asia have any power or mechanism to enforce regional agreements

For the Water -Energy Consortium to become effective, member countries will need to focus much more on the mutual benefits of regional water and energy cooperation

Reservoir. Multilateral institutions are also actively supporting the creation of the Water and Energy Consortium. But in light of recent developments, notably the Uzbek decision to construct water-regulating reservoirs, many multinational and bilateral donor agencies have refocused increasingly on national programmes for improved water and energy sector planning and management.⁶⁹ However, it is important that these programmes be firmly embedded in a regional perspective of comprehensive water and energy management.⁷⁰

The institutional challenge of environmental management

According to the Environmental Sustainability Index (ESI) recently calculated by the World Economic Forum and several influential environmental think tanks,⁷¹ Central Asian nations rank low compared with much of the world in their ability to protect the environment over the next several decades. As the shaded areas in Table 4.4 reveal, the main reasons for their poor prospects stem from weak institutional capacity and a limited ability to reflect regional and global impacts in managing national environmental resources (in other words, to practise 'global stewardship').

Despite providing basic protection, Soviet-era institutions were no match for modern environmental challenges. The Central Asian republics inherited numerous rules and standards that were inflexible, largely unsuitable for market economies, and did not allow for local or democratic input in decision-making. Environmental policy reforms in the 1990s were complicated by severe economic and nation-building challenges. It proved to be impossible for individual countries to mobilize resources for re-establishing Soviet region-wide environmental institutions, such as long-term observation

and monitoring networks. By the mid-1990s, environmental issues had all but vanished from political agendas, the number of environmental NGOs declined, and environmental concerns appeared less frequently in the media.

As a result, and despite ongoing efforts to establish viable environmental institutions, national environmental legislation and regional environmental institutions still suffer from serious weaknesses. National environmental legislation rarely attempts to address systemic causes of environmental degradation, since it is often written without regard for social and economic dynamics, and therefore is often not implemented or enforced. Currently, there are no widely accepted regional institutions for addressing cross-border environmental issues, although one important contributor to regional work is the Central Asian Regional Environment Centre (see Box 4.11). Ensuring environmental sustainability in the region clearly calls for prioritizing stronger environmental governance.⁷²

So far, there have been three major attempts to take a strategic approach to environmental issues and institutional development in Central Asia. One was the formulation of a Regional Environmental Action Plan by the Intergovernmental Commission on Sustainable Development (working under the auspices of the International Fund for the Aral Sea Salvation) in September 2001. The plan scales up National Environmental Action Plans prepared by most CIS countries in the 1990s as part of the Environment for Europe process. Although the national plans rarely received adequate financial support or political backing, they were important steps in the identification, evaluation and prioritization of environmental challenges.⁷³ It is entirely possible that the regional plan will perform a similar role.

National environmental legislation and regional environmental institutions still suffer from serious weaknesses

ESI rankings for Central Asian countries

Country	ESI	Central Asia					Reference countries	
		Enviro-nmental systems	Enviro-nmental stresses	Human-vulnerability	Institu-tional capacity	Global steward-ship	Country	ESI
Kazakhstan	78	33	15	71	130	129	Russia	33
Kyrgyzstan	80	50	41	78	112	110	Belarus	47
Tajikistan	134	59	22	144	131	115	Azerbaijan	99
Uzbekistan	142	65	86	122	147	141	Ukraine	108
Turkmenistan	144	81	130	88	146	127	Iran	132
Regional average	116	57.6	58.8	100.6	133.2	124.4	China	133

Note: The ESI ranks 146 countries; a higher rank indicates better performance in a particular area (the highest rank is 1 and the lowest is 146). Ranks in the shaded cells fall below the worldwide median.

Source: Esty et al. 2005.

Box 4.11

The Central Asian Regional Environmental Centre

In developing a strategic approach to environmental challenges, Central Asian authorities, the NGO community and international donors may want to draw on the Central Asian Regional Environmental Centre. This NGO is headquartered in Almaty, with representatives in Dushanbe, Bishkek and Tashkent.

The group was established in 1999 by an agreement among five Central Asian countries, the EU and UNDP. It is modelled on the Regional Environmental Centre established in Budapest in 1993 to facilitate environmental reconstruction of the former socialist countries of Central and South-Eastern Europe. The Regional Environmental Centre has managed to develop a considerable presence in all the countries of its region (more recently also in Turkey), and has conducted hundreds of projects within several major programmes. Its activities have had a notable impact on developing institutional capacities and facilitating regional environmental networking.

The Regional Environmental Centre's success was bolstered by the well-defined and endowed strategy of the European Union accession, and, more recently, the stabilization of the Balkans. Its Central Asian cousin may be able to play a similar function in helping to articulate and implement a regional environmental strategy in Central Asia, provided it is well supported by political will and resources, from both inside and outside the region.

Source: From the centre's Website, www.carec.kz.

Another strategic venture is the Central Asian Initiative for Sustainable Development, elaborated as part of the World Summit on Sustainable Development preparatory process and incorporated in the summit's Implementation Plan and Partnership Initiatives. The 5th Ministerial Conference on the Environment for Europe in Kiev in 2004 endorsed the initiative, and delegates decided to start preparing an international treaty institutionalizing it. Although the initiative is currently not backed by any legal, financial or political mechanisms, it has several interesting features from the perspective of regional cooperation. It seeks to establish ongoing dialogue and partnerships, to integrate and coordinate existing institutions rather than creating new ones, and to identify clearly defined goals and areas on which consensus could be achieved. This is very similar to how the EU strategy for sustainable development was formulated⁷⁴ and represents a progressive approach to international cooperation on the environment.

Third, a prominent multi-agency effort is entirely dedicated to the environment and related issues of human security. This is the so-called Environment and Security (ENVSEC) initiative by UNEP, UNDP and the Organization for Security and Cooperation in Europe (OSCE). ENVSEC started an assessment of environment and security linkages in Central Asia in 2003 through regional consultations in Ashgabat. By now a number of follow-up projects have been initiated, including an in-depth assessment in the Fergana Valley. The initiative has issued an assessment report and a comprehensive work programme for the valley that will principally address transboundary river management, natural disasters, and industrial and radioactive risks.⁷⁵

There is probably more political will for regional cooperation on environmental issues than in other

areas. This is because environmental cooperation is rarely perceived as a threat to security or sovereignty, and also because it is often easier to agree on common (environmental in this case) risks than on, for example, common development visions. Productive environmental cooperation should exploit this good will by fostering regional frameworks and by strengthening and harmonizing national institutions. However, the severe lack of domestic resources to address environmental issues means that the good will towards environmental cooperation must often be reinforced with external assistance.

One general area where external assistance could usefully be applied is to encourage more systematic involvement by Central Asian states in international environmental regimes and conventions, where their participation to date has been poor or virtually non-existent.⁷⁶ Environmental conventions are important because they provide uniform benchmarks for national environmental institutions, often established based on good international practices; facilitate access to technical assistance; and stimulate interaction between environmental officials and experts in various international forums. The secretariats of international environmental conventions, such as UNECE and UNEP, should note their particular importance for Central Asia and encourage more active involvement of these countries.

There are also specific initiatives that merit external support. We highlighted earlier the Aral Sea Basin Programme and the Caspian Environment Programme. Other examples include a sustained international effort to help address regional land degradation problems (see Box 4.12) and programmes to support the Central Asian Mountain Information Network, a regional organization founded in 1999 by the national

The lack of domestic resources to address environmental issues means that the good will towards environmental cooperation must be reinforced with external assistance

External assistance to combat land degradation

In mid-2003, a multi-stakeholder regional forum was held in Tashkent and agreed on the Tashkent Joint Platform of Action for Implementing the UN Convention on Combating Desertification. The platform called for the mainstreaming of land degradation issues into both national planning and external funding cooperation frameworks; facilitating intersectoral coordination for harmonized implementation of land degradation initiatives; the launching of a process for developing a resource mobilization strategy capitalizing on new opportunities presented by the GEF; and an agreement to establish working groups on partnership development for implementing the convention in each Central Asian country.

Accordingly, the GEF, the Asian Development Bank, and a number of other donors and international agencies are launching the Central Asian Initiative on Land Management, which aims to combat land degradation and improve rural livelihoods on a regional scale. The initiative will be a multi-country and multi-donor partnership to support the development and implementation of national frameworks for more comprehensive and integrated approaches to sustainable land management. As a truly regional effort, it recognizes that land degradation is a problem common to all Central Asian countries.

Sources: *Asian Development Bank 2000 and 2004b*.

The costs of non-cooperation are likely to be large, especially for poorer countries; further research should be devoted to a more systematic quantification

academies of sciences of all five countries with the goal of natural resource preservation in the high mountain reaches of Central Asia.⁷⁷ There are big challenges for external donors in supporting these and other regional initiatives in the area of natural resource management and capacity building, including the need to recognize that these efforts take a long time, that they require persistent and patient donor engagement in the face of waxing and waning interest within the countries, and that they need to draw as much as possible on national institutions and people as a way to foster the growth of genuine local and regional expertise.

Conclusions and recommendations

Conclusions

Water, energy and environmental sustainability in Central Asia are inseparably interlinked and have very significant region-wide dimensions that call for regionally coordinated action. First, uncoordinated and competing priorities for water use between upstream and downstream riparian states along the major trans-boundary rivers waste finite water resources, invite investments that are suboptimal from a regional perspective, increase the level of tension and risk of conflict between countries and local communities, and exacerbate the degradation of other environmental assets such as land, forests and wildlife.

Second, perverse agricultural policies and wasteful irrigation and drainage management practices are at the core of the region's water problems and cause substantial losses in agricultural productivity. Significant benefits would be derived if all countries in the region were to pursue better national water management policies in a coordinated and mutually reinforcing manner. A

more efficient use of water (and energy) resources would help reduce regional tensions about how to share limited natural resources.

Third, Central Asian countries have significant long-term potential for exports of oil, gas and electricity to markets beyond the region, but they need to cooperate with each other and their neighbours, and attract support from the international community to fully realize these opportunities.

Finally, Central Asia faces a number of important environmental risks that could damage the development potential and human security of the region as a whole. These clearly call for regionally coordinated approaches.

Unfortunately it is not possible to make a comprehensive estimate of the costs of non-cooperation, which are likely to be large, especially for poorer countries. The summary of indicative costs and benefits in Table 4.5 shows both what we currently know and do not know in terms of the costs of non-cooperation and benefits of cooperation. The currently quantifiable factors can broadly be interpreted as indicating annual net benefits in the range of 5 per cent of GDP. Benefits are likely to be double that percentage for the smaller and poorer countries, namely, Kyrgyzstan and Tajikistan.

And these are clearly only a fraction of the costs that could be avoided and the benefits that could be reaped if Central Asian countries were to cooperate fully and effectively. Further research should be devoted to a more systematic quantification.

Advocacy for enhanced Central Asian cooperation in water, energy and the environment must start by recognizing that countries have already gone some way to cooperate. They have avoided outright cross-border conflicts, a risk that was judged high by many observers after the break

Table 4.5

Costs of non-cooperation	Benefits of cooperation	Summary of indicative costs of non-cooperation and benefits of cooperation
<p>Costs of constructing downstream regulating water reservoirs: \$200 million for a three billion cubic metre potential re-regulating reservoir in Koksarai, Kazakhstan Comparable costs for construction of 2.5 billion cubic metre re-regulating reservoirs in Uzbekistan</p> <p>Costs of agricultural output loss from poor water management:⁷⁸ \$1.75 billion per annum</p>	<p>Net benefit of operating Toktogul Reservoir in irrigation instead of power mode: \$32.2 million per year</p> <p>Benefits of oil and gas transmission investments: No estimate available</p> <p>Benefits of long-term power investments: No estimate available</p> <p>Benefits of environmental protection: No estimate available</p>	

up of the Soviet Union. They have also engaged in continued dialogue and cooperative initiatives at the highest levels, as well as among academic experts and institutions and NGOs. To varying degrees, they have welcomed the engagement of international donors and institutions in supporting regional initiatives. For future cooperation, there is much to build on in terms of positive examples, lessons from past experiences, and encouragement to all partners to continue in their important efforts.

At the same time, there are many obstacles. Chief among these are the national policies of self-sufficiency in water and energy—positions shaped most likely by a narrow interpretation of energy and water as national security issues, combined with a quest for maximum national sovereignty, lingering distrust among the countries’ authorities, and a lack of institutional frameworks for conflict resolution and enforcing agreements. While most countries in the world acknowledge the security aspects of their natural resource base and like to foster some degree of independence from outside forces, this does not prevent them from trading natural resources internationally and from entering agreements to cooperate on regional natural resource use and management. This experience suggests that a better balance could be struck in Central Asia in terms of exploiting the economic and political benefits of trade in energy and water services without jeopardizing national security and independence.

What are the driving forces, then, that can help Central Asian leaders to build trust and exploit comparative advantages and mutual interests? Four elements could come together to bring about more cooperation:

- Demonstration and recognition of the collective benefits from pursuing cooperative solutions to regional problems;
- Building on prior successful cooperative experiences;

- Acknowledging that avoiding regional conflict and insecurity is in everyone’s interest (and leaders may not wish to be left behind when other parties cooperate);
- Neighbours and international donors facilitating, financing and brokering regional agreements.

So far, the effectiveness of the international community in promoting regional cooperation on water, energy and environmental issues has been limited. Despite the large sums spent, the environmental degradation of the Aral Sea area has continued, although some progress has been made in better understanding the problem and finding some localized solutions (wetland restoration, protection of parts of the sea, etc.). In the case of donors’ other commendable efforts, such as in helping to resolve the complexities of the Syr Darya water-energy nexus, cooperation of key national authorities has been limited.

Rather than going for ambitious, overarching regional solutions, donors have learned that it is generally better to pursue a triple strategy: support national solutions and projects that add up to a regionally consistent approach; support bilateral or trilateral solutions where countries are willing to work with each other; and work with and develop the capacity of regional institutions wherever opportunities arise, but remain realistic in terms of the expectations of the progress that can be made in the short and medium term.

So what does the future of regional cooperation look like? Regional agreements can only emerge if there is mutual trust and where there is a reasonably good track record of cooperation. Currently, it appears that Kazakhstan, Kyrgyzstan and Tajikistan broadly have a common vision for regional solutions to water, energy and environmental problems, and that they are likely to look for common approaches. In addition, there is likely to be a continued focus on bilateral agreements on the most pressing cross-border issues, as reflected in

For future cooperation, there is much to build on in terms of positive examples; at the same time, there are many obstacles

the improved bilateral relations among Central Asian countries and their neighbours on several important issues: among them China and Kazakhstan (oil); Kazakhstan and Russia (water); Kyrgyzstan and Tajikistan (electricity); Turkmenistan and Uzbekistan (gas); Iran, Turkey and Turkmenistan (electricity); and Kazakhstan and Kyrgyzstan (electricity and water).

Arguably, these bilateral agreements are essential to demonstrate that cooperation results in win-win solutions, to establish trust and to build traditions for regional cooperation. As these agreements start yielding returns, Central Asian leaders may increasingly come to the realization that broader cooperation is desirable. Hopefully this will spread to more and more areas, and involve more and more countries. While the benefits of bilateral and even trilateral agreements are likely to be smaller than those of regional agreements, they are easier to attain, and yield higher benefits than no cooperation at all.

Recommendations

This chapter has highlighted a number of specific areas where early cooperation on water, energy and environmental challenges is warranted, among them the following:

- The regional rivalries over water and electricity resources of the Syr Darya have so far resisted a region-wide solution. The construction of Uzbek re-regulating reservoirs may lessen the need for a cooperative agreement to resolve seasonal conflicts, but there is still a need for an agreement to facilitate multi-year storage and agree on strategies for long-term development of the hydro-potential of this watershed. Some form of predictable, secure payment by downstream riparian states at least for the costs of upstream water system maintenance is likely to be important, until new investments reduce the tension between upstream and downstream neighbours.
- On the Amu Darya, there are favourable opportunities for cooperation on the completion of the Sangtuda I+II hydro facilities, but conflicts are looming if Tajikistan proceeds with plans to finalize construction of Rogun I+II, because the latter facilities will involve major new investment in water storage, while the former does not. In addition, existing downstream water allocation rivalries between Turkmenistan and Uzbekistan may be exacerbated by future Afghan demands. These will need to be resolved.
- Turkmen-Uzbek cooperation over the Karshi Pumps demands urgent attention.

- In the electricity sector, inter-regional trading would greatly benefit from rules on third-party access to transmission systems and transmission pricing arrangements, and regional trading with Russia from the completion of the North-South Transmission Line.
- In the gas and oil sectors, reduced reliance on transit through Russia is likely to be a key priority for Kazakhstan, Turkmenistan and Uzbekistan.
- The potentially catastrophic risks of Lake Sarez, the numerous uranium tailing sites and many other environmental hot spots must be addressed in a regionally coordinated manner, and with either regional burden-sharing or international donor assistance.
- Finally, an environmental agreement between Tajikistan and Uzbekistan over the pollution from TADAZ is critical.

Beyond these specific recommendations, broader areas for fruitful regional cooperation, building on the lessons from past successes and shortfalls, include the following:

For national governments:

- Improve national policies and legislation to achieve efficient management and use of water, energy and environmental resources. The most urgent priority in national water management is to ensure that farms have adequate financial resources for on-farm irrigation maintenance. In Uzbekistan, Turkmenistan and, to some extent, Tajikistan, this will require reform of land tenure, state pricing and marketing. As these reforms take hold in these countries, but also in Kyrgyzstan and Kazakhstan, they must be accompanied by the capacity building of water user associations to assure the maintenance of farm irrigation and drainage, and by appropriate training in water application techniques. These steps would help reduce water consumption and increase agricultural productivity and yields. Sharing lessons and best practices across the region would be desirable, as would be progress in mutually reinforcing national policies in all countries.
- Look for bilateral and trilateral solutions to key border issues for water, energy and the environment by assessing the collective benefits and the potential for building trust and mutual understanding over time.
- Work at the local and community level in border areas to help address the special problems created by borders. Establishing 'borders with a human face' also applies in the context of managing cross-border relations on water, energy and environmental issues.

Deflecting and reducing conflict potential at the community level is as important for regional stability as it is for national political stability.

- Engage in a more proactive reform of environmental institutions and policies. Such reforms should be guided by state-of-the-art thinking on environmental regulation (e.g., application of economic and voluntary instruments, environmental policy integration, encouragement of cleaner production and environmental product stewardship), but also take into account the existing institutional realities.
- Increase participation in international environmental conventions and related policy and capacity development networks at both the government and non-governmental level.
- Support regional institutions and in particular the establishment and effective operation of the Water and Energy Consortium under the CACO umbrella.
- Provide the space and freedom for national and regional academic and civil society organizations and networks to develop proposals for solutions to regional water, energy and environmental issues, and to offer feedback on official strategies, programmes and actions.

For organizations of regional cooperation:

- Develop a clear vision of what is the optimal framework for regional cooperation and integration of water, energy and environmental systems in the mandated areas. But retain a realistic sense of what can be achieved in the short term. Support bilateral or trilateral approaches as long as they are broadly consistent with the long-term vision.
- CACO, as the host organization for the Water and Energy Consortium, should effectively support and promote its work.

- Explicitly integrate environmental concerns in all regional initiatives on water, energy and transport.
- Key sub-sectoral bodies in water, energy and the environment (e.g., the International Fund for the Aral Sea Salvation, the Central Asia Power System, the Central Asia Regional Environment Centre, etc.) should clarify their respective roles vis-à-vis each other and further strengthen their capacity for regional monitoring, regulation, negotiation and dispute settlement.

For international partners:

- Intensify the focus on regional energy, water and environmental issues whenever engaged in supporting national programmes in these sectors.
- Explicitly integrate environmental concerns in all regional initiatives on water, energy and transport. National environmental experts should be involved in these efforts as a way to strengthen national environmental capacities.
- Ensure effective support for the Water and Energy Consortium, if the Central Asian authorities are committed to proceed.
- Work with private and official partners to help analyse the prospects for regional water and energy infrastructure development, and find creative financing solutions for worthwhile investment programmes and projects.
- Offer support and encouragement to Central Asian countries for joining and implementing global environmental conventions.
- Support research on systematic quantification of the benefits from regional cooperation and on such long-term concerns as the monitoring of snow covers, river flow formation and biodiversity protection.

Chapter 5

Cooperation for dealing with regional threats: natural disasters, drugs, crime and terrorism

“Human security represents safety from chronic threats such as hunger, disease, and repression as well as protection from sudden and harmful disruptions in the patterns of daily life—whether in homes, in jobs or in communities.”

—UNDP *Human Development Report 1994*

In Central Asia, natural disasters and man-made threats pose major risks to life and livelihood

Protection from regional threats: an imperative for cooperation

In Central Asia, natural disasters and man-made threats pose major risks to lives and livelihoods. Since many of these threats have regional implications, cooperation in preparedness, prevention and response provides another opportunity for Central Asian countries to join forces around concrete and tangible regional action.

The imperative for cooperation is based on a number of premises. First, natural disasters and man-made threats—including earthquakes, floods, drugs, crimes and terrorism—do not recognize borders. Second, there is widespread agreement that all countries face these risks, although to varying degrees. If drug trafficking was in earlier times the exclusive concern of Afghanistan, civil war a curse only of Tajikistan, terrorism a threat only for Uzbekistan and the Fergana Valley, and crime an urban phenomenon only in big cities such as Almaty, today these problems are recognized as common threats across the region. Third, since natural disasters or man-made threats carry serious costs for economies, human welfare and political stability once they happen, preventing them and being prepared for them, where possible, is by far preferable to facing them unprepared when they happen.

A fourth point is that there are close connections between drug trafficking, crime and terrorism on the one hand, and inter- and intra-state conflict on the other, so preventing and managing risks can be seen as conflict prevention measures. Fifth, there are important links with other regional policy concerns. As countries close their borders to deal with perceived or real security threats, cross-border trade, migration and community-level human contacts wither. If there is poor maintenance of water infrastructure, the risks of catastrophic dam and canal breakage rise. And there is a vicious cycle linking drugs, crime and terrorism with weak governance, corruption, and the disempowerment of people and communities.

Finally, successful cooperation in dealing with natural disasters and man-made threats can increase the level of trust and the willingness to overcome traditional conflicts among neighbours, as examples elsewhere have demonstrated, including the rapprochement between Greece and Turkey following the devastating earthquake in the Marmara region of Turkey in 1999.

Natural disasters—priorities for regional cooperation

Since the worldwide shock over the horrendous impacts of the Asian tsunami in December 2004

and Hurricane Katrina in the southern United States in August 2005, there is a heightened realization that natural disasters can have huge, unanticipated and region-wide impacts on large numbers of people. Ocean-borne risks fortunately do not apply to Central Asia, but its territory is exposed to more than 20 different types of natural hazards, including earthquakes, flash floods, landslides, rock falls, avalanches and flooding from glacial lake bursts.¹ Any single one of these threats—or worse a combination of them—can kill thousands of people, leave millions homeless, destroy infrastructure and people's livelihoods, create shortages of food and other essential commodities, poison rivers, and cause lasting damage to health and nutrition. Often in these cases, the damage is regional, even if the catastrophe is localized. In addition to creating an immediate large-scale human tragedy, a potential disaster can affect the overall growth rate of the regional economy, reinforce fiscal problems that hinder social and infrastructure spending, and deflect aid flows to disaster response instead of long-term development needs.

Potential human and economic costs

Global evidence points to increasingly frequent natural disasters and higher impacts in terms of both human and economic costs. While the number of lives lost has declined in the past 20 years—800,000 people died from natural disasters in the 1990s compared with 2 million in the 1970s—the number of people affected has tripled to 2 billion.² According to the 2004 *World Disasters Report* of the International Federation of Red Cross and Red Crescent Societies, the economic cost of natural disasters has also skyrocketed. In the past two decades alone, direct economic losses multiplied fivefold to \$629 billion.³ Annual direct losses from weather-related events increased from an estimated \$3.9 billion in the 1950s to \$63 billion in the 1990s. The World Bank and the US Geological Survey estimate that economic losses worldwide from natural disasters in the 1990s could have been reduced by \$280 billion if \$40 billion had been invested in preventive measures.⁴

Natural disasters generally hurt poor countries disproportionately, as shown in the estimates in Table 5.1. Even within countries, poor people tend to suffer more, and the incidence of poverty inevitably increases in the aftermath. Poor people tend to live in more risk-prone areas, where land values tend to be cheaper, and they have greater difficulties in escaping in time, even when there

Natural disasters generally hurt poor countries disproportionately

Table 5.1

	Damages per disaster, as per cent of GDP				Average damages from large disasters*
	Developing countries **	Small states	Low income	Other developing countries	
1977-1981	7.1	22.4	3.2	1.8	
1982-1986	7.0	20.6	4.9	2.4	
1987-1991	12.3	34.7	4.8	2.3	
1992-1996	3.3	11.7	2.7	1.0	
1997-2001	4.1	9.0	5.8	1.5	

* Average damages per disaster are based on unweighted averages of country ratios of damages-to-GDP.

** Sample includes 31 small states, 59 low-income countries and 56 other developing countries.

Sources: IMF 2003.

are advance signals of impending disasters. Income and asset losses couple with employment retrenchments as firms respond to a shock-induced economic contraction by laying off primarily unskilled workers. Poorer people generally have less of a financial safety net to start with, owing to their low savings and lack of access to credit. All of these factors can add up to an irreversible impact on the human and physical capital of the poor, which limits their prospects for recovery. In Central Asia, the shocks from any natural disasters come on top of the already calamitous decline in incomes and increases in poverty in the wake of the collapse of the Soviet Union (see Chapter 2).

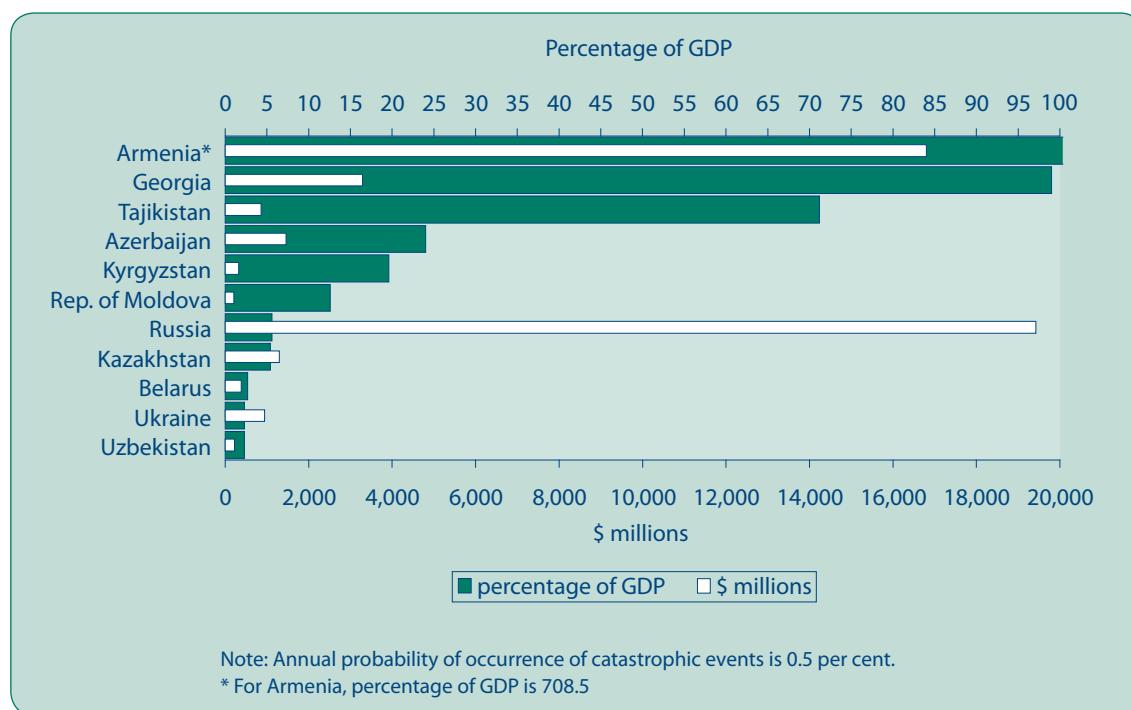
Information on the impacts and costs of natural disasters in Central Asia is limited, but even in the

absence of exceptional events, the annual cost of 'normal' disasters is clearly significant.⁵ According to some estimates,⁶ the economic loss potential ranged from a high of some 70 per cent of GDP in Tajikistan and 20 per cent in Kyrgyzstan to a more moderate 3-5 per cent in Kazakhstan and Uzbekistan (see Figure 5.1).

Between 1992 and 1999, over 1,210 natural disasters were registered in Kyrgyzstan. These took the lives of more than 400 people, and damaged or destroyed more than 50,000 houses, 222 school buildings, 127 health care facilities, roads, electricity transmission lines, hydro-technological constructions and other important infrastructure.⁷ According to UNECE estimates, direct economic damage caused by natural disasters exceeds \$20 million in a

The economic loss potential ranged from a high of some 70 per cent of GDP in Tajikistan to a more moderate 3-5 per cent in Kazakhstan and Uzbekistan

Economic loss potential from catastrophic events in selected CIS countries

Figure 5.1

Source: Based on World Bank 2004e.

Table 5.2

The impact of natural disasters in Kazakhstan, 1995-2003

	1995	1996	1997	1998	1999	2000	2001	2002	2003
Number of affected people	34,089	24,329	24,560	29,326	22,656	21,851	23,109	24,324	27,212
Number of dead	5,714	5,151	4,738	4,444	3,881	3,818	3,887	3,996	4,442
Material costs (millions of \$)*	44	22	51	37	21	22	21	36	30

*Exchange rate of \$1 to 130.49 Kazakhstani tenge as of 6 May 2005.

Source: Information Website of the Ministry of Emergencies, <http://ns.emer.kz>.

Across the region, one of the most prominent and potentially devastating hazards is earthquakes

normal year in Kyrgyzstan.⁸ This figure does not include indirect damage and secondary effects, such as ecological harm, epidemics, deterioration of living conditions and decreases in soil fertility.

Tajikistan each year experiences 50,000 landslides, 5,000 tremors and earthquakes, and hundreds of avalanches and debris flows. In 1999, a drought in southwest Tajikistan affected most of the 250,000 hectares of rain-fed crops, leaving 840,000 people in critical need of food assistance. This was followed, in 2000, by Tajikistan's worst drought in 74 years, when cereal production fell 47 per cent, and a million people faced hunger.

Kazakhstani experts have estimated the direct damage from natural disaster risks at about \$20 million annually, and indirect damage at up to 10 times that amount.⁹ Table 5.2 shows estimates by the Kazakhstani Ministry of Emergencies of the human impact and costs of disasters in Kazakhstan since 1995, including both man-made (technological, transport accidents, fires, etc.) and natural risks (including environmental damages, natural fires and infectious diseases).

Across the region, one of the most prominent and potentially devastating hazards is earthquakes.

The entire southern part of Central Asia lies in one of the world's most active seismic belts (see Figure 5.2). Severe earthquakes, causing great damage to people and infrastructure, have been common in that region. In 1949, an earthquake in Ashgabat killed 70,000 people, and Almaty was destroyed three times in the late 1800s and in the early 1900s by earthquakes measuring over 7 points on the 12-point Richter scale. If another quake of similar magnitude were to happen today, more than 60 per cent of the buildings in the Almaty region could collapse, with an estimated 500,000 injured and 300,000 killed.¹⁰ According to experts, even a less destructive earthquake could kill 75,000 of the 1.5 million residents of Almaty, 55,000 of the 1.1 million people in Dushanbe, and 45,000 of the 2.2 million residents of Tashkent.¹¹ Severe earthquakes on the territory of each of the states would likely also cause destruction of communications, heating systems, gas and water supplies, railways and highways, electric power lines and bridges.

Around 30 per cent of the territory of Kazakhstan, home to more than 6 million people and 40 per cent of the country's industries, is under constant threat of a devastating earthquake.¹² In 2003, 21 earthquakes were recorded in Kazakhstan.¹³ In the

Seismic hazard area in Central Asia

Figure 5.2



Source: Adapted from World Bank 2004e.

earth tremor recorded in the Zhambyl Oblast of southern Kazakhstan in May 2003, 43,300 people were affected, with 30,000 losing their shelters. Sixty-six per cent of all administrative buildings were seriously damaged.

More than half of the territory of Uzbekistan, an area inhabited by 16 million people and housing almost 90 per cent of the country's industries, is considered within a seismically active zone where the intensity of earthquakes can record in the 7- to 9-point range on the Richter scale.¹⁴ Strong earthquakes occurred in Andijan in 2002, in Kashkadarya in 1998, and in Tashkent in 1966, where an 8-point quake leveled 78,000 people's homes. In Tajikistan, which experiences hundreds of earthquakes every year, more than 500 houses were damaged and 2,500 people were affected by an earthquake in the Farkhor district in October 2000.

Other significant sources of potential catastrophe are landslides, mudslides and floods. There are more than 30 reservoirs in Central Asia that were created over 30 years ago and operate with outdated hydro-engineering equipment.¹⁵ Frequent floods threaten water overflows, destruction of embankments and emergency water spillage. These events can cause significant damage over thousands of square kilometres. The greatest risks, with major trans-boundary implications, come from mountain lakes with unsafe natural dams, such as Lake Sarez in Tajikistan (see Box 4.2 in Chapter 4). A burst of the dam at Lake Sarez could affect up to 6 million people residing in almost 70,000 square kilometres of territory in Afghanistan, Tajikistan, Turkmenistan and Uzbekistan.¹⁶ If earthquakes or other causes were to lead to a breach in the dams of the Charvak, Andijan, Kattakurghan or South Surkhan reservoirs in Uzbekistan, the Toktogul dam in Kyrgyzstan or the Karakum reservoirs in Tajikistan, severe flooding across borders would probably result.

Man-made aggravation of natural disaster risks

Although natural disasters are generally not preventable, it is possible to reduce the risks of serious losses. The high vulnerability to natural disasters in parts of Central Asia can be attributed both to the region's complex geo-climatic conditions, and to past policies and present coping mechanisms. Many of the ecological threats in Central Asia are in fact the result of policies that allowed decades of uranium processing, waste dumping, pesticide storage, etc. Although these practices generally have now ceased, they have left a dangerous legacy.

The resulting risks are most apparent in the pollution from uranium waste. Before the collapse of the Soviet Union, Central Asia provided raw

materials and test sites for the Soviet nuclear programme; supported the production, testing and storage of radioactive materials; and was home to the development and testing of chemical and biological weapons. After 1991, Kyrgyzstan and Tajikistan faced the disastrous consequences of being home to large quantities of uranium waste requiring the maintenance of safe tailing sites. Today, landslides, floods, earthquakes and an increase in the level of groundwater have increasingly threatened these sites, leaving the majority in critical condition and subject to destruction. Any collapse of a major tailing site could contaminate large areas across the region.

A number of sites are located close to major regional rivers or their tributaries, which increases their potential danger. For example, the Syr Darya is at risk from radioactive wastes in the tailing dumps of the former Soviet Leninabad mining and chemical plant (in today's Khojand). Tajikistan, once a major source of uranium for both military and industrial purposes, is saddled with some 50 millions tons of radioactive waste that rains could wash into the Syr Darya.¹⁷ In Kyrgyzstan, there are over 30 uranium waste storage facilities, most of them located near tributaries of the Syr Darya and only 30 kilometres away from the Uzbek border. Should mudslides and landslides occur, radioactive wastes could sweep into the Mayluu-Suu River, the Karadarya River and the Syr Darya, polluting almost 300 square kilometres in Uzbekistan, across an area populated by 1.5 million people. Uzbekistan also has its share of sites containing uranium and storage facilities for toxic poisons that present a serious threat—these are located not far from Turkmenistan.

The main challenge today is to make sure that man-made policies and practices do not exacerbate the impacts of natural events. According to a comprehensive UNDP report on the global human development dimensions of natural disasters, disaster risks can be influenced positively or negatively by urban and rural development policies, integrated resource management, industrial and economic development, health risk prevention, building and construction practices, corruption and criminality, etc.¹⁸ Allowing dense settlements on a floodplain or permitting poor or under-enforced building codes in earthquake zones can significantly raise casualties and losses from probable natural events. Corruption and poverty are frequently a deadly combination in triggering poor location decisions and lack of enforcement of codes. In mountainous areas, deforestation, ploughing and the impact of cattle grazing on mountain slopes have caused intensive destruction of the soil cover, which can induce mudslides, landslides and avalanches.¹⁹ Lack of

Frequent floods can cause significant damage over thousands of square kilometres

Many of the ecological threats in Central Asia are in fact the result of past policies

The main challenge today is to make sure that man-made policies and practices do not exacerbate the impacts of natural events

The emergency policies of the five republics currently include a regional mechanism based on the Soviet State Commission on Emergencies

maintenance of dam and irrigation infrastructure and of uranium tailing sites, combined with an absence of early warning capacities or disaster preparedness, add to the probability of high human and material losses should a disaster occur.²⁰ When these issues are rooted in historical decisions regarding population location and fundamental problems such as poverty, lack of resources and weak governance, they become very difficult to tackle. But they require explicit consideration and action.

Tackling the multidimensional aspects of disaster risk avoidance or minimization, including disaster risk monitoring and preparedness, installation of a disaster response capacity, and related policies and practices, requires interventions at various levels. These include analysing development processes and the risk that they pose through natural resource exploitation, urban development, and environmental deterioration such as soil erosion and desertification; and mitigating structural exposures to disaster risks in public infrastructure, residential housing and critical facilities such as hospitals. They also cover examining institutional and financial frameworks and social settings, such as building codes, financing and insurance for disaster mitigation, community actions for preservation, poverty and livelihoods, etc. And in a region such as Central Asia, interventions must include close regional cooperation, since the impacts of disasters cross borders, and since a regional monitoring and response capacity is much more effective than purely national approaches.

Developing the capacity to intervene: national and regional institutions

Mitigating the risks of natural and man-made disasters in each republic is the responsibility of the various Ministries for Emergency Situations, which have been set up in all the countries to formulate and implement state policies to prevent emergencies, protect lives and minimize damages. These agencies are in charge of coordination among ministries; departments; and regional, city and local governments in developing and implementing emergency plans. They also carry out training for local populations and government officials, and manage state reserve funds of financial, material and technical resources, including food stuffs and medicines.

Central Asian states have made different levels of progress in the development of disaster preparedness plans. The Government of Kazakhstan prepared a National Disaster Preparedness Action Plan in 2000 with technical support from UNDP. Kyrgyzstan, with assistance

from the Asian Development Bank, is in the process of preparing a Disaster Risk Management Capacity Building programme to complement the national capacities for disaster risk reduction with a component of community-based approaches. As part of a national environmental protection plan prepared with expertise from the World Bank, Kyrgyzstan has also developed an initiative to build safe storage sites for waste products from uranium, mercury and antimony processing. In each republic, the Red Cross and Red Crescent Societies have played key roles in disaster preparation, and a Red Cross Strategy for Central Asia has been devised.²¹

The emergency policies of the five republics currently include a regional mechanism based on an agreement struck at independence and building on the Soviet State Commission on Emergencies, a permanent cabinet body of the Soviet Union, which had been created in 1990. In 1992, this commission was broken into individual State Committees on Emergencies and Civil Defence, which subsequently became full-fledged ministries. In 1993, a CIS-wide Interstate Council for Emergency Situations Regarding Natural and Man-Made Disasters was established to coordinate disaster management policies among CIS member states. It is in charge of drafting cooperation agreements, developing and implementing inter-state technical programmes in the field of prevention and mitigation of disasters, integrating national systems, and providing training and exchanges among authorities responsible for prevention.²²

Central Asian countries also cooperate with each other through a number of regional and bilateral agreements. Among them is the 1996 agreement between Kazakhstan, Kyrgyzstan and Uzbekistan on joint collaboration for the rehabilitation of tailing sites that have a trans-boundary impact. This was followed in 1999 by a joint programme of action to rehabilitate tailing sites in the countries of the Central Asian Economic Community. A 1998 agreement between Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan on the joint use of trans-boundary rivers, water bodies and hydraulic infrastructure promotes collaboration to reduce the negative effects of spring floods, mudslides and other natural hazards. An inter-state working group was set up to meet two to three times a year to discuss trans-boundary disasters.

International cooperation has backed a number of sub-regional initiatives. In 2003, Central Asian disaster preparedness officers from Kazakhstan, Kyrgyzstan, Turkmenistan and Uzbekistan participated in the Sub-Regional Initiative for Disaster Risk Management organized by UNDP in Iran, to consider new disaster risk management

Central Asian countries have signed on to many international declarations and agreements that stipulate greater preparedness for natural disasters, but a number of factors inhibit implementation

initiatives in Central Asia and some of its neighbours, with two related follow-on meetings, one in Dushanbe in 2004 and another in Almaty in May 2005.²³ Also in 2003, the North Atlantic Treaty Organization (NATO) Disaster Response Coordination Centre conducted civil emergency exercises in the Uzbek part of the Fergana Valley. Participants from 28 countries and international organizations took part in exercises that focused on developing cooperation in dealing with emergency situations specific to the region, mainly earthquake, flood and landslide rescues. The exercises, labelled Fergana-2003, were part of the Partnership for Peace programme, to which all the Central Asian states now belong.

Central Asian countries have signed on to many international declarations and summit agreements that stipulate greater preparedness for natural disasters on a national and regional basis. For example, all the Central Asian states, except for Turkmenistan, sent a delegation to the World Conference on Disaster Reduction held in January 2005 in Kobe, Japan, and were parties to the Hyogo Declaration, which called for increased international and regional cooperation.²⁴ However, a number of factors inhibit implementation. First, at present there is no complete risk assessment or response framework available for the region as a whole, let alone an integrated framework to facilitate national and regional contingency planning, and the development of a Regional Disaster Management Plan of cooperation, monitoring, and public information sharing and education. Based on world-wide disaster management experience, examples of successful frameworks are readily available.²⁵

Second, governments in the region have an underdeveloped capacity to undertake adequate risk management, monitoring and community outreach, or the needed investments in rehabilitation works and disaster preparedness. This has been well documented for the Lugovskoye earthquake of May 2003 in Kazakhstan as one example.²⁶ Funds for disaster management are scarce in all the republics, and most of the attention is on post-disaster rescue instead of prevention.²⁷ New funding opportunities need to be explored, including through involving the private sector in bolstering disaster preparedness.

Third, local communities in Central Asia are often ill-informed about the potential dangers of disasters and the measures that could be taken to mitigate them. They are poorly represented in disaster preparation—even though they play a key role in implementation, and are often more informed and proactive about potential local threats and solutions. The state emergency systems are responsible for informing local populations on

how to react and behave during emergencies through media information campaigns, teaching disaster preparedness subjects at schools and other educational institutions, and disseminating relevant information among decision-makers. However, large pockets of people are out of reach of these systems.

National structures do provide for civil society participation, but mainly for relief and reconstruction activities. Yet civil society groups can serve three essential roles in disaster management: They can help communication between government and local communities; they can attract funds; and they can assist in promoting community awareness and preparedness. It is therefore imperative to involve their representatives in national, regional and district government committees for all stages of disaster risk management. Box 5.1 provides an example of how this can be approached in practical terms. Ideally, civil society organizations engaged in disaster risk management should also develop regional networks so they can adequately support and critique official initiatives and institutions.

Fourth, Central Asian countries have not yet introduced catastrophic risk insurance on a region-wide basis. This has been successfully introduced in selected industrial countries as well as in Turkey.²⁸ There would be multiple advantages. Individuals who purchased the insurance would receive assured benefits in case of a catastrophic event, and the burden on public budgets would lessen. Insurance also helps to improve the monitoring of building codes and locations. Organizing an insurance mechanism regionally would pool risks across a wider area than national schemes could do. However, this approach would require a long gestation period and would likely be of use only for the larger cities in Central Asia.

Civil society groups can serve essential roles in disaster management; it is therefore imperative to involve their representatives

Box 5.1

At Lake Sarez, disaster-risk mitigation involves communities

The Lake Sarez Reconstruction and Mitigation Project, in Tajikistan, has developed disaster management plans that outline the responsibilities and procedures to be followed during a disaster, train people in appropriate skills, and identify safe havens and access routes. All of these efforts involve community leaders and villages. The project set up the first all-women volunteer search and rescue team in Central Asia. Their work was instrumental in delivering assistance following the landslide in Roshkala. Village-based first response teams have been created and trained in search and rescue as well as first-aid.

Source: World Bank 2004e, Box 3.4.

Trans-regional drug trafficking and growing illicit drug consumption pose an escalating danger to the stability and development of the Central Asian people

Finally, the international community is generally tremendously responsive after a major disaster has struck, offering rapid humanitarian and reconstruction assistance. It has been much less committed to assisting in meeting the long-term challenges of disaster preparedness and prevention. International partners should focus on these issues much more explicitly, systematically and in a coordinated manner.

Illicit drugs—a regional threat to human development and human security

Trans-regional drug trafficking and, in its wake, growing illicit drug consumption pose an escalating danger to the stability and development of the Central Asian states and the people within them. Starting in the late 1990s, Central Asia has become the main drug trafficking route for the Western and Eastern European markets, transporting not only drugs from Afghanistan, but increasingly also from other parts of Asia, including China and Southeast Asia.²⁹ The drug business has become one of the main sources of finance for criminal and extremist groups and organizations in the region, some of which are connected to global criminal networks.

Drugs have taken a high toll on human security in Central Asia. The number of addicts has risen, and with high levels of poverty, younger people especially have been lured to the world of crime and drug trafficking. The implications are serious,

touching public health, economic development and social stability. Since the drug trade and its attendant problems know no borders, regional cooperation to stop them is imperative.³⁰

Dimensions of a booming trade

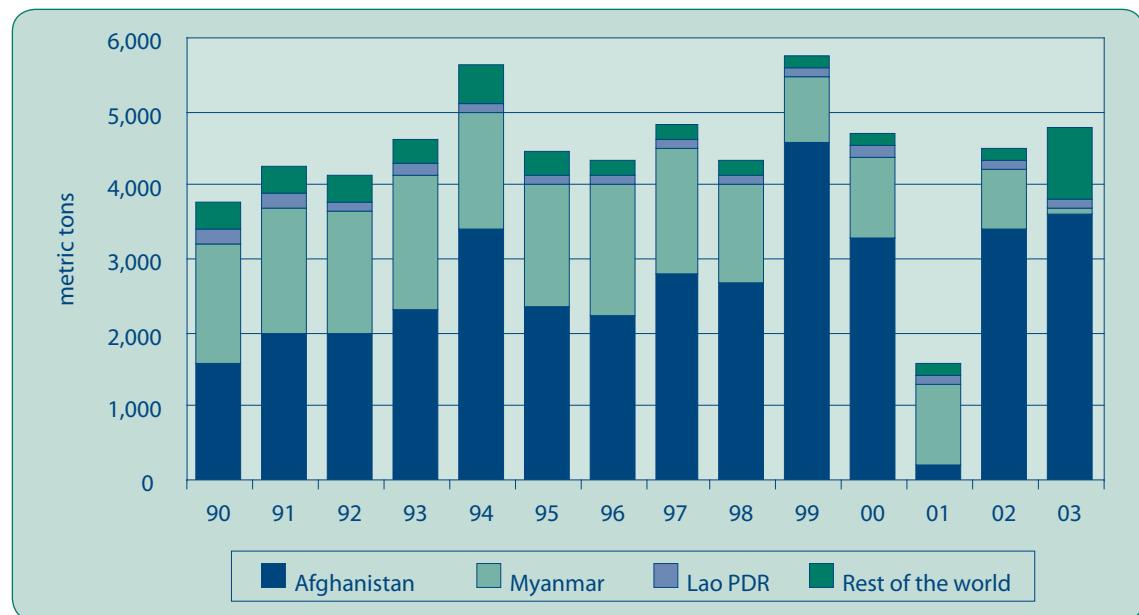
Central Asia borders on the world's main centre of opium production—Afghanistan (see Figure 5.3). Global demand for opiates has traditionally been concentrated in Western Europe, but is now also expanding rapidly in Russia and China.³¹ Prices increase according to the distance from their place of origin; every time drugs cross a state border, their cost tends to double at least. While in Dushanbe a kilogramme of high-purity heroin would cost around \$6,000, by the time it reaches Western Europe, it sells at the retail level for up to 30 times that amount.³²

There are currently three main routes for drugs out of Afghanistan: from the northeast into Tajikistan and on to Russia; into Pakistan and to its ports; and westward across the desert into Iran. Since the border with Iran is heavily guarded, and since Pakistani authorities have tightened border security, the northern route through Central Asia has become the favoured option. Corruption among some law enforcement and border authorities along the way facilitates the trade. See Figure 5.4 for a map with the principal drug trafficking routes from Afghanistan through Central Asia.³³

One measure of increased illicit drug flows is the rise in drug seizures, which probably has more

Global opium production, 1990-2003 (metric tons)

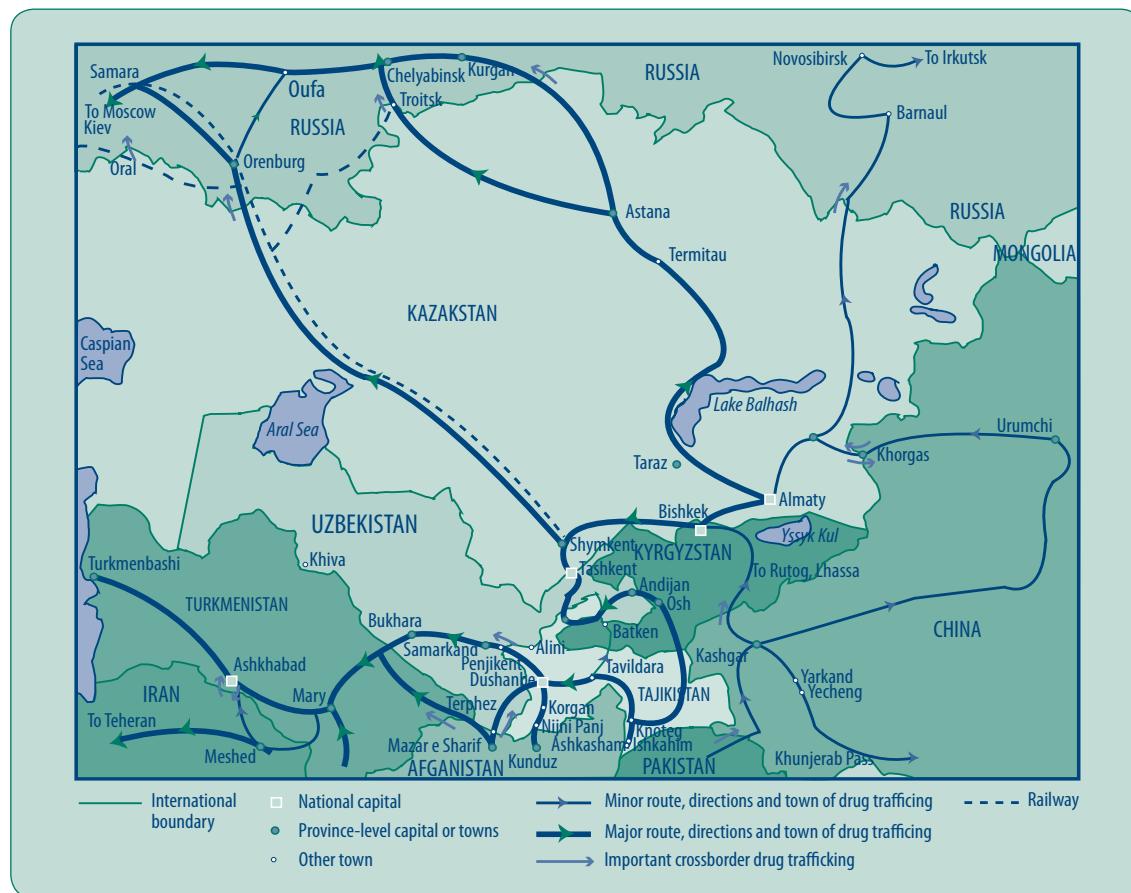
Figure 5.3



Source: UNODC 2004b.

Principal illicit drug-trafficking routes through Central Asia

Figure 5.4



Source: Reproduced with permission from Jane's Information Group, Jane's Intelligence Review.

to do with the growing quantities of trafficking than with improved law enforcement.³⁴ Since 1993, according to research published by the Silk Road Studies Program, there has been a 30-fold increase in heroin seizures in Central Asia.³⁵ UNODC noted a doubling of heroin seizures from 2000 to 2002.³⁶

The drug-trafficking problem is endemic in all five republics, although a large proportion of heroin seizures have taken place in Tajikistan. In 2002, Tajikistan alone intercepted 2.3 tons of opium and 5.6 tons of heroin, which equal 80 per cent of the total intercepted in the region.³⁷ This boosted Tajikistan from the 23rd position to the fifth place in the world for interception.³⁸ Up to 100 tons of heroin are estimated to pass through Tajikistan each year, which is equivalent to the estimated annual North American and West European demand.

Uzbekistan is also affected by drug trafficking, most of it coming from Afghanistan. More than 600 kilograms of drugs were seized during the first six months of 2004, including 295 kilograms of heroin. This is twice as much as in the same period in 2003.³⁹ It is estimated that approximately

100 to 150 tons of Afghanistan's narcotics moved through Kazakhstan in 2004, approximately 30 per cent of which sold there.⁴⁰ In Kyrgyzstan, during 2004, narcotics seizures increased by 9 per cent over 2003.⁴¹

The drug-trafficking problem is endemic in all five republics

Causes of the regional drug problem

The factors driving the booming drug industry in Central Asia are many, with geography playing a central role, given the region's location between the powerful poles of supply in Afghanistan and demand in Europe, China and Russia. Increased drug production in Afghanistan is worrying for Central Asian countries. In north-eastern Afghanistan, a burgeoning opium crop feeds into dozens of heroin production facilities, each capable of producing 10 to 20 kilograms a day. In 2000, the Taliban Government's ban on opium cut output to relatively insignificant amounts, but the post-Taliban years have seen a dramatic resurgence. The drug-crop area in Afghanistan increased considerably in 2004, reaching about 131,000 hectares according to UNODC, although 2005 projections show a slight decrease.⁴²

The narcotics industry has become deeply embedded in the economies of some states

The war against drugs in Afghanistan is hampered by a number of problems, including the lack of alternative income sources for Afghan farmers, the limited effectiveness of crop eradication and substitution programmes, the lack of government political control in broad sections of the country, links to warlords and organized crime, and the lack of effective strategies and proper coordination among donors.⁴³ As one researcher put it, campaigns to eradicate opium in Afghanistan have been counterproductive in the mid-term as prices are driven up and rural poverty is exacerbated, leading to displacement of production rather than eradication.⁴⁴ Central Asia is ideally placed to absorb this displaced production.

Although Central Asia is today more significant as a transit route, the countries face a real risk, at least in the case of Kyrgyzstan and Tajikistan, of becoming producer countries in the future.⁴⁵ The main concern is that a potentially drastic decrease in opium poppy cultivation and production in Afghanistan will trigger a corresponding increase in Central Asia (the so-called 'balloon effect').⁴⁶ With significant amounts of arable land in many parts of the region, high poverty and unemployment, weak local government and law enforcement agencies, and strong external demand, the risks of becoming a future drug production hub should not be dismissed lightly.

Even in the absence of local production, a combination of vast potential earnings and dire socio-economic conditions provide fertile conditions for the drug trade. The narcotics industry has become deeply embedded in the economies of some states, with local populations increasingly involved as couriers, distributors and users, and governmental and military structures subject to drug-related corruption. Poverty encourages many to risk the harsh punishments for drug trafficking, which include the death penalty.⁴⁷ A World Bank report on Tajikistan estimates that between 30 to 50 per cent of Tajikistan's economic activity is linked to narcotics trafficking, and 30 per cent of the population is dependent on the illicit drug business.⁴⁸ Those attracted by the high returns include women and youth, who serve as drug couriers in exchange for food to feed their families and payments in drugs rather than cash. For traffickers, a single successful deal can amount to the equivalent of several years' wages.

Drug trafficking in the region is facilitated by the porous borders between Afghanistan and the countries of Central Asia, with corruption at the borders once again a problem.⁴⁹ There is some hope among outside observers that the broader struggle against terrorism in the region may assist governments to improve their abilities to monitor and disrupt the flow of drugs through

their territories.⁵⁰ Tighter border controls intended to prevent the flow of arms and the infiltration of extremists could also be effective against drug smugglers.

Most importantly, however, it is the high demand for heroin in Europe and increasingly Russia that proffers the large amounts of money flowing through Central Asia, ensuring that employment in the drug trade will pay everyone better than almost any alternative.⁵¹ No serious effort is under way to cut back this demand, although in Europe heroin consumption is stagnant or falling on its own account, while cocaine is making a big comeback. As mentioned earlier, however, opiate demand has picked up in China and Russia, and will likely also increase along the trafficking routes, including in Central Asia.

The stark reality is that as long as the demand and supply forces abroad continue unabated, the drug transit problem in Central Asia will likely remain intractable. In the absence of efforts to drastically curb drug demand and supply, Central Asia will continue to face major disruptions and associated human costs from its location along the primary routes of the illicit drug trade.

Drug trafficking in the region is facilitated by the porous borders between Afghanistan and the countries of Central Asia, with corruption at the borders once again a problem

Economic and human costs and implications for regional cooperation

The increase in drug trafficking has had serious ramifications for public health, economic development, governance and the security of Central Asian states. Drug abuse is a recent problem in Central Asia directly linked to transit, as well as to growing demand from urban youth. Information on drug use is of mixed quality and not always up to date, but according to a UNODC report, Central Asia faces one of the strongest increases in opiate abuse worldwide in recent years—a 17-fold increase from 1990 to 2002, particularly in the intravenous use of heroin. Tajikistan's Ministry of Health reported that drug addicts in state institutions increased fourfold between 1996 and 2000, with 74 per cent allegedly using heroin. The real figure, according to health experts, is likely to be 10 to 15 per cent higher.⁵² In Turkmenistan, between 1991 and 1997, drug addiction increased approximately eight times.⁵³ Between 1991 and 2001, Kyrgyzstan experienced a 340 per cent increase in drug addicts. In 1991, 82 per cent of drug users were hashish users; by 2001, 68 per cent of addicts used heroin and opium.⁵⁴ There needs to be some caution, however, in comparing estimates of the incidence in drug use across countries, since very different practices are followed in each country in collecting and reporting such information.

The increase in drug trafficking has had serious ramifications for public health, economic development, governance and the security of Central Asian states

For 2004, problem drug users were estimated to make up almost 1 per cent of the total population of the region, which would represent around 550,000 cases. This compares to an assessment of annual opiates use prevalence of 0.41 per cent in Western Europe and 0.32 per cent in Asia in the period from 2001 to 2003. The number of drug addicts among Kazakhstan's 15 million people was estimated at up to 186,000. In Kyrgyzstan, which has a population of nearly 5 million people, the figure could be as high as 100,000. In Tajikistan, with a population of 6.3 million, the number of addicts was estimated at between 45,000 and 55,000, while in Uzbekistan the number was put at up to 91,000 out of a population of 25.6 million.⁵⁵ In Turkmenistan, unofficial estimates put the number of drug users as high as 100,000 out of a population of 4.9 million.⁵⁶

Drug use has also become increasingly risky, with poor-quality heroin, often taken intravenously, the drug most frequently used. The age when people begin to take drugs has dropped, while the number of women addicts has grown, as has the number of crimes linked to narcotics. People are switching from more expensive vodka to cheaper heroin, and heroin users are starting to switch from smoking or snorting to injection, which increases the health risks.

Transmission by injecting drug users is responsible for 85 per cent of all HIV cases in Central Asia, making it the region's primary mode of transmission. There is very limited awareness among drug users and the general population about the risks of transmission through sharing infected needles and paraphernalia. More than 60 per cent of Uzbeks with HIV are believed to be intravenous drug users. An examination of used syringes in Tashkent revealed 45.5 per cent contained HIV-positive blood.⁵⁷ In Kazakhstan and Kyrgyzstan, upward of 70 per cent of HIV-infected persons are under 30 years old. The majority of the infections are related to injecting drug abuse. Young people are the worst affected, with those in the margins of economy particularly vulnerable. In Kazakhstan, three-quarters of people diagnosed with HIV/AIDs are unemployed.⁵⁸ Another issue is the increasing participation of women and children in illicit trafficking, partly because they raise less suspicion and may be treated less harshly when caught.⁵⁹ Between 1993 and 1998, the number of women arrested for narcotics increased fourfold. In Tajikistan, by 2000, women comprised 10 per cent of those prosecuted for trafficking.⁶⁰ Women are particularly vulnerable, especially in rural areas, to overtures from drug dealers due to widespread poverty, discrimination, despair and ignorance of the law.⁶¹ Poor economic conditions and established drug-

trafficking networks have also been associated with increased human trafficking, especially organized trafficking of women for sex work in Russia, Eastern Europe and the Middle East, as well as Kazakhstan. Low levels of awareness among police and officials handicap efforts to deal with the problem of human trafficking, as do corruption and the lack of cooperative links between sending, transit and receiving states.

More generally, the drug trade undermines economic and political stability by fostering corruption in ways that spin into a vicious cycle. The weak governance of Central Asian states facilitates illicit drug transit, while the resulting criminalization of the region has further weakened government structures and undermined the potential government response. The illicit drug business diverts resources and entrepreneurial capacity to the criminal sphere and black markets, and hinders the emergence of viable legal economies. It undermines and discredits the bureaucracies as well as the upper echelons of governments if officials are linked to illicit transactions.⁶²

There can be little doubt that narcotics trafficking has increased petty crime and violence among militants and criminals, and led to the organization of groups known as the narco-mafia. There have been reports that the drug trade has also contributed to financing terrorism and extremist groups in the region.⁶³ Other observers point to the lack of real evidence tying terrorist organizations, such as Al Qaeda, to drugs, and surmise that "the term narco-terrorism [is] too vague and counterproductive in terms of addressing either drug trafficking or terrorism since it brings very different actors into too broad a category. While terrorists and drug traffickers often share some short-term goals, they have different long-term objectives (political goals for terrorists, greed for drug lords) and shouldn't be conflated.... [T]o overcome both opium production and terrorism in Afghanistan, the government and the international community should focus less on waging wars on drugs and terrorism and more on implementing a broad programme of alternative and integrated development in the whole country. Within this, a multi-level strategy involving effective sanctions on illicit and criminal activities is critical. Such a programme should be implemented in a progressive way so as to secure sustainable political and territorial stability."⁶⁴

There can be little doubt that the drug trade is contributing to regional instability and insecurity, as the principal actors seek to maintain an environment conducive for their operations.

Transmission by injecting drug users is responsible for 85 per cent of all HIV infections in Central Asia

The weak governance of Central Asian states facilitates illicit drug transit, while the resulting criminalization of the region has further weakened government structures

Drug trafficking is a regional problem; it requires regional solutions

Addressing the problems of illicit drugs

Drug trafficking is a regional problem. It requires regional solutions. But effective drug interdiction and border controls are hampered by limited capacities, both human and technical, and the lack of national and regional level cooperation among law enforcement authorities. Although the five states of Central Asia are striving to refine their laws related to narcotics, to develop police services and to cooperate with the international community, a number of constraints get in the way, including the lack of sufficient resources for training and equipment, a weak institutional infrastructure and corruption.

What kind of response strategies can Central Asian countries adopt as a regional bloc or nationally? Responses could be liberal or repressive,⁶⁵ but it is important that they are coordinated to be effective. If neighbours adopt different types of responses, the problem will then move from country to country.

Repressive policies involve a war against drugs centred on punitive and control-oriented measures, including aerial spraying and crop eradication, as well as tough law-enforcement measures against drug circulation and abuse. This approach, based on zero tolerance, concentrates on prevention and punishment of drug production, trafficking and use. In contrast, liberal policies focus on providing the poor drug-producing and transit countries with alternative sources of livelihoods, and on decriminalizing the use of drugs, as has been done in some European countries.⁶⁶ In most cases, a well-balanced strategy is likely to be best, combining the use of strict, but fair and predictable law enforcement with preventive measures in individual countries and across the region.

This is a tall order under the best of circumstances and very difficult to pull off successfully under the conditions facing Central Asia, particularly the strong forces of supply and demand, as has been borne out by many and varied efforts to control the drug traffic since independence.

Conventions and legislation

All five Central Asian countries have ratified the UN anti-narcotics conventions, including the 1961 Single Convention on Narcotic Drugs, the 1971 Convention on Psychotropic Substances, and the 1998 Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances.⁶⁷ The majority are signatories to the UN Convention against Transnational Organized Crime. All with the exception of Turkmenistan have also signed the Central Asian Counter-Narcotics Memorandum of Understanding with UNODC.

Each country needs to review and update domestic drug and organized crime control legislation to bring it in line with the UN drug control and crime prevention conventions, norms and standards

However, there is a need to strengthen legislative and legal structures and capacities across the region. None of the Central Asian states have adopted comprehensive legislation on money laundering and confiscation of criminal assets. No country has established a financial intelligence unit, thus making it very difficult to target the assets of criminal and drug-related organizations in those economies with organized banking systems.⁶⁸

The level of international cooperation remains low and is jeopardized by the lack of bilateral mutual legal assistance and extradition treaties with most countries other than those in the CIS. National authorities have insufficiently trained human resources and limited infrastructure for extradition and legal assistance. Each country needs to review and update domestic drug and organized crime control legislation to bring it in line with the UN drug control and crime prevention conventions, norms and standards. Cooperation could then be extended to establishing mechanisms for international judicial cooperation in the exchange of information, extradition of traffickers and offenders, and other forms of mutual legal assistance.

Regional approaches and institutions

Two types of regional strategies for fighting drug trafficking in Central Asia have been tried: efforts to join in curbing trafficking from Afghanistan, and cooperation on drug transiting between countries. Neither of these approaches has yielded much success.

The first approach involved an attempt to create a security belt around Afghanistan to intercept the outflow of drugs. In 2000, as part of the Tashkent Declaration on fundamental principles of peaceful settlement of the conflict in Afghanistan, members of the 'six-plus-two' group (China, Iran, Pakistan, Tajikistan, Turkmenistan and Uzbekistan, plus Russia and the United States) expressed their deep concern at the increased cultivation, production and trafficking of illicit drugs in and from Afghanistan, and discussed the establishment of a mechanism to enable them to cooperate more closely on counter-narcotics issues. A Regional Action Plan was approved in September 2000 by China, Iran, Pakistan, Russia, Tajikistan, the United States and Uzbekistan to strengthen cooperation in drug control. UNODC was slated to implement the plan, but it became obsolete with the commencement of military actions against the Taliban in October 2001, and the subsequent engagement of the United States and coalition forces in Afghanistan. As a result, the 'six-plus-two' group suspended its efforts.

As for the second approach, there have been numerous regional memoranda and agreements on inter-state cooperation among Central Asian states to control drug-trafficking, including a memorandum of understanding signed by the five Central Asian governments and UNODC in May 1996 on sub-regional drug-control cooperation.⁶⁹ Despite annual review meetings and the reiteration on several occasions of a desire for cooperation—such as an agreement in 2000 between Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan on joint actions in the struggle against terrorism, political and religious extremism, and transnational delinquency—these efforts have not paid off. Regional institutions have also tried and failed to advance the cause of drug control, including CACO's Interstate Commission on Drug Control, established in 1996, and the Coordinating Body on Drug Control, which has operated under the ECO secretariat since 1999.

There also have been some bilateral initiatives. Russia's federal drug control service and Kyrgyzstan's drug control agency signed an agreement on cooperation in fighting the trafficking of illicit drugs, psychotropic substances and their precursors. Tajikistan signed bilateral agreements with Kyrgyzstan in 1998, Uzbekistan in 1999 and Kazakhstan in 2000.⁷⁰ A memorandum of cooperation was also signed by Afghanistan and Tajikistan to allow the representation of the Tajik Drug Control Agency in Kabul and Afghan provinces. While these agreements are helpful in principle, their effects have been quite limited in practice, primarily due to the weak capacities of national drug control agencies and the limited cooperation among the different law enforcement agencies in each country.⁷¹ These factors also explain why multilateral efforts have stumbled.

Recently, intensified cooperation within regional organizations such as the Collective Security Treaty Organization (CSTO) and the SCO has evolved as a way to simultaneously fight crime, drugs and terrorism. This cooperation has included an annual joint military operation to combat drugs between the CIS and the SCO. In 2003 and 2004, members of the CSTO held preventive operations against narco-trafficking in Kyrgyzstan; some included the participation of other CIS countries and the United States.⁷² It remains to be seen whether this kind of approach can yield better results than those that were tried earlier. Since it involves mostly the repressive form of drug control, it should in any case be complemented by development initiatives.

One big gap in regional drug control efforts had been Turkmenistan's unwillingness to cooperate with other Central Asian countries on drug issues and its lack of participation in any regional level

initiatives organized by UNODC.⁷³ Turkmen officials were also reluctant to provide information to international organizations about drug seizures on Turkmen borders. Since Turkmenistan has a border of some 700 kilometres with Afghanistan, this had become a major concern to international drug control agencies, including the International Narcotics Control Board. Turkmenistan was the only country neighbouring Afghanistan that was not participating in the Topaz initiative for international monitoring and operations aimed to combat drug production and smuggling in Central Asia. However, since April 2004, in a promising shift, the Turkmen Government has begun cooperating with UNODC, including by joining Operation Topaz, launched in 2001 to target acetic anhydride, a critical chemical in illicit heroin manufacturing.⁷⁴

There have been numerous regional memoranda and agreements on inter-state cooperation among Central Asian states to control drug-trafficking

International support

International organizations currently involved in anti-drug programmes in Central Asia include UNODC, UNDP, the OSCE, the European Commission (EC), the IOM and bilateral donors. As the lead coordinating agency and with a significant regional presence, UNODC collaborates with all the countries on exchanges of information and experiences, the provision of technical equipment and border control projects all along the Central Asian borders with Afghanistan (Tajikistan, Turkmenistan and Uzbekistan). UNODC has also been involved in extensive efforts to develop institutions, such as by providing assistance to Kyrgyzstan and Tajikistan to establish and strengthen their drug control agencies. Working especially with the SCO, UNODC promotes the ratification and implementation of treaties on terrorism, and technical capacity development among legal practitioners. It also supports the elaboration, adoption and implementation of comprehensive laws against money laundering and the financing of terrorism, and assists with setting up financial intelligence units, where appropriate.

There are many other multilateral and bilateral initiatives to help combat drug trafficking in Central Asia, including the EU programme to aid improvement in border management and drug control (see Box 3.9 in Chapter 3). All these international efforts, however, face many of the same constraints encountered in individual countries, from a lack of real control over supply and demand beyond the region to weak institutional capacity. Among external donors there has also been the issue of insufficient coordination. One positive development has been the establishment of a Central Asian

All these international efforts, however, face many of the same constraints encountered in individual countries, from a lack of real control over supply and demand beyond the region to weak institutional capacity

All Central Asian countries have a clear interest in having politically stable and secure neighbours; instability in one country can spark political upheaval across the border

There is growing concern about the possibly intensifying activities of various extremist, terrorist, and criminal groups and networks operating in Central Asia

Regional Information Coordination Centre, which seeks to promote a regional approach to border control, information gathering and sharing, and the control of illicit drug trafficking. But all partners in and outside Central Asia must do much more, if the menace of drug trafficking is to be stopped.

Terrorism and trans-border crime: new phenomena

All Central Asian countries have a clear interest in having politically stable and secure neighbours, because instability in one country can spark political upheaval across the border. Political instability arises from multiple causes, not least internal ones related to underdevelopment and insufficiently transparent governance systems, as the March 2005 unrest and government change in Kyrgyzstan demonstrated. But from a regional perspective, since their independence, the governments of Central Asia have perceived threats to stability mostly from transnational terrorism and trans-border criminal activities. This concern has also been shared, albeit for differing reasons, by the large countries outside the region, in particular China, Russia and the United States. In this section, we try to shed some light on the forces and interests at work, and present some views on how regional cooperation can help address these threats to human development and human

security. This can only be a brief exploration of a very complex and difficult topic.

Trends and actors

Following the collapse of the Soviet Union, Central Asia confronted the spread of extremist ideas and terrorist activities from the outside world as well as within some home-grown conflicts. This took place against the backdrop of severe economic recession and the spread of the regional drug trade. While the transition was overall remarkably peaceful, the decade after independence was marked by some insurgencies, armed attacks and terrorist actions. The most notable armed conflict was the Tajik Civil War (1992–1997). But there were other sporadic outbursts, including extremist violence in Kyrgyzstan in 1999 and in Uzbekistan in 2004. Early 2005 saw the overthrow of the Kyrgyz Government and violence in the Andijan province of Uzbekistan (see Box 5.2).⁷⁵

Among domestic policy makers and international observers, there is growing concern about the possibly intensifying activities of various extremist, terrorist, and criminal groups and networks operating in Central Asia. See Table 5.3 for a description of the various kinds of these groups. The different characteristics need to be considered in any discussion of the regional scope for terrorism and crime, and appropriate regional responses.

Box 5.2

Timeline of major incidents of political violence in Central Asia since 1999

February 1999: A series of nearly simultaneous bombings in Tashkent killed 19 and wounded over 100.

July 1999: Islamic militants from Tajikistan infiltrated the remote Kyrgyz province of Batken and later seized five mountain villages, taking a team of Japanese geologists hostage. The militants wanted to force the release of Muslims held in Uzbek prisons and to reopen thousands of mosques and religious training institutions. Reacting to this threat, the Uzbek air force bombed the mountains above the provincial town of Batken.

27 March–3 April 2004: Two suicide bombers stopped by the police in Tashkent killed themselves and three policemen, wounding five more officers. This triggered a series of attacks coordinated in Tashkent and Bukhara, including a female suicide bomber. The death toll in six days of violence stood at 33 terrorists (seven of them women), 10 policemen and four civilians. Police arrested 19 suspected terrorists and seized 55 suicide bomber belts, 72 ammonium nitrate bombs and more than two tons of chemicals for making bombs.

30 July 2004: Terrorists attacked the US and Israeli embassies in Tashkent. Seven people were killed, including three attackers. A terrorist group that identified itself as the Holy War Group claimed responsibility, and on a website indicated it acted to retaliate against Uzbek policies supported by the Israeli and US governments. According to a statement by this group collected by the Associated Press, the action had a clear political meaning and was supported by Al Qaeda cells in Pakistan.

23 September 2004: Uzbekistan arrested and tried over 50 people for complicity in the March and April terrorist attacks.

24 March 2005: The Kyrgyz President fled the country after opposition movements took to the streets of Bishkek and provincial capitals, with some violence erupting.

13 May 2005: After the takeover by armed insurgents of a prison and other Government buildings in the city of Andijan in eastern Uzbekistan, Uzbek security forces clashed with thousands of demonstrators. Estimates of deaths ranged from about 173 according to the Government, to over 700, claimed by opposition figures and outside observers. Some 500 people fled from Uzbekistan across the border to Kyrgyzstan.

Source: Assembled by Shahrbanou Tadjbaksh, based on country background papers and other relevant materials.

Table 5.3

	Intentions and activities	Networks and linkages	Political implications	Typology of criminal and extremist political groups operating in Central Asia
Drug mafias	Middlemen who buy opiates from farmers (heroin/opium in Afghanistan and hashish in Central Asia) and sell to international buyers.	Mostly localized, but with links to political elites in Afghanistan and Central Asia.	As middlemen, they pose threats to communities but may not have the power or capacity to threaten stability.	
Criminal networks	Interested in acquiring the financial gains associated with involvement in the drug trade, they move the drugs through the region to the outside world.	Transnational links to criminal networks.	Composed of a chain of regional and international players, including officials in several governments and in the security services, their transnational networks could prove powerful. Furthermore, they can exacerbate corruption among authorities.	
Criminal/terrorist networks (e.g., Islamic Movement of Uzbekistan)	They encompass the criminal/terrorist nexus—criminal because of their direct involvement in the drug trade, and terrorist because of explicit political declarations, even if only rhetorical.	Transnational, with links both to criminal networks and to extremist political organizations, including, possibly, Al Qaeda.	Potentially very harmful to political authorities because they combine insatiable criminal interests with insurgencies and terrorist activities.	
Religious extremist groups (e.g., Hizb-ut- Tahrir)	Intended to overthrow the political regimes of Central Asia and to replace them with an Islamic Caliphate.	Transnational in membership and possibly in leadership, with linkages throughout Central Asia, and offices in Europe.	Their influence will depend on the extent to which they can provide socioeconomic relief to local populations, in competition with (and often in the absence of) the state, and to their growing linkages to drug trafficking for financing their activities.	

Source: Assembled by Shahrbanou Tadjbaksh, based on country background papers and other relevant materials.

A complex web of causes

The multifaceted consequences of terrorism and trans-border crime in Central Asia could have potentially destabilizing impacts on internal political systems as well as regional and international trade, in part through the proliferation of drugs and weapons. At the national level, terrorism has led to an increased clampdown on opposition groups, and, at the regional level, to the reinforcement of border regimes. Terrorism is also linked with money laundering, drug trafficking, human trafficking and lawlessness as well as with the widening inequalities in the welfare of people in affected and non-affected areas. The most effective way to begin to deal with terrorism and trans-border crime is to understand their possible root causes—some of which are the same, and some of which are different.

Grievances: poverty and inequality

Inequality, poverty and corruption have been at the root of conflicts and uprisings throughout the world, including the 2005 revolution in Kyrgyzstan. Poverty can foster circumstances where ordinary people become criminals and terrorists because they are frustrated with their lives and don't have much to lose.⁷⁶ There are also direct links between the lack of voice and marginalization, and the desire to be heard

through violent means. As UN Secretary-General Kofi Annan stated in the report *In Larger Freedom*, “[W]hile poverty and denial of human rights may not be said to ‘cause’ civil war, terrorism or organized crime, they all greatly increase the risk of instability and violence.”⁷⁷

The overarching factors at work can include economic decline, lack of social protection, the marginalization and political exclusion of ethnic minorities, the exploitation of the unprotected by a venal bureaucracy and the violation of human rights. Ultimately, violence induced by poverty and inequality stems from a lack of trust and an insufficient social contract between governments and their people, thus making the elimination of poverty and corruption primary weapons to fight terrorism and crime. Despite the relatively high incidence of poverty, inequality, corruption and human hardship in much of Central Asia, a recent survey of public perceptions leads to the tentative conclusion that a solid majority of people feel there is little threat of conflict among countries, in countries or at the local level. A higher percentage is worried about security threats from organized crime more than from religious organizations. Only a very small share is dissatisfied with security in their country. Yet those who report a concern about possible conflict think it likely that poverty and related socioeconomic reasons will be the main

Poverty can foster circumstances where ordinary people become criminals and terrorists because they are frustrated with their lives and don't have much to lose

The elimination of poverty and corruption are primary weapons to fight terrorism and crime

Public perceptions about security and conflict in Central Asia

The World Bank's 2004 survey of 6,000 people in four Central Asia countries asked a number of questions about trust, security and conflict. The responses are briefly summarized as follows (all percentages are unweighted for the total sample):

- 68 per cent think that one needs to be very careful in dealing with people.
- 32 per cent feel less safe walking about alone today than a few years ago.
- 12 per cent think there are organizations, movements and groups causing harm (most of them think the groups are radical religious groups).
- 59 per cent think it is not likely at all that there will be conflict in their country in the next few years (those who think it likely cite mostly poverty and related socioeconomic reasons).
- 74 per cent think it is not likely at all that there will be conflict on the local level.
- 60 per cent think it is not likely at all that there will be conflict among countries in Central Asia (sources of possible conflict identified were specific to countries, and mostly involved customs and border management, or resources such as water, energy, etc.).
- 35 per cent think there are no security threats.
- 22 per cent/12 per cent think there is a security threat from organized crime/religious organizations.
- 2 per cent/8 per cent think there is an outside threat from a CIS/non-CIS country.
- 14 per cent are fairly or completely dissatisfied with security in their country.

Source: Based on the 2004 World Bank Public Opinion Survey.

Three key economic factors make a country susceptible to civil war: low income, low economic growth and high natural resource dependence

culprits (see Box 5.3). These findings should not be a source of complacency, as the events summarized in Box 5.2, especially in Kyrgyzstan and Uzbekistan, have shown.⁷⁸

A global ideological struggle or a regional protest?

There are speculations that some of the terrorist groups in Central Asia may be linked to regional or global terrorist groups, including radical Islamist groups and, possibly, Al Qaeda. Despite differences in ideological bases, financing sources and methods, radical Islamist movements in Central Asia share with global radical Islamist networks the objectives of the awakening of political self-consciousness and religious politicization among religious members of the population, and of changing secular political systems into Islamic states, including through violent measures.⁷⁹

However, great caution is called for before labelling religious movements 'extremist', 'fundamentalist' or even 'Islamist', and before attributing local movements to external influences. It is especially important to distinguish between the constructive roles that Islam and Islamic values play in societies, and threats emanating from political organizations that use Islamic identity for their ideological goals.

In Central Asia, there is a renaissance of Islam on the one hand, and the rise of extremism on the other. The renaissance of Islam has attracted new believers, especially among the young. Islam and

Islamic values in the region are based on local traditions and are distinct from those elsewhere, including in the Middle East. A number of Islamic movements, ranging from welfare organizations to local mosques, and even political parties, advocate these values. These movements are actively engaged in fostering the welfare and education of Central Asians and in non-extremist political activity. Despite commonalities with global Islamic movements, it seems likely that the Islamic movements in Central Asia, whether radicalized or not, have their roots in specific local and regional traditions as well as grievances. Recent research in Tajikistan provides one example in support of this conclusion (see Box 5.4).

Profiting from violence

According to research by the World Bank and the International Peace Academy,⁸⁰ three key economic factors make a country susceptible to civil war: low income, low economic growth and high natural resource dependence. The first two factors produce a pool of potential rebel recruits, mainly among disaffected young men, while the third is a potential source of finance for conflict. Much of the post-Cold War civil conflict in developing countries in fact has been driven not by purely political reasons, but by powerful economic motives and agendas. Warfare is thus understood as "an instrument of enterprise and violence as a mode of accumulation."⁸¹ Instead of regarding war as the continuation of politics by other means, this research suggests that conflict

Box 5.4**The source of radical Islamic movements in Tajikistan**

Survey data indicate that the social base of radical Islamic movements in Tajikistan is not wide but covers certain strata of the population, among them especially the following:

- *Marketplace traders and people in small and medium businesses:* Entrepreneurship in Tajikistan is in a difficult situation. The lack of law and order, corruption and heavy taxation do not allow the development of small and medium enterprises, forcing entrepreneurs to work illegally. Due to the fact that the secular administration cannot or does not want to improve the legal situation and provide order, entrepreneurs and traders are forced to call upon Islam in seeking a regulator of social and business life.
- *Unemployed youths:* This is a special group that has lost perspective and feels separated from society.
- *Population of border regions:* Since 2000, a rapid increase in the influence of political Islam has been observed in the regions bordering Kyrgyzstan and Uzbekistan. This is connected with the formation of new borders and the division of a formerly united region. Dissemination of the ideas of Hizb-ut-Tahrir in Central Asia in general, and in Tajikistan in particular, is based in part on the attractiveness of Islamic integrationism. The reaction of the population to the establishment of borders in old civilization centres, especially in the Fergana Valley, which most suffered from the division of Central Asia, has been acutely negative.

As a whole, the analysis of interviews held in January to March 2004 in Dushanbe, Khujand and Tashkent indicated that the main motivation for turning to political Islam was great disappointment with the policies of Central Asian leaders that hinder regional trade, transportation, and the transit of people and goods, all factors that have aggravated the situation of small traders and entrepreneurs.⁸²

Source: "UNDP Country Background Study, Tajikistan."

could be seen instead as the continuation of economics by other means.

The idea that some parties actually profit from prolonged violence can be extended to the terrorist and criminal activities that flourish from instability. For Central Asia, opportunities present themselves through international networks for drug and arms trafficking; access to small arms; and weak, underfunded, corrupt and mistrusted security sectors (mainly the police and military). These allow terrorist groups to fund their operations through trafficking in narcotics. Money laundering, both to finance terrorism and to launder drug and other organized crime profits, takes advantage of weak banking systems and widespread cash- and trade-based currency exchanges. None of the republics are members of any international groups to combat money laundering.

Corruption is another opportunity for criminality and violence. The radical transformation of the economy and public and political life of the countries of Central Asia was accompanied by a chaotic situation for law and order. The shadow economy, corruption and bribery, which became the most profitable ways to survive amid poor socioeconomic conditions, grew enormously. Unlawful acts of officials became part of increased criminality as a whole.⁸³

Weak law enforcement and border control

Other reasons for the apparent surge of criminality and terrorism in Central Asia are the weaknesses of national security forces and the lack of adequate security sector reforms. In various governments,

the coordination of anti-terrorist activities is the responsibility of the security services, in cooperation with the Ministries of Internal Affairs, the State Border Protection Committees, the State Customs Committees, the Ministries of Defense and the Ministries for Emergency Situations.⁸⁴ Yet conditions in the armed forces remain poor, and the security sector, like most public service areas, suffers from underfunding, a dearth of qualified personnel and corruption. The allocation of more funds for consolidation of the countries' security and state frontier control mechanisms would be one ingredient to staunch illegal cross-border activities. Reform and better funding of security forces, however, may require broader governance reforms; in isolation, security reforms are not likely to go very far.

A combination of social and economic factors has contributed to corruption within antiterrorist units, which at times have become part of the security problem rather than its solution. Problems common to post-Soviet militaries based on national conscription, such as underfunding and the phenomenon of 'hazing' or institutionalized bullying within the barracks, plague the Central Asian armed forces. These weaknesses have prompted countries to promote their security interests through a foreign policy strategy of seeking security assistance wherever it can be found. Kyrgyzstan, for example, cooperates closely with the US National Guard, while seeking military ties to China and Russia. Some forms of support come through participation in international and regional security bodies, including the NATO Partnership for Peace programme, the CSTO and the SCO.

None of the republics are members of any international groups to combat money laundering

Other reasons for the apparent surge of criminality and terrorism in Central Asia are the weaknesses of national security forces and the lack of adequate security sector reforms

Threats from terrorism have spurred a tendency in Central Asia to meet opposition with repression

Ineffective border control agencies are an extension of weak security services. Porous borders allow international terrorists and criminals to move across and outside the region with few difficulties, and to use the territory of one Central Asian country for arranging and implementing subversive missions in another one. This situation destroys trust between the states and hinders general cooperation. The results of these tensions have been border closures, the introduction of visa regimes, energy cuts, confrontations over water and even the mining of disputed frontiers. For example, in its dispute with Kyrgyzstan and Tajikistan over incursions by the Islamic Movement of Uzbekistan, the Uzbek Government has mined contested borders. Uzbekistan has further stretched barbed wire across its border with Kazakhstan after accusations that training camps in southern Kazakhstan were used to prepare the March 2004 insurgencies. Kyrgyz and Tajik citizens also repeatedly complain that Uzbekistan's border guards move into their territories in order to punish real or imaginary militants.

The limits of a repressive reaction to opposition?

Threats from terrorism have spurred a tendency in Central Asia, as in other countries with authoritarian governments, to meet most, if not all forms of opposition with repression, out of fear that a more liberal response might encourage further opposition, terror acts and pressures for regime change.⁸⁵ In its report *Islamist Mobilization and Regional Security*, the International Crisis Group⁸⁶ argued that an exaggerated threat of violence by militant Islamic movements in Central Asia has been used to legitimize repressive measures by the governments of Kyrgyzstan, Tajikistan, and, especially, Uzbekistan. Claims about the existence of radical Islamic movements, both by the authorities in the region and frequently by outside observers, have been used to justify strongly repressive actions, supported by cooperative international security measures against the perceived common threat and with the acquiescence of the international community.

However, repression is more likely to foment the threats it seeks to counter by increasing social and political tensions. According to Kofi Annan, "[C]ompromising human rights cannot serve the struggle against terrorism. On the contrary, it facilitates the achievement of the terrorists' objectives by provoking tension, hatred, and mistrust of governments among precisely those parts of the population where they are most likely to find recruits."⁸⁷ Indiscriminate suppression of political dissent has not ensured the stability of the Central Asian political systems. Instead, it has likely contributed to

the radicalization of their populations and to the growth of destabilizing extremist groups.

A summary view of the causes of terrorism and cross-border criminality

The picture of the causes of terrorism and cross-border criminality in Central Asia that emerges from consideration of these multiple factors is highly complex. We may summarize it best, but cautiously, by pointing to local and regional grievances as the principal causes, including grievances over poverty and unemployment, barriers to business and trade, weak institutions and corrupt officialdom, and authorities that repress opposition and religious activity. Superimposed over these causes are external factors, most important among them the international drug trade, but also the influence of radical Islamic political forces.

The great risk for the Central Asian region is that these many factors may lead to a mutually reinforcing cycle of poverty, weak governance, ideology, violence and repression. The hope has to be that both at national and regional levels, with the support of their neighbours and of the international community, the governments and civil societies of Central Asia find ways to break this cycle, and to create the stable and supportive political conditions under which human development and human security can be safeguarded for the people of the region.

Opportunities for regional cooperation in combating terrorism and cross-border criminality

One of the stimuli for regional cooperation in Central Asia has been the need for security to avert common threats to stability. Since 1991, the Central Asian countries have entered numerous regional collective security agreements and institutions in an attempt to create an overall regional security system. These attempts led off with the signing of the CIS Collective Security Treaty in 1992 in Tashkent, followed by accession to the OSCE and participation in the Partnership for Peace programme initiated by NATO's Euro-Atlantic Partnership Council. In 1993, collective CIS peace-keeping forces were created to patrol the Afghan-Tajik border. They consisted mainly of Russian troops, but included Kazakhstani, Kyrgyz and Uzbek military units. These forces played an important role in settling the civil war in Tajikistan and helped to prevent the conflict from spreading to the region. However, they did not become a basis for a regional security system. In 1995, Uzbekistan withdrew its battalion from Tajikistan, followed by Kyrgyzstan and then Kazakhstan in 1998.⁸⁸

Since 1991, the Central Asian countries have entered numerous regional collective security agreements and institutions in an attempt to create an overall regional security system

To date, no effort to create an effective regional security system has been successful. Through the 1990s, the efficacy of most initiatives remained low due to limited capacities and willingness to cooperate on the part of Central Asian states, and to limited interest from the international community. After the terrorist attacks of 11 September 2001, the international community became much more engaged not only in Afghanistan, but also in Central Asia. This promised an opportunity for greater progress in security cooperation, as global interests (the United States, NATO and the OSCE) and regional ones (China and Russia through the SCO) took up leading roles in helping to build a new regional security system.

While there was some concern that this outside engagement might give rise to a new 'Great Game' of competing superpowers struggling to dominate the region, this fear is mitigated by two factors. First, while all major outside players clearly pursue their own national interests in the region, it appears that they all have a clear self-interest in ensuring political stability and economic prosperity, rather than in reinforcing centrifugal and destabilizing tendencies (see also Chapter 8). Second, so far outside engagement has not led to a breakthrough in regional security cooperation in Central Asia, mostly due to different perceptions of potential threats, unresolved cross-border security issues (availability of enclaves, demarcation of borders, shared natural resources, etc.), competition for regional leadership between Kazakhstan and Uzbekistan, and a lack of mutual confidence in the capacity of neighbours in the region to maintain security.⁸⁹ Although currently many different regional and international organizations are engaged in shaping the security agenda in Central Asia, so far their activities raise more questions than they provide answers. These questions are briefly considered on the following pages.⁹⁰

The CIS

The main benefit of security cooperation under the CIS umbrella is that it gives the Central Asian states access to the anti-terrorist centre that has been functioning in the CIS since 2001. They can also be part of the activities of the CSTO, including planned cooperation in a united air defence system; in assessing radiological, biological and chemical threats; in the organization's Rapid Deployment Forces stationed in Kant in Kyrgyzstan; and in joint military exercises. However, the organization's membership (Armenia, Belarus, Kazakhstan, Kyrgyzstan, Russia and Tajikistan, but not Turkmenistan and Uzbekistan) limits its scope.

The CIS summit held in Astana in September 2004, a month after the terrorist attacks and tragic bloodshed at the school in Beslan in Russia, had as an overarching theme a common stance against terrorism. Summit participants also issued statements and signed documents expressing their intention to combat illegal migration, organized crime and drug trafficking.⁹¹

CACO

CACO and its predecessors have undertaken some security cooperation efforts, although their main mandate traditionally has been in the economic field. In 1994 Kazakhstan, Kyrgyzstan and Uzbekistan signed an agreement under CACO on military and technical cooperation and created the Council of Defence Ministers. The council's statute was approved in 1995, and the Committee of Chiefs of General Staffs formed in 1997. The same year, the three countries created a peace-keeping battalion called Centrasbat. However, military cooperation through CACO proved largely ineffective.

In a 2004 Dushanbe meeting of the Council of Heads of States of CACO, the presidents called for improving cooperation in the struggle against international terrorism, religious extremism, drug trafficking and other challenges to the security of member states. They agreed to authorize their security bodies to make a list of terrorist and extremist organizations, their leaders and members, an initiative that the Uzbek president had proposed to the CIS summit.⁹²

The SCO

The SCO was created as a regional security agreement for Central Asia and retains the security agenda at the core of its mandate, even as its activities have broadened to include economic cooperation issues. To ramp up its regional security activities, the organization established a Regional Anti-Terrorist Structure in Tashkent in January 2004, and its first multilateral military exercise (called Interaction-2003) took place in August 2003 in China and Kazakhstan. With its members pledging to fight terrorism in the region, to abide by the rule of mutual respect for sovereignty and territorial integrity, to refrain from interfering in each other's internal affairs and from using or threatening to use force against each other, and to avoid seeking unilateral military superiority in contiguous regions, the SCO provides a platform for close security cooperation. Perhaps more importantly, it encourages joint leadership of China and Russia in ensuring stability, security and protection from terrorist threats in the region.

At their summit meeting in Astana in July 2005, the organization's leaders agreed to reinvigorate the common fight against terrorism, separatism and extremism. Their joint declaration said that "the heads of states believe the joining of efforts of the member countries is needed to effectively counter new challenges and threats to international and regional security and stability."⁹³ The leaders also promised close cooperation among law enforcement agencies, special services and defence ministries to jointly plan and conduct anti-terrorist operations, to combat drug trafficking and to harmonize national legislation in security areas.⁹⁴ Given the unequivocal support of the SCO leaders for the Uzbek Government's actions in Andijan in May 2005, it appears that members are unified in what is generally seen as a more repressive stance towards domestic and regional security threats.

NATO in Central Asia

All Central Asian countries have engaged in the Partnership for Peace programmes with NATO⁹⁵ and are in the process of developing individual partnership action plans.⁹⁶ Partnership programmes include activities and consultations for improved national defence planning and budgeting, and provide equipment and training.⁹⁷ Other projects include disaster preparedness and scientific and technical cooperation. NATO has also encouraged its member nations, partner countries and other international donors to set up Partnership for Peace Trust Funds in order to assist partner countries in coping with their old stockpiles of weapons and ammunition. In Tajikistan in 2004, a trust fund helped to destroy the last remaining stockpile of approximately 1,200 antipersonnel landmines left over from the civil war.

Other NATO plans include appointing a special representative for the region and opening NATO training centres. However, the scope for enhanced regional cooperation among Central Asia countries under NATO-sponsored programmes is limited at best.⁹⁸ Central Asian capitals appear to look to NATO principally to procure new supplies of modern weapons and equipment, and to a lesser extent for help with their own internal defence reform programmes.⁹⁹

The OSCE

After its initial focus on human rights and democratization, including support to government/NGO relations, judiciary and police reforms, elections and ombudsperson offices, the OSCE has expanded its activities in Central Asia to focus

on economic issues, human security and counter-terrorism.¹⁰⁰ In December 2001, it organized a major conference on terrorism in collaboration with UNODC—the Bishkek International Conference on Enhancing Security and Stability in Central Asia: Strengthening Comprehensive Efforts to Counter Terrorism—which issued the Bishkek Platform for Action. This statement called for joint activities to prevent and fight against terrorism, building on the approach stipulated in the OSCE Charter on Preventing and Combating Terrorism.¹⁰¹

In 2002, the OSCE created the Action against Terrorism Unit as the focal point for action against terrorism carried out by OSCE bodies, institutions and field missions. It responds to requests for assistance from OSCE member states, and delivers practical assistance and guidance to field activities. In its work, the OSCE stresses the need to balance human rights and human security considerations with national security needs. For example, in its report on the Andijan violence in Uzbekistan in May 2005, the OSCE warned that "while states have legitimate security concerns in the current fight against terrorism, caution must be applied to avoid excessively broad and indiscriminate use of the terms 'terrorism' and 'extremism'. Otherwise this would present negative consequences for legitimate political opposition, ethnic and religious minorities, and the effective enjoyment of human rights such as freedom of expression and association."¹⁰²

UN engagement

The Central Asian countries have joined the UN agreements on the struggle against terrorism (11 conventions and two protocols). The countries also participate in the work of the Counter-Terrorism Committee under the UN Security Council. And cooperation with the United Nations on anti-terrorism matters may be reinforced through the establishment of a UN Regional Centre for Preventative Diplomacy for Central Asia. Plans call for opening the centre in Ashgabad, which might help draw Turkmenistan more fully into regional cooperation efforts.

An overall assessment

Based on the experiences with regional security cooperation through regional and supra-regional organizations, we may draw a few overarching conclusions. First, regional security, including anti-terrorism, is an important concern to governments in the region, all of whom appear to share a strong interest in assuring national and regional stability and in fighting terrorist and criminal threats.

Second, in the past, Turkmenistan and Uzbekistan have tended to go their own way in meeting their security needs. This has limited the scope for regional security cooperation. Turkmenistan continues to stand aside, but it appears since 2004 that Uzbekistan has increased its readiness to cooperate in regional security organizations, including the SCO. This may open the door over time to the development of a comprehensive regional security framework.

Third, no single organization has established an effective lead in fostering regional security cooperation, although the SCO holds perhaps the best prospects for developing the required capacity and political will, especially if China and Russia continue to strengthen their joint leadership role.

Finally, international partners, such as NATO, the OSCE and the UN, cannot substitute for regional leadership in promoting security cooperation, but they can provide useful complementary support by offering, respectively, assistance for military reform and modernization, technical advice on anti-terrorism initiatives based on international experiences, and an umbrella for shaping regional agreements in line with international conventions. Perhaps their most important contribution will be to offer reminders—and incentives—to the authorities in the region to acknowledge that security, both national and regional, requires that governments do not repress their citizens, but empower them to participate in the search for national and human security, to address and resolve conflicts at the community level, and to build trust across borders through networks of civil society organizations.

Conclusions and recommendations

Conclusions

Natural disasters and man-made threats have major implications for human development and human security in Central Asia, as they pose serious risks to human lives, health and livelihoods (see Table 5.4). If left unattended and unresolved, they can extract a political and economic toll, and lead to conflict at the community, national and regional levels. Mitigating these risks takes determined action nationally and regionally, both directly to counter the threats, and also indirectly by providing better foundations for economic growth, human development and good governance. That said, in terms of crime and terrorism, measures for improved law enforcement and control of security threats should not be accompanied by a general repression of political life, but need to be reinforced with heightened respect for human rights, empowerment of communities and the strengthening of good governance.

Ways need to be found to focus and strengthen the capacities of regional institutions and forums to proactively address natural disasters and man-made threats, which are best dealt with through early, coordinated prevention rather than reaction. Current regional approaches and institutions do not adequately address the multiple concerns in these areas. Yet cooperation is not only necessary, but also should come naturally, given the many shared interests among the governments and the people of the region, and the common incentives of conflict prevention and risk mitigation. Potential links also exist with bottom-up initiatives involving communities across borders. Cooperation overall

No single organization has established an effective lead in fostering regional security cooperation, although the SCO holds perhaps the best prospects for developing the required capacity and political will

Ways need to be found to focus and strengthen the capacities of regional institutions and forums for coordinated prevention rather than reaction

Table 5.4

People's lives threatened	Potential economic losses	Summary of indicative costs of natural disasters and man-made threats in Central Asia
Earthquakes in major cities: Potentially 45,000 to 75,000 deaths per city, hundreds of thousands displaced Break in Lake Sarez dam: Up to 6 million people threatened by flooding Problem drug users: An estimated 550,000 people Conflict, violence and war: 50,000 dead in the 1992-1997 Tajik Civil War ¹⁰³ From 170 to over 700 dead in Andijan, Uzbekistan violence in May 2005	Major natural disasters 5 to 10% of GDP lost for the typical small, poor country Conflict, violence and war: Up to 70% of GDP could be lost for Tajikistan 30 to 50% of GDP lost for a major civil war (Bosnia, Georgia, Tajikistan, etc.)	Summary of indicative costs of natural disasters and man-made threats in Central Asia

Note: The numbers cited are indicative only; sources in text, unless otherwise noted.

Cooperation should come naturally, given the common incentives of conflict prevention and risk mitigation

can go a long way towards building mutual trust and understanding among Central Asian neighbours.

Since there are many connections between the five Central Asian states and neighbouring Afghanistan, incorporating Afghanistan into regional initiatives for managing natural disasters and man-made threats will be important. The large neighbours, China and Russia, also have an important stake, as does the international community at large. International assistance and engagement cannot substitute for initiatives based in the region, but could play a more proactive role nonetheless in supporting national and regional efforts to address multiple threats.

Specific challenges to regional cooperation include a lack of consistent focus and cooperative leadership in the region; a lack of effective reaction/prevention policies at the national level, and of common prevention mechanisms and contingency planning; the low capacity of national and regional agencies; corruption; weak information flows; and a lack of adequate and sustained funding. Despite these obstacles, the stakes are very high, and all actors should seriously address the threats identified in this chapter.

Preparing for natural disasters

Central Asia is particularly prone to natural disasters with striking regional impacts, especially earthquakes and floods. The risks from these disasters have been heightened by past human practices, such as the contamination left from uranium processing. Millions of people's lives and livelihoods are at risk. All countries in Central Asia have some governmental and community structures in place to help prepare for and deal with natural disasters, and regional cooperation is gaining momentum, due to a growing understanding of connections between economic and environmental interests, international contacts and the influence of generally accepted international principles.

However, many weaknesses persist. At the national level, legislation still does not meet international norms, including on the provision of disaster insurance. The capacities of national emergency agencies remain limited, with insufficient equipment and training. Civil society and communities, while engaged frequently in self-help activities, are not adequately linked to and supported by governmental initiatives.

At the regional level, disaster vulnerability assessments have not yet been carried out, and the necessary regional information and databases have not been compiled or disseminated. There is no comprehensive regional disaster preparedness plan based on national plans, prepared with

support from international experts and monitored on an ongoing basis. A key element of such a plan would be an early warning system for the many different natural disaster hot spots of regional significance.

None of the major regional institutional bodies (in particular CACO and the SCO) have a clear mandate for formulating and carrying through a unified regional approach to disaster management. As recommended by the Kobe World Conference, such an approach would promote regional programmes, develop methodologies and standards, share information, mobilize resources, and undertake and publish regional baseline assessments and progress reports.

Finally, the international donor community has not yet adequately focused on disaster preparedness and prevention as a critical set of human security risks, and has failed to coordinate its own engagement in a systematic and effective manner.

Fighting the illicit drug trade

Central Asia is a transit corridor for huge illicit drug flows from the world's principal hub of heroin supply in Afghanistan to the principal hubs of demand in Europe, and increasingly, in China and Russia. Without progress in controlling supply and demand at these hubs, measures to stop trafficking will very likely prove elusive. So far, not enough has been done by the international community to staunch drug supply and demand. Options for action could include providing Afghan farmers with viable alternative crops, punishing local warlords and tribal leaders who encourage and tax poppy cultivation, and reducing drug-use rates in Western Europe, China and Russia. However, Central Asian countries can help themselves, individually and jointly, and with support from the international community, to limit the worst manifestations of the drug trade and the risks it poses in terms of increased health threats, corruption and even growth in local production of opium.

Although many initiatives have been pursued to date, few have gone far enough. Central Asian countries have not sufficiently improved national counter-narcotics policies and institutions, border control and law enforcement. To be successful, counter-narcotics policies must be combined with policies that treat narcotics trafficking as a development issue. This requires tackling overall development challenges, such as assuring that poor farmers have markets for their products, and urban dwellers have jobs or business opportunities that provide alternative livelihoods. Greater transparency and inclusion of local communities, local officials, village elders, grassroots NGOs, women, youth and local elites would help ensure

Greater transparency and inclusion of local communities, local officials, village elders, grass-roots NGOs, women, youth and local elites would help ensure long-term sustainability and effectiveness of programmes to combat drugs

long-term sustainability and effectiveness of programmes to combat drugs. Many of these programmes have also failed to focus sufficiently on reducing the harm caused by drug trafficking and use, the treatment of drug addiction, and links to public health initiatives to control HIV/AIDS. Protection of human rights remains generally a low priority and corruption undermines efforts to combat drug trafficking.

By its very nature, the drug-trafficking problem crosses borders and involves all countries in Central Asia. However, interagency coordination and cooperation between national mechanisms responsible for drug control has fallen short, including on basic issues such as interagency and regional operational guidelines to harmonize counter-narcotics legislations, or joint operations. Until now, regional coordination, to the extent it has taken place, has been carried out by UNODC. No regional organization, including the SCO and CACO, has had the clear mandate or capacity to address this issue.

Information sharing in the region has been sporadic, with little systematic collection and evaluation of data on drug transiting and drug abuse at the national level. There is no regional database on drug trafficking, and no mechanisms for timely exchanges of information on trafficking patterns, criminal organizations, opium production, opium/heroin distribution networks and narcotics trafficking. There has been little experience sharing data with neighbours such as Iran and Pakistan, which have their own longstanding programmes of countering the illicit drug trade with Afghanistan. An additional problem has been weak donor coordination. Long-term financial commitments have been the exception, rather than the rule, and too few donor resources have been devoted to monitoring, evaluation and follow-up, including assisting with legislation and providing training.

Combating terrorism and cross-border crime

Today, the security conditions in Central Asia differ considerably from those before the Afghan war, which reduced the Taliban threat and its support for extremist militant groups in Central Asia. But security threats from terrorist and extremist groups have not been eliminated completely, and crime has soared with the drug trade. The governments of the region face the challenge of developing democratic structures that empower their own citizens, channel opposition energies into constructive movements, and ensure that a perpetually downward spiral of poverty, corruption, ideology, criminality and repression does not take hold. The struggle against terrorism

and cross-border criminality remains an urgent concern for cooperation among the governments of the region, as it does for China, Russia and the international community.

Several issues were highlighted. First, a comprehensive understanding of the relationships between drugs, crime and terrorism must be attained in order to develop and implement effective security policies. Second, the drug-crime-terror nexus requires that governments as well as law enforcement and security agencies in the region work together, pursuing national, regional and international interagency cooperation. Third, it is necessary to tackle the root causes, including poverty, inadequate and inefficient governance, and the breakdown of social contracts between state and society, in order to reduce the incentives and opportunities for people to engage in criminal and terrorist activities. This requires a comprehensive human development and human security strategy, combining security and control of illegal activities with social and economic development measures and good governance reforms.

The governments in Central Asia have long been concerned about the national security of their countries. Many national, regional and international initiatives have been created, but again, much remains to be done. Not all Central Asian countries have joined the relevant anti-terrorism conventions, including the 1999 UN International Convention for the Suppression of the Financing of Terrorism, the 2000 Vienna Declaration on Crime and Justice and the 2001 OSCE Bucharest Plan of Action for Combating Terrorism.

National judicial and legal systems must be modernized to take on the drug business, crime and terrorism. This includes the adoption of national anti-money laundering legislation based on guidance from the intergovernmental Financial Action Task Force, and the creation of financial intelligence units to prevent and suppress the financing of terrorism as well as other relevant crimes.

Border controls need further improvement, which in turn requires close bilateral and regional collaboration, along the lines of the EU's BOMCA/CADAP programmes. Inter-agency cooperation needs to be promoted nationally between anti-terrorist agencies and those fighting crime, including drug trafficking, by an exchange of operational information between such agencies as the General Prosecutors' Offices; the Ministries of Foreign Affairs, Internal Affairs, Defence and Justice; national security agencies; and border and customs services. Regional cooperation can draw from these national efforts.

The struggle against terrorism and cross-border criminality remains an urgent concern for cooperation among the governments of the region

National judicial and legal systems must be modernized to take on the drug business, crime and terrorism

Border controls need further improvement, which in turn requires close bilateral and regional collaboration

Common regional anti-terrorism strategies need to be broad-based, considering Central Asia within the larger sub-region that includes Afghanistan, Iran and Pakistan

Community and NGO involvement in the fight against drug trafficking, delinquency and terrorism needs to build on local projects already operating in the border regions (through UNDP in the Fergana Valley, for example). Formal structures could benefit from opening up to NGO participation, and devising a regional action plan that includes responsibilities for regional forums of civil society, etc.

Regional cooperation between agencies combating terrorism and those fighting crime, including the trafficking of arms and illicit drugs, remains sporadic. In practical terms, more can be done to establish regional task forces, database sharing, channels of communication and bilateral exchanges, and to develop capacity through special training programmes and workshops. The mandates of regional organizations need to be clarified. With enhanced capacity, the SCO's Regional Anti-Terrorist Centre in Tashkent could take a leading role. Regional information sharing needs to be organized by setting up a regional system of gathering data on and analysing criminal and terrorist activities. This information needs to be passed on to other countries, and appropriate regional and international bodies.

Finally, international donors need more coherent regional strategies, based on a shared understanding of threats and challenges related to drug trafficking, crime and terrorism as an integral part of the larger human development and human security challenges facing Central Asia. Common regional anti-terrorism strategies need to be broad-based, considering Central Asia within the larger sub-region that includes Afghanistan, Iran and Pakistan. They should also be oriented towards the long term, comprehensive, well-coordinated and clearly linked to the activities of international lead agencies, especially UNODC, as well as regional lead institutions, presumably the SCO. Regional programmes must also be backed by long-term and sufficient financing, given the record of projects abandoned before coming to fruition due to lack of funds.

Recommendations

For the governments of the Central Asian countries:

- Join and implement the relevant international conventions on disaster preparedness, drug control and anti-terrorism, and modernize national legislation in all three areas.
- Develop comprehensive, development-oriented strategies for addressing the underlying socioeconomic risks and challenges of natural disasters and man-made threats:

- For natural disasters, improve land use and building code regulations and enforcement, introduce insurance schemes, and develop disaster preparedness and training programmes.
- For anti-drug and anti-terrorism initiatives, combine control-oriented actions with pro-poor developmental strategies and programmes that create jobs, especially for young people, with public health and education programmes, and with efforts to reduce corruption.
- Strengthen the capacity of implementing agencies and ensure cross-agency coordination and information sharing, including among emergency preparedness and response agencies, police and security forces.
- Modernize border management for effective control of drug flows and cross-border criminal and terrorist activities, while maintaining borders 'with a human face' for ordinary people, trade and commerce.
- Systematically involve local communities and civil society organizations in disaster preparedness and response initiatives, in anti-drug campaigns, and in the design and implementation of anti-terrorism programmes.
- Ensure the protection of human rights and limit repressive responses in the fight against drugs and terrorism to minimize costs to human security and reduce the long-term risk of alienating people.

For regional organizations in Central Asia:

- Make disaster preparedness and response, anti-drug and anti-terrorism programmes high priorities, and clarify the mandates of organizations in these areas. Recent summits of the SCO and CACO have taken steps in this direction for anti-drug and anti-terrorism initiatives, but need to do so also for natural disasters, and need to follow up effectively.
- Develop regional risk assessment and planning capacities, early warning systems (especially for natural disaster hot spots), and systematic links among relevant national and regional agencies.
- Strengthen regional information collection and sharing systems for disaster management, and anti-drug and anti-terrorism programmes.
- Provide encouragement, guidance and support for national initiatives that apply best practices in balancing control and national security responses with broader developmental initiatives; that improve border management

and control, and aim for ‘borders with a human face’; and that assure respect for human rights, and the active engagement of local communities and civil society organizations.

For international partners:

- Focus more donor attention on the issues of natural disaster preparedness and prevention with a regional perspective, and support comprehensive regional approaches to anti-drug and anti-terrorism programmes with adequate and sustained funding.
- Revisit ongoing anti-drug strategies to ensure adequate attention is paid to controlling production in Afghanistan and consumption in Western Europe, China and Russia, while also setting realistic goals for what drug interdiction

programmes can achieve along the drug trafficking routes.

- Emphasize the need for community-based, development-oriented programmes of conflict prevention, drug control and natural disaster prevention. These should involve civil society, support ‘borders with a human face’ and respect human rights.
- Aim for more effective coordination of regional donor programmes in the areas of disaster management, drug control and anti-terrorism, in close cooperation with the lead regional and national agencies.
- Provide funding for research, training and information management involving regional experts and institutions in the areas of natural disasters and man-made threats.

Chapter 6

The social development challenge

“For social development issues, cooperation allows concentrating scarce resources and combining efforts for the solution of many common problems of the countries of Central Asia.”

—“*UNDP Country Background Study, Kyrgyzstan*”

For human development and human security, people – and especially poor people – also need employment opportunities, good health, a good education and access to knowledge

For human development and human security, people—and especially poor people—require not only access to markets through trade, the effective and sustainable utilization of natural resources, and the freedom from threats. They also need the essential underpinnings of social development: employment opportunities, good health, a good education and access to knowledge. The MDGs incorporate many key aspects of social development as a reflection of the important role these factors play in human development and human security. They are nowhere more important than for people belonging to excluded and vulnerable population groups, especially women and children.

Social development issues—such as migration, health, education, knowledge and gender—are generally seen as national policy concerns that do not require regional cooperation. However, the countries of Central Asia need to cooperate with each other and their neighbours if they are to meet the social challenges they face. There are direct and important regional linkages for migration patterns, while communicable diseases easily cross frontiers. Shared access to education and knowledge can open significant opportunities for all.

Even for social development issues without apparent cross-border connections, regional benchmarking and monitoring can help encourage progress towards common goals; sharing information can spread best practices; and networking can bring together governments, business organizations and NGOs to collaborate on solving problems. In this chapter, we consider the key social development challenges for Central Asia and the roles regional cooperation could play in tackling them.

Cross-border migration

Through labour migration people search to better their lives and those of their families

Cross-border migration weaves together regions, communities and countries, with risks and benefits for the migrants, their families, and their countries of origin and destination. In this

report, we are primarily concerned with labour migration, in which people search to better their lives and those of their families. But Central Asia also has a recent history of non-labour migration, especially the refugee flows experienced in the early and mid-1990s. The Tajik Civil War pushed tens of thousands of refugees into neighbouring countries, and has left behind to this day a significant number of stateless people. In May 2005, the violence in Andijan, Uzbekistan, resulted in about 500 refugees crossing the border into Kyrgyzstan. Their fate created political and social problems, and served as a reminder that human dislocation and suffering are the inevitable results of unrest or violent conflict.¹

Migration patterns

Data on migration are notoriously difficult to obtain and generally quite unreliable. Table 6.1 represents one reasonable estimate of the population shifts that have occurred in Central Asia between 1989 and 2002.

The shifts reflected by these numbers are in some cases huge. Kazakhstan lost over three million people from 1989 due to migration, or more than 20 per cent of its population; Tajikistan close to 11 per cent; Uzbekistan over 1 million, or about 4 per cent; and Kyrgyzstan more than 7 per cent. The migration movements can be divided into two broad categories: one related to political factors and the second to economics.

The first category includes ethnic Russians who, along with Germans and Ukrainians, left Central Asia immediately after independence out of concern for their political future under new regimes dominated by the titular ethnic group. These migrants were primarily well-educated and possessed technical skills. According to one estimate, more than a fourth of all ethnic Russians have left Central Asia since 1989.²

The second category has grown since the mid-1990s, when economic motivations became the principal reason for migration in Central Asia. Most migrants have left to seek better economic

Population change and migration rates in Central Asia, 1989-2002 (beginning of the year, thousands)

	Total population		Absolute change		
	1989	2002	Total	Natural increase	Migration
Kazakhstan	16,465	14,821	-1,644	1,722	-3,365
Kyrgyzstan	4,291	4,974	684	1,044	-360
Tajikistan	5,109	6,380	1,271	1,965	-694
Turkmenistan	3,534	5,500	1,966	1,103	863
Uzbekistan	19,905	25,211	5,306	6,377	-1,071

Source: Heliak n.d.

opportunities in Russia and recently in Kazakhstan. According to official Kyrgyz estimates, there are 30,000 Kyrgyz migrants in Russia, but unofficial sources in both Russia and Kyrgyzstan put the number in the range of 200,000 to 500,000, with the higher number equaling almost 10 per cent of Kyrgyzstan's total population.³ The number of migrants from Tajikistan working in Russia ranges from 5 per cent to possibly as high as 18 per cent of the population. A significant majority work illegally.⁴

Uzbekistan has between 600,000 and 1.5 million migrants, or from 3-6 per cent of its population, working primarily in Russia, but also in Kazakhstan.⁵ Although Turkmenistan, as an exception, is estimated to have experienced large net immigration in the early years after independence, from 1998 to 2000 Turkmenistan had a four times higher rate of emigration than immigration, with approximately 78 per cent of emigrants headed to Russia.⁶

Today, two important changes in migration are occurring. First, there is an increase in circular patterns of temporary migration. Workers go for three to six months, return home, go back again, and continue this cycle. Some of these are shuttle traders moving small amounts of goods across the border over the course of a few days (see also Chapter 3), but there also appear to be short-term labour migrants as well as the return of some ethnic minorities that had left in the early 1990s.⁷

Second, while most migrants in Central Asia have been male, there are now increasing numbers of female migrants. Since independence, many women have worked as shuttle traders, but now more women are also taking permanent service-sector jobs in Russia, as its growing economy has a need for more shop and service workers.⁸

Economic and social 'push' and 'pull' factors

Current migration patterns in Central Asia mainly reflect the failure of the local labour market to provide jobs, while opportunities beckon elsewhere. Institutional and social factors—especially the still widespread ability to speak the Russian language, existing transport links, and contacts with friends and family often reaching back to Soviet days—have facilitated these economic migration flows. Broadly speaking, migrants make a calculation based on what they expect they can earn abroad, on the cost of travel and relocation, and on the need to send money home to support their families (see Box 6.1). The economic factors of migration are commonly seen as 'push' and 'pull'. They represent a joint set of considerations by individuals and their families about where they face the best opportunities.

As noted in Chapter 2, the decline of real wages in Kyrgyzstan and Tajikistan; the growing unemployment, especially among youth in Kyrgyzstan, Tajikistan, and Uzbekistan; and the restrictions on trade and commerce in Uzbekistan have all been pushing younger workers to migrate to where they see better job opportunities, especially Russia. As the populations in all of these countries, except Kazakhstan, continue to increase, the pressures to migrate have become significant.

Important economic 'pull' factors prompt migrants to travel for the opportunity of earning a steady salary, in spite of significant barriers. Janybek is a street cleaner in Moscow from Batkin in Kyrgyzstan. He told interviewers that he makes \$200 a month and is planning to bring his wife to Moscow because of the good pay.⁹ Interviews with other labour migrants in

Since the mid-1990s, most migrants have left to seek better economic opportunities in Russia and recently in Kazakhstan

Box 6.1

Stories of young Tajik migrants

Here are two typical stories of young people in Tajikistan who have had to look for work elsewhere. They were pushed out by the lack of opportunities at home, and pulled by the opportunities to make a living abroad for themselves and their families.

"There was a drought for two years, and the wheat crop wasn't good. The family was close to starvation. Being the oldest son, I had to leave to look for work. We were not paid by the *kolkhoz* (Soviet-style collective farm) during the last few years."

—Unskilled labourer, 22, Khovaling district, Tajikistan

"In the last year, we haven't seen any money at all. We were not paid. I borrowed money, bought a ticket and left for Russia to seek work. I found a job in Moscow and was very surprised to discover that Russians were not cheating us, and we were paid fairly. I have to return to my mother, get married and start a family. But there is no chance of finding a paid job at home."

—Road worker, 21, Vakhsh district, Tajikistan

Source: Olimova and Bosk 2003, pp. 15, 16.

This can mean a loss of young, talented labour, but also act as a safety valve

Russia indicate that the workers are principally concerned with earning enough to send back money to their families in Central Asia. A worker from Tajikistan stated, "Even if they send me back 10 times, I will return to Russia again and again. I just have to go."¹⁰

Costs and benefits for countries and communities

Migrants are often the most highly motivated and skilled members of the workforce in the community of origin. For the labour-exporting country, this can mean a loss of young, talented labour.¹¹ At the same time, out-migration can act as a safety valve, relieving the pent-up pressure of those who are unable to find work in their hometowns, especially young men. While the creation of long-term job opportunities at home should be a high priority in the longer term, easing opportunities to migrate for those who are unemployed, disgruntled and poor in the short to medium term can bring on balance significant benefits to the country and community of origin.

Among the benefits of migration, remittances weigh heavily. The majority of remittances in Central Asia, as elsewhere, are handled informally, so tracking and accounting for them is very difficult. According to official statistics, the level of remittances is about 5 per cent of GDP for Tajikistan and 2.3 per cent for Kyrgyzstan. But Government ministers in Tajikistan have estimated remittances at as much as 20 per cent of GDP.¹² This discrepancy in the numbers highlights how little is known about remittance flows, and the corresponding economic and social impact. It is clear that remittances are important sources of income for many poor families as well as in aggregate terms for the country as a whole. Moreover, migrants return home with new skills. Many open their own businesses that provide new jobs. In Uzbekistan, new businesses opened by returning migrants have created up to an estimated 350,000 new jobs.¹³

Despite the huge contributions from remittances, weak governance and banking institutions create barriers to transferring them. Individuals have to overcome these, often by carrying money back home or sending it through friends and acquaintances. This reduces the wider economic benefits that would accrue if these important financial resources were intermediated through the banking system. It also creates personal hardships for the migrants and their families. As a 31-year-old hired worker from Dushanbe,¹⁴ put it: "The biggest problem is sending remittances or bringing the money home with you. The whole time you're afraid someone will take away everything you've earned.

According to official statistics, the level of remittances is about 5 per cent of GDP for Tajikistan and 2.3 per cent for Kyrgyzstan; but government ministers in Tajikistan have estimated remittances at as much as 20 per cent of GDP

Illegal migrants tend to have the lowest paid jobs in the countries of destination, are subject to being fired and deported at any time, and are often poorly treated, without recourse to any legal protections

Customs officials, border guards and police in all countries we pass through take money away from us. Racketeers extort money from you. They rob, beat or even kill you."

As an encouraging sign that real progress is possible on this issue, the Tajik Government in 2003 developed a mechanism that allowed money transfers through the banking system without the need to establish a bank account, and encouraged Tajik banks to establish correspondent business with foreign banks for transferring money on behalf of individuals. As a result of this change, transfers from migrants through the banking system increased from \$75 million in 2001 to \$256 million in 2003.¹⁵ Other countries, such as Kyrgyzstan, have also implemented steps to assist with money transfers, but specific measures are still needed in the official banking sector to increase legal remittances.

The downside of migration includes the problems migrant workers face in the countries where they work, since many are illegal immigrants with no employment rights.¹⁶ Illegal migrants tend to have the lowest paid jobs in the countries of destination, are subject to being fired and deported at any time, and are often poorly treated by their employers and local officials, without recourse to any legal protections.¹⁷ A step towards easing these burdens came in 2004, when Russia signed an agreement with Tajikistan that will allow Tajik migrants to become legally registered workers with health insurance. Once ratified by the Russian Parliament, this could be a significant boost for immigrant workers and their families and communities back home.¹⁸ Russia will reap benefits as well. In the face of a shrinking population, it can shore up its declining labour force by hosting productive Tajik migrants.

Barriers to labour migration

While labour migration can yield positive economic and social benefits for both the sending and receiving countries, there are tremendous informal and institutional barriers erected by the sending, receiving and transit countries in Central Asia and the CIS. Immediately after the break up of the Soviet Union, the CIS countries declared mutual recognition of each country's passports and a visa-free regime. Throughout the past 15 years, however, institutional barriers have increasingly restricted the free flow of migrants and citizens. Since July 2005, authorities no longer accept the internal CIS passports at borders—they require international passports or even a visa. These travel documents generally can only be obtained at considerable costs, involving time, travel and visa fees in the capital city. These are prohibitive for many

poor travellers and migrants, who therefore try to cross the borders illegally, bribing border guards where necessary. While there is a legitimate need to enforce border security, there is also a need for reasonable visa and migration policies.

Half of all respondents in a recent survey conducted in Central Asia felt that the new border arrangements had a negative impact on trade and transport, on access to family and friends, and on business (see also Chapter 3). For those who travelled across the borders for work or trade, respondents from Kyrgyzstan and from Uzbekistan both listed border, visa and customs controls as the number one difficulty.¹⁹ In addition, more than a third of the respondents were dissatisfied with the treatment by customs service employees, border guards, and immigration officials. From verbal or physical abuse, to demands for bribes, to the arbitrary refusal by guards to allow workers to cross, migrants and ordinary citizens face a constant battle to legally enter a neighbouring country (see Box 6.2). As one Tajik shuttle trader put it: "While travelling through several republics, we pass plenty of border, customs and militia posts. Customs and passport checks are very exhausting. If we arrive at the border in the evening, border guards and customs officials will keep us there till morning unless we pay what they demand. It's not a life, it's a nightmare."²⁰

Economic and social obstacles also prevent labour migration. The combined costs of travel, housing, visas and bribes keeps those most in need of better jobs, namely the poorest, trapped in their

communities even if they wanted to migrate. Added to this are the social barriers to travel and work in another country. The increasing ethnic abuse and discrimination towards migrants in Russia discourages workers from both travelling to the country and then registering when they arrive. There has been a disturbing increase in Russia in the number of skinheads and other nationalist extremists who will use violence against any perceived immigrant, legal or not.²¹

There are tremendous informal and institutional barriers to migration erected by the sending, receiving and transit countries in Central Asia and the CIS

Migration policy for 'borders with a human face'

Central Asia is a region where crossing borders for economic or social reasons is a daily necessity for many. To enhance the human development of the region, there is a pressing need to have 'borders with a human face', as described in Chapter 3, especially to facilitate labour migration.

There are specific steps that Central Asian governments, their neighbours and the international community could take, starting with improved border management. This includes clear and simple requirements that are easily understood by border guards and travellers, and requires the training and oversight of border guards as well as the control of corruption and bribery. Second, country documentation needs to be recognized across Central Asia. While some bilateral and multilateral treaties on mutual recognition have been signed, few are actually implemented. Simplified

Box 6.2

Organizing a trip for migrants from Tajikistan to Russia

The travel organizer—also referred to as the 'caravan driver'—gathers a group of labour migrants who want to go from the Tajik city of Khujand to Krasnoyarsk in Russia by bus, and registers their documents for the trip. In order to transit Uzbekistan, a transit visa is required. It costs \$6 per person, but organizers collect \$10 to \$12 from each passenger due to 'extras'. In order to get a collective transit visa, the caravan driver makes the list of passengers; registers it in the notary office in the department of the Tajik Ministry of Security; and collects passport photocopies, photos, medical certificates and certificates stating that individuals don't have HIV/AIDS or other infectious diseases. Then the caravan driver leaves for Dushanbe, where the Uzbek Embassy is located, submits the documents and waits for the visa. As a rule, this takes one to two weeks, sometimes up to a month.

After the caravan driver has obtained the visa and collected all necessary documents, after an examination of the bus for drugs by search dogs, and after each passenger has acknowledged that he or she does not have drugs, the bus leaves Khujand for Russia. At the Tajik-Uzbek border, it is necessary to pay an official customs duty of \$50 per bus, and bribes to Uzbek border troops and customs officers of \$5 per passenger. The procedure of customs clearance is that passengers have to leave the bus during the luggage examination. If the driver disagrees with the amount of bribe requested or the passengers get angry, Uzbek customs officers organize a detailed drug search of the bus. While on Uzbekistan territory, the bus is escorted by an official escort that charges \$70 to \$80. Overall, expenditures on transit through Uzbekistan typically amount to \$2,000. The 150-kilometre transit usually takes one to two days. In Kazakhstan, the bus is escorted as well. The escort charges \$1,500 per trip and facilitates contacts with police posts along the route. Typically, a bus pays \$15 to \$35 at each police post. Total travel time from Tajikistan to Russia is 22 to 24 days.

Source: Interview with a bus driver on 11 April 2004 in Khujand, as reported in the "UNDP Country Background Study, Tajikistan."

The countries of origin should take an active role in protecting the rights of their citizens working in other countries

passport and visa regimes that apply region-wide would much enhance the movement of people and goods.²²

Third, specific laws are needed to aid shuttle traders and day labourers. Not all migrants plan to stay in another country permanently. Shuttle traders and day labourers are often subject to the greatest amount of abuse, since they are unable to pay large bribes or seek alternative routes. Since they provide important services in terms of trade and labour, it is in the interest of all Central Asian countries to establish clear and documented regulations that aid their daily movements.

A fourth step would be to provide incentives to banks to handle labour migrants' remittances. The banking regulatory bodies in the region and of neighbouring countries should take an active role in encouraging the legal transfer of monies through the financial sector.

Finally, the countries of origin should take an active role in protecting the rights of their citizens working in other countries. This includes both proactively negotiating bilateral agreements with receiving countries, as well as providing information for migrants and their families, setting up legal clinics for migrants in neighbouring countries, and negotiating for more favourable visa and passport regimes. As noted above, Tajikistan has successfully worked with Russia to establish bilateral agreements on the treatment of migrants. These kinds of negotiations might have more power and weight if they were approached regionally rather than by individual nations.

Increased poverty, the decline of social safety nets and higher incidences of communicable and non-communicable diseases sharply reduced life expectancies

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Challenges to regional health and health care

In the early years after independence, economic decline and inflation severely shackled state spending on health in Central Asia, a trend that continued even after 1995, except for Turkmenistan (see Figure 6.1). Tajikistan spends considerably less in per capita terms for public health than do the other countries. But even those with more funding lag behind Hungary and Russia in total health spending (see Figure 6.2). With the collapse of public finances, the Central Asian countries have had to restructure financial mechanisms in the health sector. An increasing share of private health care financing, especially in the poorest states, has extracted higher out-of-pocket payments that have meant greater burdens for patients, particularly those who are poor.²³

Consequently, basic health indicators in Central Asia have deteriorated. Increased poverty, the decline of social safety nets, and higher incidences of communicable and non-communicable diseases have sharply reduced life expectancies since independence (see Figure 6.3), although the numbers began improving again in the late 1990s. Male life expectancy took a particularly severe drop. This trend can partly be explained by behavioural reasons, such as emotional stress, excessive consumption of alcohol, smoking and drug abuse. Although women's life expectancy is higher than men's, the health of women on balance is probably not any better, as maternal health services have declined, and medical treatment for girls and women is often given lower priority than that for men.

Public expenditure on health
(per cent of GDP, 1995 and 2002)

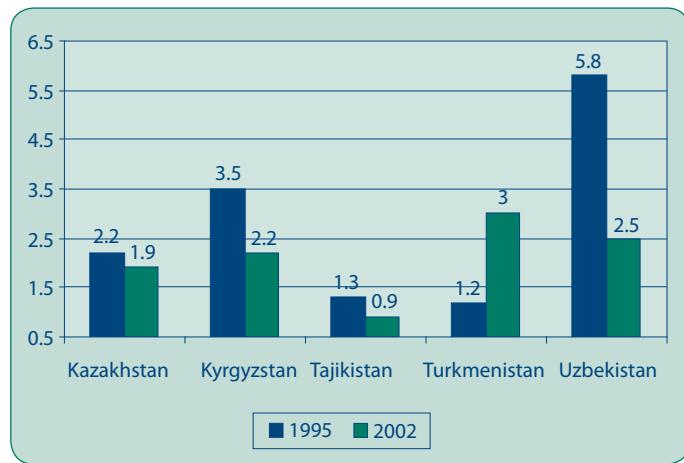


Figure 6.1

Health expenditure per capita, 2002 (PPP \$)

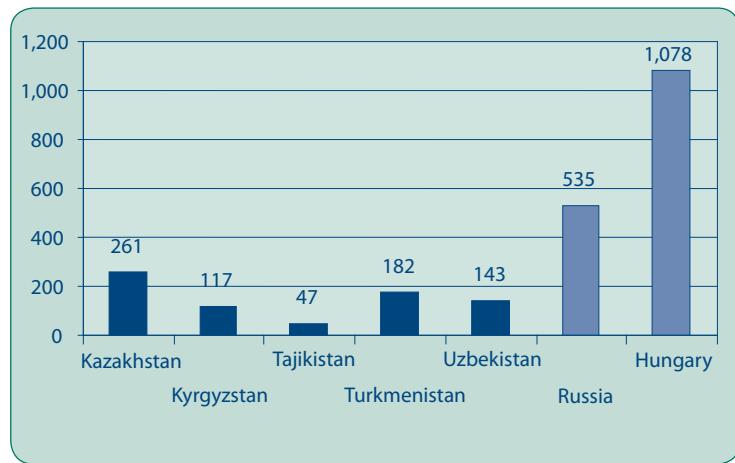
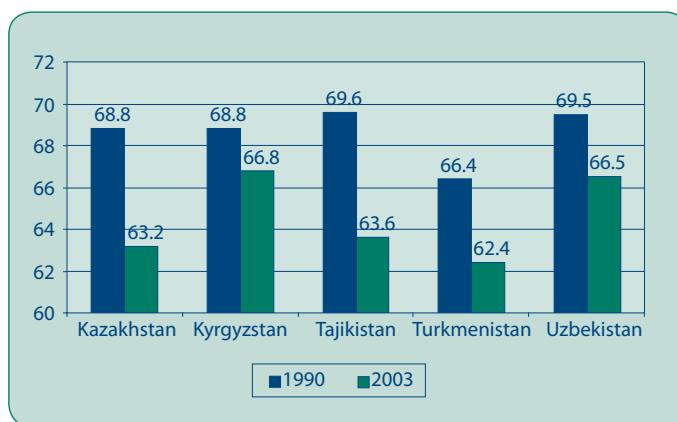


Figure 6.2

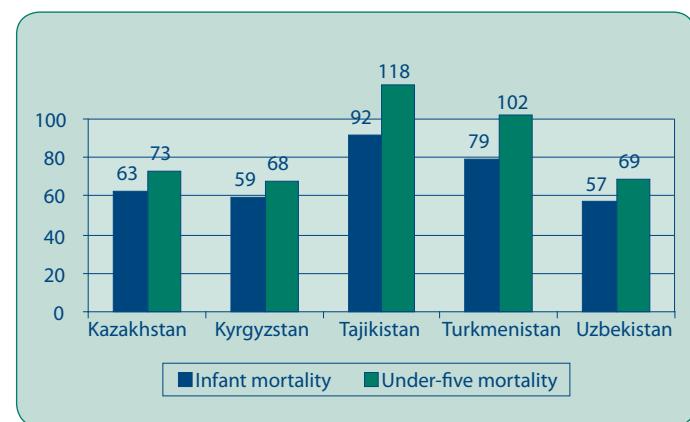
A decrease in life expectancy at birth
(total years between 1990 and 2003)



Sources: UNDP 1993, pp. 135-136 and UNDP 2005, pp. 220-221.

Figure 6.3

Infant and under-five mortality
(per 1,000 live births), 2003



Source: UNDP 2005, pp. 251-252.

Figure 6.4

The rates of infant, under-five and maternal mortality along with chronic malnutrition and micronutrient deficiencies continue to be higher in Central Asia than in the other post-Soviet republics. Diseases of the respiratory system, perinatal illnesses, and infectious and parasitic diseases are among the main reasons for infant mortality. The Central Asian countries have not been able to maintain the high immunization coverage of the 1980s. In many areas, children and women suffer from iron-deficiency anaemia and iodine deficiencies.²⁴

Official estimates of infant and under-five mortality show a significant variation across Central Asia. Surprisingly, mortality rates are higher in resource-rich Kazakhstan and Turkmenistan than in Uzbekistan and Kyrgyzstan (see Figure 6.4). However, these differences are likely to be overstated, since official and survey-based estimates of infant mortality diverge significantly. In Uzbekistan, survey-based infant mortality is a third higher than official data; in Kyrgyzstan, Tajikistan and Turkmenistan, it is two times greater.²⁵ The divergence is based on different approaches to reporting.²⁶ Under-reporting and poor statistical practices prevent effective monitoring and benchmarking at national and regional levels, including for monitoring progress towards achieving the MDGs.

There is also a striking difference in maternal mortality rates among Central Asian countries,²⁷ again probably due to problems in reporting methodology and practices. However, there is little doubt that Central Asia has severe problems with maternal health, particularly in Kyrgyzstan and Tajikistan.²⁸ Across the region, high maternal mortality rates are caused by early pregnancy, multiple births and short intervals between births, a high abortion rate, and inadequate care during

pregnancy and after delivery. In Tajikistan, birth attendance by skilled personnel decreased from 93.6 per cent of all births in 1989 to 67.3 per cent in 2001.²⁹ More and more women give birth at home due to poverty, and the lack of transportation and communication between district health centres and the villages many live in.

The two principal communicable disease threats in Central Asia are tuberculosis and HIV/AIDS

The threat of communicable diseases

From a regional perspective, one of the most critical health problems is the growth in communicable diseases. The two principal communicable disease threats in Central Asia, as in much of the former Soviet Union, are tuberculosis (TB) and HIV/AIDS. These are devastating illnesses that spread across borders and require a coordinated regional response, especially given the rapidly worsening epidemiological situation in Central Asia.

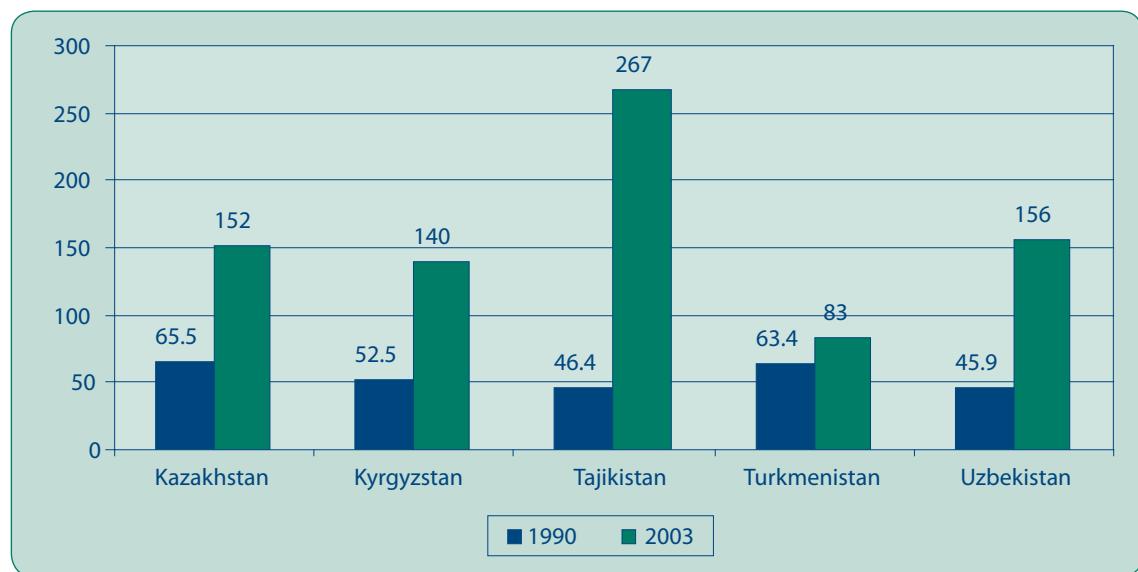
The increase in TB incidence since independence has stemmed from the severe deterioration of socioeconomic conditions and the health care system. A number of cross-border transmission mechanisms help the spread of TB, including labour migration; poor veterinary control of cattle and its main products, milk and beef; and the HIV epidemic.

From 1990 to 2002, TB incidence doubled or worse in most Central Asian countries (see Figure 6.5), affecting mostly poor and young people. Aside from the health consequences for individual people, the epidemic has a serious development impact, since it results in productivity losses estimated at between 0.5 and 0.8 per cent of GDP every year.³⁰

The World Health Organization (WHO) has recommended that all Central Asian countries adopt the directly observed treatment short course (DOTS) for TB.³¹ According to WHO, case

The incidence of tuberculosis, 1990 and 2003 (number of cases per 100,000 people)

Figure 6.5



Sources: See <http://data.euro.who.int/cisid> and UNDP 2005.

Official statistics very likely understate the real extent of HIV/AIDS prevalence

detection was approximately 40 per cent in 2002, and the treatment success rate between 78 and 82 per cent among patients treated under the DOTS strategy.³² By introducing DOTS in prisons, where TB rates are exceptionally high, Kazakhstan succeeded in reducing its mortality rate, which could be a good signal for the neighbouring states.³³

The Central Asian republics have expressed political commitment to meeting the MDG targets for TB control by 2015, but experts doubt they will be successful.³⁴ This would require much better coordination among national agencies, typically the Interior Ministries and the Ministries of Health, along with regional cooperation and substantial amounts of international financial support.

In addition to and linked with the TB epidemic, Central Asia faces a skyrocketing growth in HIV/AIDS cases, with recorded cases soaring by 1,600 per cent from 2000 to 2004—8,078 cases had been registered by 2004, compared with only 50 in 1996.³⁵ The HIV epidemic in Central Asia is now growing faster than in most other regions of the

world, with an alarming increase in measured incidence between 2000 and 2003—threefold in Kazakhstan, nine-fold in Kyrgyzstan, 17-fold in Tajikistan and 16-fold in Uzbekistan.³⁶

The official statistics very likely understate the real extent of the disease: According to local and international experts, HIV/AIDS prevalence is at least 10 times higher than official reports.³⁷ The Center for Disease Control and Prevention in Central Asia estimates that 90,000 people in the region live with HIV/AIDS. The highest incidence of newly diagnosed HIV infection occurs in cities located along the drug-trafficking route from Afghanistan to Russia. Among the Central Asian republics, Kazakhstan has the largest number of people living with HIV/AIDS and the highest prevalence rate (see Table 6.2 and Box 6.3). The lower incidence found in other countries likely reflects in part less adequate systems of monitoring.

A number of factors are driving Central Asia's HIV/AIDS epidemic: increasing trade in and use of intravenous drugs, corruption, institutional weaknesses in health care, poverty and

HIV prevalence estimates, end 2003

Country	Adults and children (0-49) living with HIV	Adult (15-49) HIV-prevalence rate
Kazakhstan	16,500 (range: 5,800-35,000)	0.2% (range: 0.1-0.3%)
Kyrgyzstan	3,900 (range: 1,500-8,000)	0.1% (range: <0.2%)
Uzbekistan	11,000 (range: 4,900-29,000)	0.1% (range: 0-0.2%)

Table 6.2

Source: UNAIDS 2004b.³⁸

Box 6.3

Fighting HIV/AIDS in Kazakhstan

In Kazakhstan, the rapid increases in the number of injecting drug users, now estimated at 250,000, and sex workers, approximately 20,000, are key factors behind the current HIV/AIDS epidemic. Officially, some 4,600 HIV/AIDS cases have been registered in the country; the vast majority are people who have acquired HIV through intravenous drug use. However, experts believe the true number to be closer to 20,000, with a gradual shift towards sexual transmission. Under an optimistic scenario, the cumulative number of HIV-positive individuals could rise to 20,000 in 2010 and 40,000 in 2015. The pessimistic scenario would result in substantially higher prevalence rates, with 170,000 infected in 2010 and 490,000 infected in 2015.

Traditionally, as a result of public opinion and government policy, people living with HIV/AIDS in Kazakhstan have faced deep stigma, social isolation and sometimes abandonment by their families. There is a strong association in the public mind between HIV/AIDS and injecting drug use, a practice that is widely despised.

The national Government has now adopted a comprehensive programme on HIV/AIDS prevention, supported by the Global Fund to Fight AIDS, Tuberculosis and Malaria; the World Bank; Joint UN Programme on HIV/AIDS (UNAIDS); UNDP; USAID; the Open Society Institute and many other international organizations. The programme covers the establishment of government health facilities charged with HIV prevention and AIDS care in all 14 provinces. They offer HIV tests and register HIV-positive persons. One of the challenges for Kazakhstan, as in much of the rest of the former Soviet Union, is to integrate this work into facilities that treat TB, sexually transmitted infections or drug dependency.

Another part of the Kazakhstani programme focuses on reducing the incidence of drug use. Eleven ministries and departments are working on more effective measures to combat drug trafficking. The Kazakhstani Interior Minister believes that the number of drug addicts fell by 10 per cent in 2004, mainly due to wide media coverage. Special financing and airtime has been allocated to cover anti-drug issues.

Sources: World Bank 2004f, Human Rights Watch 2003 and IRIN 2005c.

unemployment, rural/urban and interstate migration, and changing social and cultural practices. The increased sexual transmission of the virus threatens to spread the epidemic to the wider community beyond drug users, with the number of women with HIV already on the rise.

Together, TB and HIV/AIDS take a heavy toll on the economies of Central Asia. The cost for HIV/AIDS prevention and treatment could top \$1 billion for the period 2004 to 2007.³⁹ Neither individual nor national health budgets are able to cover the high costs of antiretroviral, life-prolonging treatments, which range from \$1,000 to \$10,000 per year per patient. According to a World Bank study, public budgets in Central Asia will not be able to cope with HIV treatment unless the infection rate slows or the costs are cut drastically.⁴⁰ At current rates, Kyrgyzstan would have to spend \$4.4 billion in 2015 on HIV antiretroviral treatment alone, a figure twice the country's present GDP.⁴¹ In the medium term, Central Asia must take preventive measures to slow the spread of HIV and negotiate the prices of antiretroviral drugs to maintain a balanced budget. A regional approach to price negotiation may be one viable option.

National ministries of health have developed national HIV/AIDS programmes, often in partnership with organizations such as the Global Fund to Fight AIDS, Tuberculosis and Malaria, UNAIDS, UNDP, the World Bank, the Open Society Institute and USAID. Since the end of the 1990s, needle exchange and condom promotion programmes have shown some effectiveness in reducing infections among drug users and sex workers.

The Open Society Institute supported NGO and state organizations to establish needle exchange points across the region except in Turkmenistan, in an attempt to reach a significant percentage of the estimated 500,000 injecting drug users in Central Asia with a package of services including disposable syringes, condoms and education about the transmission of the infection. A regional Global Fund project included a special component aimed at prevention activities among labour migrants, their families, street children and prisoners. In early 2005, with backing from the international community, CACO funded an innovative project to support a regional strategy to fight HIV/AIDS (see Box 6.4).

Unfortunately, contradictory public policies hamper HIV/AIDS prevention. National legislation allows enforcement of draconian measures against intravenous drug users.⁴² Since drug users feel threatened by arrest, prosecution and imprisonment for possession of heroin, they do not want to seek diagnosis or treatment of HIV/AIDS for fear of being jailed. They may have no access to sterile syringes and information. Coordination and harmonization of drug enforcement and HIV/AIDS policies is critical if they are not to undermine each other.

Other communicable diseases with regional impacts affecting Central Asia include sexually transmitted diseases, which are directly connected in their incidence to HIV/AIDS, and have also expanded rapidly in the 1990s.⁴³ Diarrhoea, typhoid fever, viral hepatitis and most importantly malaria are being spread through polluted canals, rivers and water bodies. According to a 2002 WHO

Neither individual nor national health budgets are able to cover the high costs of antiretroviral, life-prolonging treatments

Multi-donor support of a CACO regional project to combat HIV/AIDS

A regional, multi-donor project on HIV/AIDS started with a regional study that analysed recent epidemiological data; calculated the potential economic costs of an unchecked regional epidemic; and provided detailed assessments of the need for surveillance, prevention, treatment and care. The study also provided an inventory of country-specific efforts to fight HIV/AIDS, which are being supported by a range of donors.

Based on this analysis, the World Bank worked with a group of international donors in supporting four of the five Central Asia states (excluding Turkmenistan) on developing a regional strategy. The project was set up under the auspices of CACO, and marks the first time a regional intergovernmental organization has been directly involved in joint activities between nations and external agencies.

With \$27 million in funding, the project has three main goals: to reduce the growth of HIV/AIDS between 2005 and 2010; to establish a Regional AIDS Fund to finance HIV/AIDS prevention and control activities beyond the end of the project; and to contribute to better regional cooperation. Activities will focus on helping to set up a legal environment that would include prevention work with vulnerable groups; to improve information and decision-making based on good quality epidemiological data; and to strengthen institutional capacity and cross-border cooperation, as well as cooperation between the public and private sector, and between different public services, such as HIV/AIDS centres and prisons.

Based on favourable initial experiences, efforts are now underway to set up a similar programme for combating TB.

Source: World Bank 2005d.

An ongoing regional malaria epidemic continues to expand

study, an ongoing regional malaria epidemic continues to expand from districts bordering Afghanistan to new areas, especially in the Fergana Valley. Malaria, once eradicated, is now endemic in many parts of Tajikistan, and the WHO estimates that 400,000 new cases occurred in 2002. Finally, the recent outbreak of severe acute respiratory syndrome (SARS) and the incipient spread of avian flu from South East Asia are important reminders of the need to be ready for potentially devastating epidemics that require not only national, but also regional and global response capacities. Central Asia is certainly not immune to these threats and regional cooperation will be an important ingredient to protect against them.

Regional approaches to health

All Central Asian countries have had to confront the inheritance of a Soviet health care system that provided wide, if inefficient access to health services of reasonable quality, and which, after independence and severe economic recession, became fiscally unsustainable. Governments have made significant efforts to reform their ailing healthcare systems, but the process of reform has led each government to remodel these systems in different ways, reflecting specific national political and economic priorities. Nonetheless, these countries share the same legacy of health care management and broadly similar challenges for the future.

Common policy issues start with restructuring and downsizing the large and rapidly deteriorating physical stock of health facilities, and reducing the excessive quantity of health care personnel, while

improving the pay and training of those who remain.⁴⁴ A second issue is the reform of health care financing mechanisms, including patient fees, insurance schemes and incentive-based payments for health.⁴⁵ Other challenges include reducing corruption in health care, which according to surveys is seen as a widespread problem;⁴⁶ tackling increasing costs and bureaucratization; and assuring access to health care by the poor. In general, the lack of administrative and institutional capacity and poor governance in health services hinders both national health care and any potential for regional cooperation.

Both in searching for an effective health care system and in addressing cross-border issues related to communicable diseases, the Central Asian countries can cooperate with one another. The previously over-centralized and rigid system of health care administered from Moscow limited innovations and local initiatives. New decentralized approaches can help identify suitable models of health care that could be evaluated regionally, with cooperation on analysing the lessons learned, and sharing best practices in monitoring and benchmarking.

Some progress in this direction is already being made. A regional information network for Central Asia (CARINFONET) was established in the mid-1990s with WHO support. It features a regional health indicator database, an annual statistical publication, and a network of health professionals from across the region who are responsible for collecting, processing and disseminating health data and statistics.⁴⁷ More recently, regional cooperation has taken off in working on HIV/AIDS and may follow on TB (see Box 6.4). Further

New suitable models of health care could be evaluated regionally, with cooperation on analyzing the lessons learned, and sharing best practices in monitoring and benchmarking

regional initiatives along these lines could be pursued for other areas, along with strong national programmes.

One way to develop a regional approach to health sector benchmarking and monitoring would be to use national and regional adaptations of the MDGs and their specific targets. Since such monitoring is already being carried out by UNDP on a country-by-country basis, it would be a simple step to take a Central Asian regional approach. Coupled with related analysis of differences in progress across countries, this could then form the basis for reviews and exchanges of opinions, experiences and best practices in one of the regional organizations, such as CACO or SCO.

There are other ways regional cooperation could help health care in Central Asia. For example, from 1999 to 2003, under an agreement between Russia and Uzbekistan, 550 medical professionals received training in leading medical centres in Russia.⁴⁸ Similar training and medical student exchanges could also be developed on a regional basis. Another example could be cooperation among border communities and border control agencies so that the closest health care facilities would be available for emergencies.

While regional cooperation offers some obvious benefits and has been shown to work through the joint actions of the Central Asian countries and the donor community since the late 1990s, not all countries are evenly involved. Turkmenistan in particular has consistently opted out of regional initiatives against communicable diseases. In general, both in the public sector and civil society, the level of regional networking on the pace of health reform and health-related problems remains low. Another challenge is the lack of reliable statistics and the use of different data collection methodologies, which impede regional benchmarking, monitoring and evaluation of health reforms. A number of health indicators continue to be politicized.

One obvious area in which regional cooperation has fallen short involves the serious gaps in regional health strategies for mobile population groups such as migrants, long-distance truck drivers, intravenous drug users and sex workers.⁴⁹ While new market relations and economic hardship prompt people to move throughout the region, a great number have very little access to health facilities and health-related information, and contribute to the regional spread of communicable diseases.

Fortunately, Central Asia has a number of strengths that should be helpful in responding to these and other concerns. With a history of successful achievement of high levels of health care, the region clearly

has the human capacity for better services and the understanding that superior health outcomes are essential for human development and human security. Furthermore, examples of modern national health sector reform and of successful regional cooperation point the way towards the future. An increased recognition among the leadership as well as the people in the region that the health crisis is very serious and that concerted action is needed in a number of areas hopefully will further strengthen the resolve to implement reforms and cooperate in this key area.

One way to develop a regional approach to health sector benchmarking and monitoring would be to use national and regional adaptations of the MDGs

Education, knowledge and communication

Centralized educational policy, unified school curricula, an integrated tertiary education system that allowed students to study throughout the Soviet Union, and widely dispersed research networks were the hallmarks of the Soviet education system, along with large financial flows centrally allocated to make it work even in the poorest regions. Once this fell apart, Central Asia's newly independent states were no longer able to provide the quantity and quality of education, research and knowledge that people had become accustomed to. In some countries, the reduced use of the Russian language as a lingua franca has also posed a barrier to communication, especially among the young and less well educated. At the same time, the rise of the Internet has provided new opportunities for region-wide and global communication, and contacts among the countries of the region in culture, media and civil society continue to flourish in many areas.

Regional cooperation has fallen short in the health of mobile population groups such as migrants, long-distance truck drivers, intravenous drug users and sex workers

The crisis of education

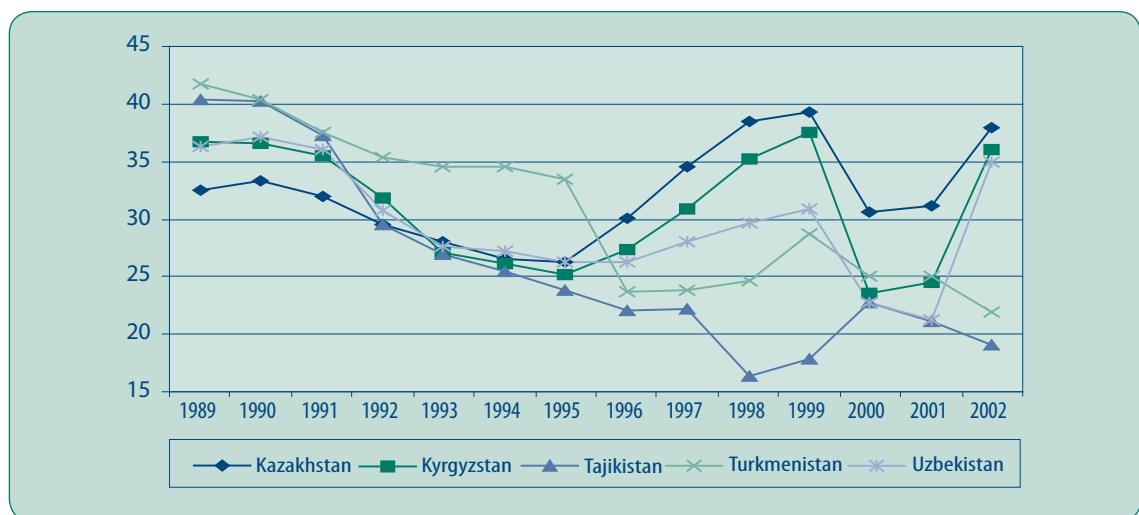
Since independence, each nation has started developing its own model of education, with a widening divergence in education reforms attributable to differences in social openness and progress on the transformation to a market economy. The countries more advanced in market reforms have tended to make more profound reforms in their education systems, compared to the countries that retained large elements of the old command economies.

However, all states face educational systems in distress, as they confront three interrelated problems: a crisis in basic and secondary education, a serious challenge in tertiary education, and the growing barriers of languages. This comes at a time when the Central Asian nations are still very young despite declining birth rates: the share of people under age 17 ranges from 32 per cent of the total population

Since independence, each nation has started developing its own model of education, due to differences in social openness and progress on the transformation to a market economy

General secondary enrolments (gross rates, as % of population aged 15-18)

Figure 6.6



Source: UNICEF 2004.

The previously well-organized preschool system in the region has broken down, which affects children at a critical age and also limits women's participation in social and economic life

in Kazakhstan to almost 48 per cent in Tajikistan.⁵⁰ As is the case with health care, regional cooperation on education could facilitate the sharing of experiences and best practices, regional benchmarking and in some cases the mutually beneficial pooling of scarce resources.

Basic and secondary education

After independence, enrolment in basic education declined in Central Asia, and school attendance and completion rates fell. In Tajikistan and Turkmenistan, general secondary enrolments have roughly halved between 1989 and 2001. However, three other countries, Kazakhstan, Kyrgyzstan and Uzbekistan, have overcome to a certain extent transitional constraints and reached pre-independence enrolment levels in the early 2000s (see Figure 6.6). Official data on school attendance probably do not reflect the actual situation in rural communities. A UNICEF and UN Educational, Scientific and Cultural Organization (UNESCO) survey in Kyrgyzstan revealed that the problem of low school attendance and the number of missed classes is substantially higher than the officially registered data.⁵¹ A number of factors have caused the lower attendance rates: poverty and the rise of child labour, limited access to safe transport, heating problems, and formal and informal fees that school administrations have to collect for maintenance of infrastructure and as incentives for teachers.

There are two other alarming trends. First, the previously well-organized preschool system in the region has broken down, which affects children at a critical age and also limits women's participation in social and economic life. The most significant drop in pre-primary enrolments (by about three

quarters) occurred in Kazakhstan and Kyrgyzstan. Even in Kazakhstan, which is economically stronger than the other Central Asian countries, after 1990 more than 80 per cent of all kindergartens were closed.⁵² Second, there has been a serious weakening of vocational and technical secondary education over the last decade: In Kazakhstan, Kyrgyzstan and Tajikistan, enrolment among the group aged 15 to 18 fell by half. In Turkmenistan, it dropped to one fifth. In contrast, Uzbekistan successfully managed this crisis, and vocational/technical secondary education enrolment has already reached its pre-independence level (see Figure 6.7).

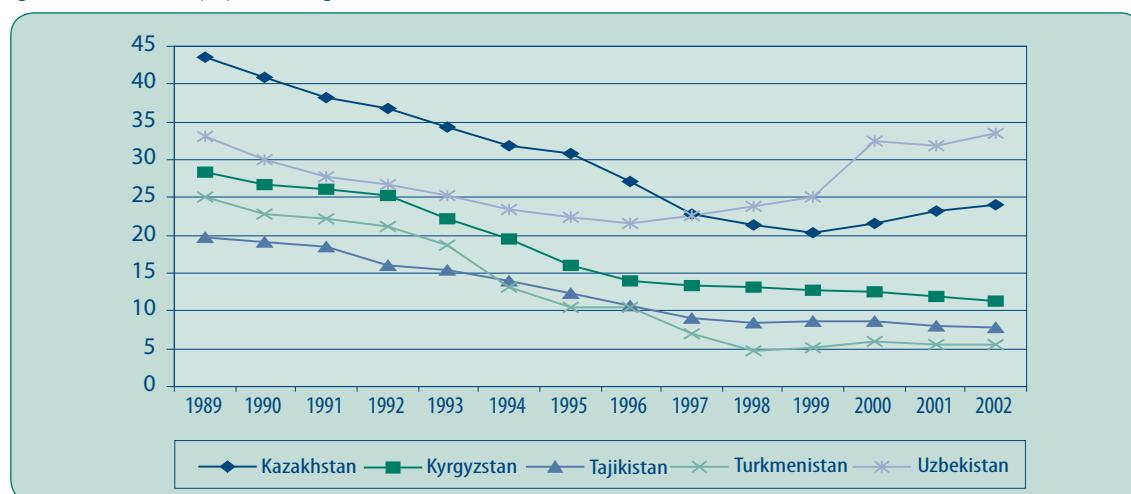
Public spending on education fell drastically in all Central Asian countries after independence, especially in Kyrgyzstan and Tajikistan.⁵³ Between 1990 and 2001, public expenditure on education as a per cent of GDP shrank from 9.7 to 2.4 per cent in Tajikistan and from 8.3 to 3.1 per cent in Kyrgyzstan (whereas the world average is 4.1 per cent).⁵⁴ This has taken place even as GDP itself has been falling, making the cuts in absolute spending that much more dramatic. Severe expenditure cuts in education have led to falling school quality and attendance, and the deterioration of educational infrastructure. They also have resulted in significant reductions in teacher pay, even as the teaching profession has become less prestigious. Teachers therefore drift into other professions, take on multiple jobs or emigrate. In Kyrgyzstan, for instance, many qualified teachers have left for Russia, and more recently have gone to Kazakhstan.⁵⁵

As a result of these trends, educational achievements are falling. The level of illiteracy is increasing among children from poor families, especially in rural communities. Gender-related

The level of illiteracy is increasing among children from poor families, especially in rural communities

Vocational and technical secondary enrolment in Central Asia
(gross rates, as % of population aged 15-18)

Figure 6.7



Source: UNICEF 2004.

problems have become more serious, with impoverishment and re-emerging cultural practices of gender discrimination encouraging a disproportionate drop in the enrolment of girls in secondary education. This has been especially notable in Tajikistan and Uzbekistan (but not in Kazakhstan).⁵⁶ Often female adolescents in rural areas are induced to marry early or to discontinue learning because of domestic chores. And as the out-of-pocket expenses for schooling have increased, poor families have cut education spending first for daughters. This rising gender disparity will have serious long-term implications for the economic and social status and well-being of women in Central Asia, as well as more generally negative human development impacts due to the well-established link between female education and health, education and human development indicators.

Another problem associated with poverty and with the decline in the education and social security systems is the growing number of vulnerable children. The evidence is so far anecdotal, but it indicates a serious new trend. For example, it is estimated that in Bishkek alone there are up to 800 street children trying to survive in a hostile environment.⁵⁷ There are also media reports about growing child prostitution.⁵⁸ Vulnerable children are commonly harassed by criminals and police, and while a few NGOs try to help, their capacity is very limited.⁵⁹

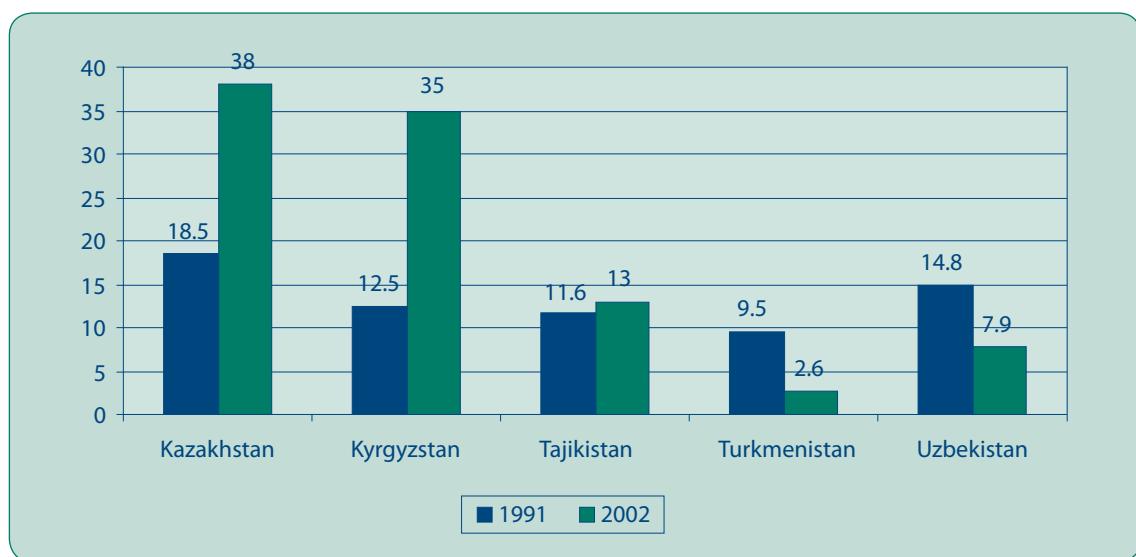
Tertiary education

The challenge of higher education reform has also been serious, with radical differences in approaches across countries. In Turkmenistan and Uzbekistan, the state continues to hold

a strong monopoly over tertiary education; state ideology heavily affects the curriculum and academic freedom. In contrast, Kazakhstan and Kyrgyzstan have undertaken progressive institutional changes in decentralizing tertiary education, encouraging private education and achieving academic freedom over the last 15 years. In Kazakhstan, the reorganization of higher education was facilitated by the greater economic and financial resources available. Politically more open but economically disadvantaged, Kyrgyzstan has had to rely mostly on external aid for its reform. In both countries, new private colleges and universities successfully compete with state educational institutions. Higher education establishments, both private and public, enjoy significant autonomy from the state and can draw on multiple sources of financial support. Higher education enrolment remarkably increased 2.0 times in Kazakhstan and 2.8 times in Kyrgyzstan from 1991 to 2002, whereas in Turkmenistan and Uzbekistan, enrolment fell 3.7 and 1.9 times, respectively (see Figure 6.8).⁶⁰

Despite severe cuts in state budgets, the number of universities is increasing in the region

Despite severe cuts in state budgets, the number of universities is increasing in the region. Payment for university education, which was virtually nonexistent before independence, has been widely introduced and has begun to limit access for poor youth, and especially for girls. Gaps in schooling between the well-off and the poor, and between the major cities and countryside are growing rapidly. Despite the introduction of tuition and fees, the real wages of university faculty in several Central Asian countries are still very low, with negative effects on the quality of education—many university teachers have to work multiple jobs. Corruption in universities

Higher education enrolment in Central Asia, 1991 and 2001 (gross rates, % of population aged 19-24) **Figure 6.8**

Source: UNICEF 2004.

The elimination of access to universities and discontinuation of the recognition of diplomas from other republics threaten to undermine prospects for a modern knowledge society

damages educational standards and has driven university administrations to introduce a system of standardized entrance tests as a way to reduce opportunities for graft.⁶¹

In the Soviet period, thousands of students could attend universities across the Soviet Union. Students from Kyrgyzstan and Tajikistan, for example, graduated from universities in Uzbekistan (or, of course, Russia). Today, new barriers in education, different alphabets, visa regimes and poverty minimize study in other republics and student exchanges. The elimination of access to universities and discontinuation of the recognition of diplomas from other republics (especially by Turkmenistan and Uzbekistan) threaten to undermine prospects for a modern knowledge society that fosters innovation and competitive adaptation.⁶² The grimmest situation prevails in Turkmenistan, whose leadership has systematically weakened its traditional education system, conducts a deliberate policy of self-isolation and refuses recognition of diplomas from other CIS republics.⁶³

Responding to some of these challenges, new types of universities and educational establishments have emerged. In the regional education market, universities offer traditional Soviet and Western-style degrees; they are all heavily dependent on tuition fees as both state and private universities compete for funding and students. New opportunities in international-standard university education are offered by the American University of Central Asia; the University of Central Asia, which is supported by the Aga Khan Development Network;⁶⁴ the OSCE Academy in Bishkek;⁶⁵ the

Eurasian University; the Kazakhstan Institute of Management, Economics and Strategic Research and many others committed to a regional approach to teaching and research. At the same time, the collapse of state atheism and the revival of religion, in particular of Islam, have led to the emergence of new religious education establishments across the region. Central Asian students also study at the *madrassas*, or religious schools, in the Middle East and South Asia.

UNICEF, USAID, the Open Society Institute and other organizations have assisted in establishing professional networks and associations for tertiary education institutions and professionals, including the Central Asian Foundation for Management Development and the international educational network EDNET. EDNET, which includes 266 universities in Central Asia, operates a programme of visiting international professors from neighbouring countries, which provides a cost-effective and high-quality solution to the problem of the deficit of teachers for certain subjects in many universities of the region. Another initiative, the Central Asia Education Cooperation Network, supported by the Asian Development Bank and the Open Society Institute, helps strengthen collaborative links among individuals, groups and educational institutions through electronic networking.

Given the weaknesses of their tertiary education systems, some Central Asian governments have adopted programmes for funding students abroad. Special presidential scholarship programmes for talented youth have been established in Kazakhstan (Bolashak), Kyrgyzstan (Cadres for the XXI Century) and Uzbekistan (Umid). The Soros Foundation, through its Higher Education Support

Programme, assists students from Central Asia to study in Europe and the United States.

Growing language barriers

As in the rest of the Soviet Union, the Russian language dominated in Central Asia for over 70 years in public service, commerce, education and science. To varying degrees the use of national languages in public life had been restricted in each republic; it was almost absent in higher education and science. The Russia-centred study of history, literature and culture along with Soviet indoctrination prevailed in the curricula. When Central Asian countries gained independence, the national languages were declared official languages, and acquired great importance in government and education. Turkmenistan and Uzbekistan introduced the Latin alphabet for their national languages. Curriculum reforms prioritized the teaching of local history, culture and language. This was an inevitable and appropriate part of the process of nation-building in the new republics, and of preserving and developing cultural and national heritages.

These reforms also brought about a number of challenges: First, textbook development and teacher education and retraining had to meet the needs of the new language curricula. Second, with a large number of students in each country belonging to ethnic minorities with their own languages, and ethnic and cultural identities, a curriculum focused largely on the titular ethnic group created potential tensions and gaps in national education by not addressing the needs of minorities. A third issue was that national interpretations of history and culture exacerbated the region's centrifugal forces.

Finally, the Russian language, while still widely used especially in Kazakhstan and Kyrgyzstan, has come under threat as a lingua franca for

cross-border and cross-ethnic communication. An increasing share of the population no longer has a good command of the Russian language, especially in Tajikistan and Uzbekistan (see Box 6.5). Policies aimed at maintaining Russian as a second language, even among the younger people, would have the benefit of maintaining the ability to communicate easily across borders. A presidential decree on improving Russian and English language teaching in Tajikistan was passed in 2004, but the educational resources in Tajikistan have been so limited that implementation faces severe constraints.⁶⁶

Education and language problems are perhaps most painful for national minorities. Since each Central Asian republic is home to sizable ethnic minority groups, the choice of the language of instruction in school has taken on new significance. Responding to the needs of these minorities, hundreds of schools operate in the language of ethnic minorities throughout the region.⁶⁷ However, the ability of national governments to support these schools with trained teachers and textbooks in native languages is very limited. In Tajikistan, Uzbek schools still have to use Soviet textbooks.⁶⁸ Since Uzbekistan transferred to the Latin alphabet, students from Uzbek schools in Kazakhstan, Kyrgyzstan and Tajikistan are not able to read textbooks from Uzbekistan. In order to mitigate the problem with schoolbooks, the Government of Kyrgyzstan has sent about 1 million Kyrgyz language textbooks to schools in Uzbekistan since 1997.⁶⁹ Russia supplies textbooks for Russian schools in Central Asia.

The Russian language, while still widely used especially in Kazakhstan and Kyrgyzstan, has come under threat as a lingua franca for cross-border and cross-ethnic communication

Knowledge, research and communication

Research and communication, based on a strong educational system, is at the heart of developing a new knowledge economy, which is a vital

For small and relatively poor countries it is essential that their people have ready access to global knowledge networks

Box 6.5

The risk of losing Russian as a lingua franca

The prevalence of Russian as a second language and lingua franca can help bridge the emerging ethnic and political divides in Central Asia, since it is still widely used in the region today. A majority of the population speaks and understands Russian, watches Russian-language TV and listens to Russian-language radio. Most people in Central Asia—politicians, business people, scholars and students—communicate with each other in Russian when they meet across borders.

However, the gradual loss of Russian as a lingua franca in some of the countries, especially among the younger generation, has taken countries in different directions in terms of national languages replacing Russian in instruction and official use. According to a recent World Bank-sponsored survey in Central Asia, a majority of respondents speak Russian fluently in Kyrgyzstan and an overwhelming majority in Kazakhstan. However, in Tajikistan and Uzbekistan, less than half of those surveyed say that they speak Russian fluently.

This trend is linked to several factors, among them the out-migration of the Russian population, national language requirements in education and government service, the increased use of the national language in the media, and the general weakening of the educational system. English, while increasingly taught and understood, will not be a substitute for Russian as a region-wide lingua franca for some time to come. According to the same survey, only one per cent of the respondents spoke English fluently.

Financial constraints prompted a far-reaching brain drain as many scholars and engineers left for Russia and the West

ingredient of international competitiveness, human advancement, and the ability to flexibly adapt to changing circumstance and risks. For small and relatively poor countries, it is essential that their people have ready access to knowledge and are encouraged to participate in global knowledge networks. Strengthening regional knowledge capacities and networks is an important step in that direction.

Research and development

Before independence, state-sponsored research and development (R&D) was highly developed in Central Asia, much of it designed to support the Soviet industrial-military complex. Dozens of research institutes, branches of the Soviet Academy of Science and other scientific institutions headquartered mainly in Moscow operated in each republic. Even today, R&D expertise is still significant in Central Asia, especially in Kazakhstan and Uzbekistan (see Figure 6.9). But science and research overall have suffered severe declines. Contrary to the progress that has been made in reforming higher education, the research and innovation systems in the region remain largely unreformed and locked within national boundaries.

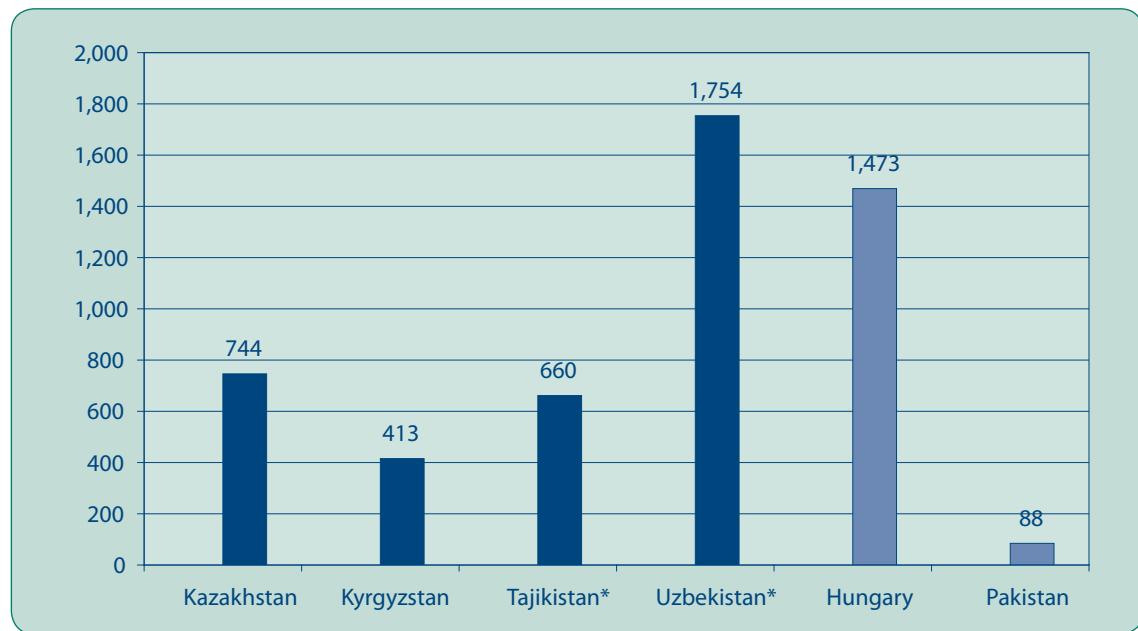
Severe budget cuts, the breakdown of the centralized management structure and the interruption of academic contacts with Moscow led to an irreversible loss of many research institutes, and a general decline of science and scholarship. Financial constraints prompted a far-reaching brain drain

as many scholars and engineers left for Russia and the West. Others moved from research institutions to the educational sector or turned to non-scientific work. Research establishments in Kazakhstan and Uzbekistan generally suffered somewhat less due to greater continued state funding, while they largely collapsed in the other three countries. Sporadic external assistance was insufficient to fill the gaps. And while research centres and universities have attempted to maintain or establish some communication and networking regionally and worldwide, their limited capacities have also severely constrained them in this regard.

Aside from not maintaining the intellectual assets of the past, academic institutions in the region have responded only slowly to the challenges of transition to the market economy. A World Bank study to assess the capacity development needs in economics research and teaching in Central Asia concluded that despite reforms in higher education and the appearance of new private institutions, the quality of economics education and research remains inadequate. According to that analysis, the institutional environment is the most favourable to new educational and R&D initiatives in Kazakhstan and Kyrgyzstan. But even there, university teachers need further training in market economics, and the curricula need to be changed.⁷⁰ The study recommends creating a critical mass of economics education and research on a regional basis, for the simple reason that each country has limited financial and human resources.⁷¹

Researchers in R&D, 2003 (per million people)

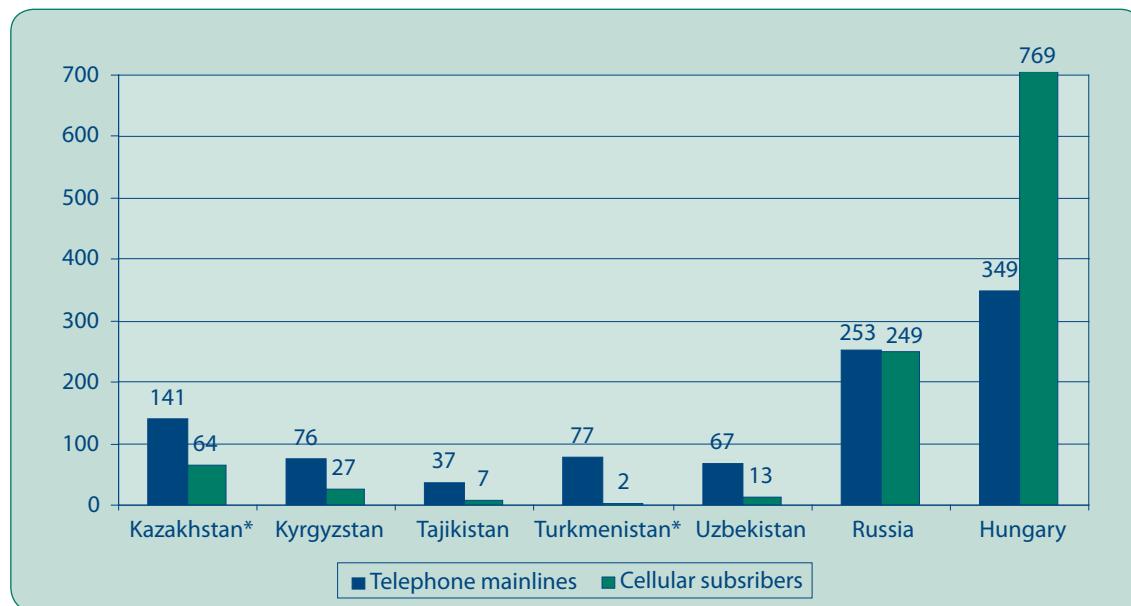
Figure 6.9



Sources: UNDP 2005, pp. 263-264. * from UNDP 2004c, pp. 180-182.

Telephone mainlines and cellular subscribers per 1,000 people, 2003

Figure 6.10



Sources: UNDP 2005 pp. 263-264. * from UNDP 2004c, pp. 181-182 (Turkmenistan—mainlines and cellular subscribers, Kazakhstan—cellular subscribers only)

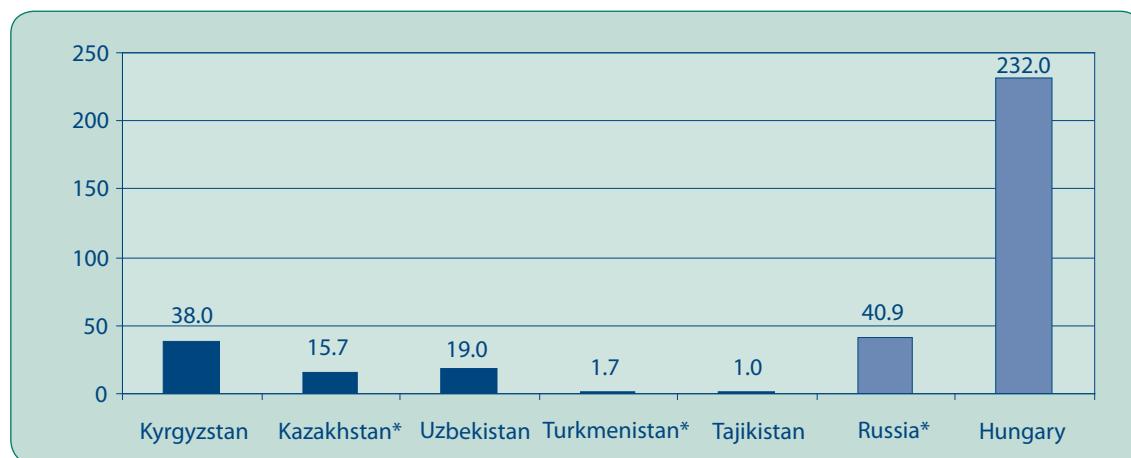
Access to information

Limited access to information is a hindrance confronted across Central Asia. For a basic device like the telephone, data indicate that countries have much lower usage rates than in Hungary or the Russian Federation (see Figure 6.10). Within Central Asia, Kazakhstan has the highest numbers of telephone lines and cellular subscribers per 1,000 people. Some of the other countries do relatively well in terms of telephone landlines (Kyrgyzstan and Turkmenistan), but they all fall far short on cellular phone service.

For the Internet, perhaps the greatest resource for building well-informed, modern, information-based societies, and for sharing knowledge regionally and globally, Central Asia is significantly behind Russia and Eastern Europe in connectivity (see Figure 6.11). Accessibility varies among countries as a result of different resource levels and divergent national policies on modern electronic communication. The public in Kazakhstan and Kyrgyzstan enjoys much better access to worldwide and regional information than do people in Turkmenistan and Uzbekistan, where Internet services have to comply with government controls.⁷² The

Internet users per 1,000 people, 2003

Figure 6.11



Sources: UNDP 2005, pp. 262-264. *from UNDP 2004c, pp. 180-182.

Despite the limited connectivity, people in Central Asia learn about and discuss regional developments actively on the Internet

low Internet connectivity in Tajikistan results partly from the devastation of infrastructure during the civil war, and partly from the government's limited support for expanded access.

Generally, even where accessible, Internet service is expensive. For instance, in the United States, users paying \$15 to \$20 a month can have unlimited access to the Internet, while a user in Uzbekistan has to pay about \$2 an hour.⁷³ Another issue is that mostly urban citizens benefit from using the Internet, which is widening disparities in access to information between cities and rural areas. Ensuring more even-handed connectivity should be a high priority for national and regional initiatives.

There has been some donor support for enlarged Internet access as one of the key ways to increase Central Asia's connectivity with the rest of the world for business, science and education, as well as for greater information access and transparency in local political processes. In the mid-1990s, the Bureau of Educational and Cultural Affairs of the US Department of State initiated the Internet Access and Training Program, which consists of a network of Internet access sites in 11 Eurasian countries, including the five Central Asian states. Through these sites, thousands of individuals each month receive free-of-charge access to the Internet as well as to a wide variety of computer-related training programmes.⁷⁴ NATO has been funding an Internet network infrastructure by creating the Virtual Silk Highway, which provides access to a communications satellite to support cost-effective Internet access in academic and educational institutions in Central Asia and the South Caucasus.⁷⁵

However, partnership between some donor organizations and governments in the less politically open Central Asian republics can be a bumpy road. In Uzbekistan, a joint project of the Open Society Institute, UNDP and NATO that provided universities and NGOs with access to the Internet expanded into eight provinces in 2003. However, in April 2004, the Government of Uzbekistan shut down the Open Society Institute Assistance Foundation in the country by revoking its registration.⁷⁶ Turkmenistan's engagement with international initiatives in this area, except for the Virtual Silk Highway project, is almost nonexistent.

Despite the limited connectivity, people in Central Asia learn about and discuss regional developments actively on the Internet. Hundreds of local users have joined lively debates on the implications of various events in the region.⁷⁷ Popular national and regional websites have sidestepped censorship and threats—some that have been shut down

have simply emerged the next day under new web addresses. Donors have encouraged web pages featuring regional information and cross-national exchanges of information on web portals such as for the Central Asian Gateway, Eurasianet, Radio Free Europe, the Institute for Reporting War and Peace, Cimera, Freenet and others. Most are in English and Russian, and have become popular in the region and beyond.

Another benefit of the new connectivity is that labour migrants from Central Asia to Russia and other states are able to share their insights and regularly communicate with people in their homeland countries. Internet access also provides an essential communications and information lifeline to an increasing number of NGOs working jointly with state agencies or on their own to reform education and health care, improve the standing of women and other vulnerable groups, address environmental concerns, and track and advocate the observance of human rights in their countries and region-wide.

In terms of the traditional media, such as newspapers and television, media freedom varies across the region. It is relatively high in Kazakhstan and Kyrgyzstan, less so in Tajikistan and even less in Uzbekistan, and virtually absent in Turkmenistan. In 2002, the index of daily newspapers per 1,000 people was higher in Kyrgyzstan and Tajikistan than in Turkmenistan and Uzbekistan, but much lower than in Russia and especially Hungary. The number of radios per 1,000 people, however, is relatively high in Turkmenistan and Uzbekistan (see Figure 6.12). This might be explained by tight controls over the print media exerted in these countries. Regional newspapers are almost nonexistent; the only region-wide newspaper, *The Times of Central Asia*, is printed in Bishkek in English, mostly for foreigners. While local news agencies provide brief regional news and analysis, in general the media do not exert a strong integrating force in the region.

Television has become the most popular source of information. However, television access remains lower in Central Asia than in Hungary or the Russian Federation, both in terms of TV ownership and especially access to cable television (see Table 6.3). With the exception of Kyrgyzstan, television channels are largely controlled by their states, including the frequently watched Russian channels.

Culture

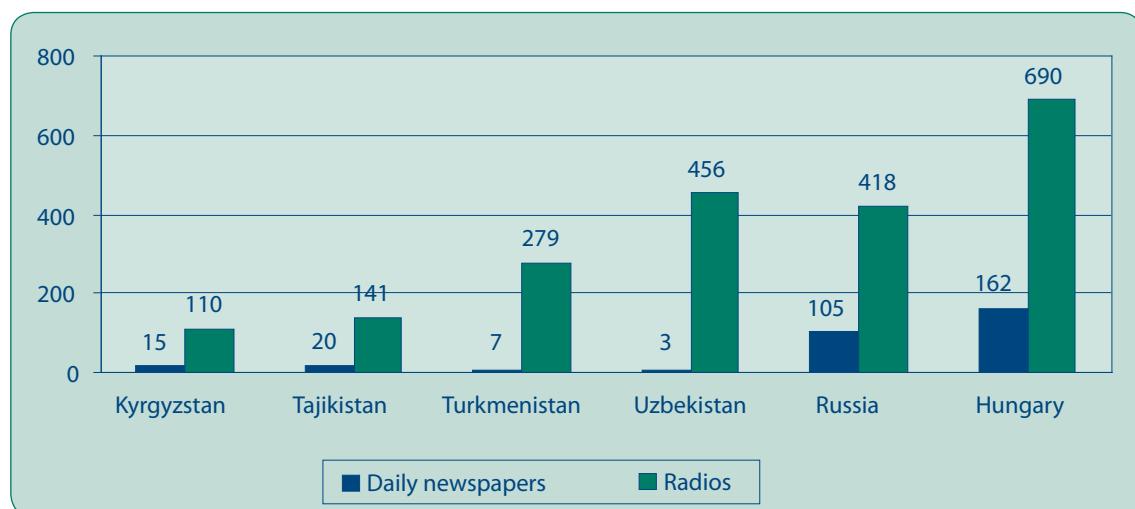
Historically, Central Asian people have shared many cultural traditions and even today culture in Central Asia is an integrating force for countries and communities across borders. Under the Soviet regime, the cultures of the local peoples were

For Central Asia, the Internet offers an important avenue to increase regional integration, learning and the monitoring of human development

Regional newspapers are almost nonexistent; television has become the most popular source of information in the region

Daily newspapers (2000) and radios (2003) per 1,000 people

Figure 6.12



Note: Comparable information not available for Kazakhstan.

Source: World Bank 2005e, Table 5.11.

"asserted merely as material for transformations and integration into the Soviet socialist culture, and an independent value behind them was not recognized."⁷⁸ Nevertheless, the Central Asian republics inherited strong and interconnected institutions of cultural infrastructure, such as theatres, museums, and libraries built under the Soviet system. Currently, the rate of decline of cultural institutions is even faster than of those in science and education.

Many libraries and culture clubs, especially in provinces, were closed in the first decade of transition. For instance, during the 1990s in Kyrgyzstan, the number of libraries and clubs decreased by a third and a half respectively.⁷⁹ Most countries are trying to restore their cultural achievements and share them with their neighbours—well-known singers and theatres perform across the region. Only in Turkmenistan has the political leadership banned non-titular (Turkmen) cultural organizations, including operas, ballets and circuses. In general, however,

music, literature, theatre, movies, and fine and applied arts remain an important connecting force for the region. External support can also be helpful here, as the famous Silk Road Project of the world-renowned cellist Yo-Yo Ma has demonstrated.⁸⁰ One of the UN Educational, Scientific and Cultural Organization (UNESCO) projects on strengthening common cultural heritage and intercultural dialogue in the region,⁸¹ the six-volume *History of Civilizations of Central Asia*, was the first international attempt to present a comprehensive picture of the cultures from the dawn of civilization to the modern-day, and was written by a distinguished team of specialists, including national scholars of the Central Asian states and other experts.⁸²

Central Asia inherited strong and interconnected cultural institutions, such as theatres, museums, and libraries; currently, the decline of these institutions is even faster than in science and education

Regional approaches to building modern knowledge and information societies

A high level of education, knowledge, innovation and connectivity are clearly essential for

Table 6.3

	Sets per 1,000 people	Cable subscribers per 1,000 people
Kazakhstan	338	6.6
Kyrgyzstan	49	3.6
Tajikistan	357	0.1
Turkmenistan	182	n.a.
Uzbekistan	280	3.7
Russian Federation (2001)	538	76.7
Hungary	475	190.7

Television access, 2003

Source: World Bank 2005e, Table 5.11.

Cooperative regional approaches in education and knowledge should be a priority

international competitiveness, for sustained economic growth, and most importantly for human development and human security. Except for Turkmenistan, all the Central Asian countries have governments committed to better education and more advanced knowledge societies, and to working in differing degrees of partnership with each other, with international agencies and with civil society.

Cooperative regional approaches in education and knowledge should be a priority for all of these actors. Some important areas for cooperation include the regional benchmarking of educational achievements, R&D application and electronic connectivity, using among other indicators the education and knowledge-related MDG goals and targets.⁸³ Countries could also benefit from sharing experiences and best practices in education reforms and strategies. A key aspect will be to improve the quality of education along with its quantity, including changes in the content of primary secondary education to produce graduates with critical thinking, communication and teamwork skills. Other steps could be countries' mutual recognition of each other's diplomas for further study and employment, allowing students to access each other's educational facilities, and cooperation across borders on the schooling of ethnic minorities. Regional programmes could help advance Internet connectivity, especially in rural areas. And encouraging Russian as a second language and lingua franca for the region will continue to bring people from all walks of life together across borders.

In recent decades women have lost some of their previous achievements, so critical to human development

Gender: regional challenges and cooperation⁸⁴

In Soviet times, the Central Asian countries achieved undeniable progress in advancing women's status. Women enjoyed universal access to basic health care, education, child care and social safety net services. In recent decades, and in particular since the collapse of the Soviet Union, women have lost some of these achievements so critical to human development. Many have become more vulnerable and risk further losses unless the trends are stabilized or better yet reversed. Box 6.6 provides insight on how different social factors have contributed to a high school dropout rate for girls in Tajikistan.

Issues of inequality

There are a number of significant issues related to gender that are common across the region. One of the most fundamental is political representation. The gender imbalance at the top echelons of the state administration has been increasing in Central Asia. Women have little access to political life and decision-making. The MDG indicator of seats in parliament held by women varies in all countries of Central Asia, and may actually cloud the real extent of political participation. For instance, in 2004 in the Turkmen Parliament, women comprised 26 per cent of the members, compared with 9 per cent in Kazakhstan and 7 per cent in Kyrgyzstan, even though it is likely that women actually have less ability to influence

Box 6.6

School dropouts among girls in Tajikistan

An increasing number of girls in Tajikistan are leaving school before reaching grade nine, prompting the Tajik Ministry of Education, with support from UNICEF, to survey two schools in Dushanbe, along with one school in Hisor and another in Vahdat district. The survey concluded that there are three main factors behind girls dropping out of school: poverty, family spending priorities and gender socialization.

Poor families explained that the withdrawal of their daughters from school is partly for lack of resources, and partly because of insecurity, the distance to school, a hostile attitude in the school towards their daughter, opposition of the father or older brother, or poor health of the daughter or mother.

But the survey also noted it is not just the very poor whose daughters do not complete their education—there is the matter of spending priorities for the not-so-poor. Spending on girls' education is simply not a priority for many families who were interviewed.

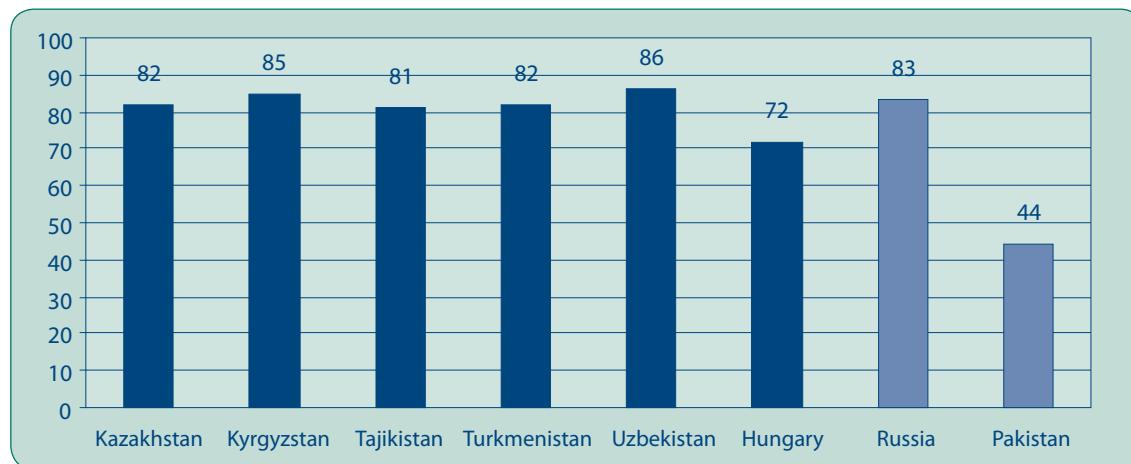
As for gender socialization, according to the report the dropout of girls from schools is based on two characteristics of traditional Tajik culture. The first is that of different roles imposed upon girls and boys. Gender inequality is deeply rooted, and boys and girls are raised and socialized differently within the family and community. Traditionally, the main sphere of girls' and women's lives has been the home (housework, childbearing and rearing, and family maintenance).

And then there is the role of conservative interpretations of religion. "Religion continues to be very influential in private, family and community life, and is interpreted by some as condoning the control of men over women's social life, housework, birth control, forced marriages, domestic violence and/or exclusion of women from inheritance," the UNICEF country head observed.

Source: IRIN 2004b.

Female economic activity rate as % of male rate, 2003

Figure 6.13



Source: UNDP 2005, 311-313.

what happens to them in Turkmenistan than in the other two countries, due to the greater degree of political control in Turkmenistan. However, it is notable that after the March 2005 parliamentary elections in Kyrgyzstan, only male deputies were elected to Parliament, because women were displaced at an early stage in the electoral process by male candidates.⁸⁵ However, advocacy of several women's NGOs has resulted in the appointment of a special adviser to the President on gender issues.

Women have limited access to decision-making positions in both the executive and legislative branches, except in the health care and social protection sectors. In contrast, women prevail in NGOs. Some women's NGOs advocate a restoration of the quota system for parliamentary representation as a way of ensuring women's political participation. While this might help in a truly democratic environment as a transition mecha-

nism, there is the risk that such a requirement could result only in token participation of women in political life, rather than the real empowerment of women.⁸⁶ In Uzbekistan, the positions of deputy *hokim* (governor) and the deputy prime minister for women's affairs have been reserved for women. This may represent progress, but, as some local women's advocates have pointed out, this could also serve to restrict the access of women to governor or minister positions.

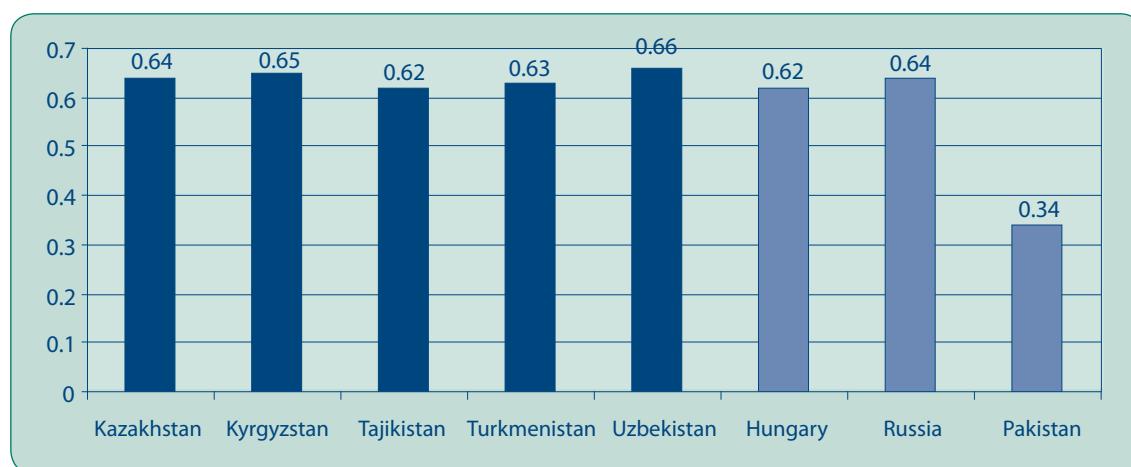
Another challenge is employment. Gender disparity in the labour market has increased as women have been the first to lose their jobs during economic recession. The number of registered unemployed women increased 25-fold in Kyrgyzstan and 10-fold in Tajikistan after independence.⁸⁷ Women who are in the labour market earn less than their male counterparts, but they do not fare worse than their female counterparts in Hungary or Russia (see Figures 6.13 and 6.14). In general, the les-

Women have limited access to decision-making positions in both the executive and legislative branches

Gender disparities in the labour market have increased as women have been the first to lose their jobs during economic recession

Ratio of estimated female-to-male earned income in selected countries, 2003

Figure 6.14



Source: UNDP 2005, pp. 303-305.

The International Organization of Migration estimates that up to 10,000 people from Central Asia, mostly women, have been trafficked under false offers of employment

son from the transition experience has been that economic reform programmes need to recognize that restructuring often hits women very hard, especially when there is employment retrenchment in public service sectors such as health care, culture and education, where women represent a major share of the workforce.

Cultural factors also affect the roles women perform at home and at work in Central Asia. Almost all domestic duties and low-paid, informal sector jobs are regarded as women's work. By their very nature, these jobs leave women vulnerable to economic shocks, on top of the fact that women have little time for training and education because they are overburdened by traditional domestic tasks. Nonetheless, as described in Chapter 3, women in Central Asia also have found ways to participate actively in trade and commerce, especially as shuttle traders. To protect women's opportunities, shuttle trade should not be restricted.

Traditional culture also has an impact on gender equality. Since independence, cultural traditions affect once again how women live and participate in economic and social activities. Due to the preference given to men in traditional land ownership rights, for example, land privatization has resulted in increasing gender inequality in ownership and access to land. A recent Kyrgyz survey indicated that despite written laws stipulating gender equality, many women lose land and assets because of the observance of traditional laws and practices.⁸⁸ The customary law observed by many Muslim families backs inheritance of land and major assets by male relatives. Customary law and women's tenure rights are rarely discussed in society, but an exception to this is the recent advocacy for women's greater access to land launched by women's NGOs in Kyrgyzstan and Tajikistan with the support of the UN Development Fund for Women (UNIFEM).

There has also been a return to traditional local community self-government with courts of elders or *mahalla* (neighbourhood) committees, which had been outlawed during the Soviet era. These play at times controversial roles as far as gender is concerned. They occasionally intervene in family affairs, such as by preventing women from divorcing in domestic violence cases, or forcing them to return to their family, according to human rights advocates. In Kyrgyzstan, the court of elders in rural areas includes usually only male seniors, who may lean towards patriarchal traditions.

Gender-based violence remains a pervasive problem for women, although since independence, civil society groups have broken the Soviet-era taboo against speaking about the subject and publicized a number of reports on it. They have initiated public discussions in all the Central Asian countries except

Turkmenistan. This advocacy work has led to greater acknowledgement of the problem; some countries have changed their laws. In Kyrgyzstan, gender equality and domestic violence laws have already been adopted by the Parliament.

At the same time, however, an entirely new form of violence against women is flourishing—human trafficking. The IOM estimates that up to 10,000 people from Central Asia, mostly women, have been trafficked to the Gulf States, Russia and other countries under false offers of employment.⁸⁹ In addition, Central Asia has become a transit corridor for trafficked persons, and within countries, there is internal trafficking from rural areas to the cities. An IOM study on trafficking in Kyrgyzstan found that girls as young as 10 were being trafficked from remote mountain villages.⁹⁰

Human trafficking is a well-organized business, and there are reports of collaboration between criminal networks and police and officials responsible for immigration issues and airport security.⁹¹ Trafficking also links up with the narcotics trade and the spread of HIV. Aside from the general increase in lawlessness, the rapid increase in human trafficking and in the number of female and male sex workers in Central Asia can be attributed to a lack of employment opportunities, with human traffickers promising young women good jobs, marriage abroad or participation in international beauty contests.⁹²

Having a regional perspective on gender as a complement to national gender policies is important for Central Asia. The MDG for gender (MDG 3) focuses on key gender issues and offers a useful way to compare, benchmark and measure progress across countries. Box 6.7 takes a summary look at where the Central Asian countries are in terms of achieving specific MDG gender targets. One of the problems faced in compiling the relevant information is that for many gender-related issues, the lack of adequate sex-disaggregated data is a serious constraint. The absence of gender-differentiated analysis and insufficient national mechanisms for monitoring gender disparities in governance, the labour market and access to resources diminishes state and non-state support to women. Inadequate gender statistics mask the revival of customary law and traditional gender biases, and state statistical agencies are not well equipped to monitor the increasing incidence of unregistered (religious) marriages and divorces, the spread of polygamous unions, or the flow of external and internal migrants, including the trafficking of human beings. Transition countries need additional international assistance to enhance their statistical capacity to generate data on these and other crucial gender issues.

The MDG 3 is a useful way of comparing, benchmarking and measuring progress across countries and focusing on key gender issues

Box 6.7

MDG targets: how can they serve as regional benchmarks for gender policies?

The third MDG calls for promoting gender equality and empowering women. A UNDP regional MDG report, *National Millennium Goals: A Framework for Action*, shows that no Central Asian country is on track to achieve the national targets they have adopted under Goal 3. But it also demonstrates that the MDG targets can be used as a benchmarking and monitoring tool to measure progress. The table below shows a target-by-target assessment as of mid-2005.

Country	Target	Indicator	Assessment of likely achievement by 2015
Kazakhstan	<i>Target 1. Eliminate gender disparity in primary and secondary education, preferably by 2005, and at all levels of education no later than 2015.</i>	Ratio of girls to boys in secondary education	On track
		Ratio of young literate females to males	On track
		Women's pay as percentage of men's	Unlikely
		Proportion of seats held by women in national Parliament	Unlikely
Kyrgyzstan	<i>Target 1. Eliminate gender disparity in employment and managerial opportunities.</i>	Share of women among students of higher educational institutions	On track
		Ratio of women's wages to men's wages	Unlikely
		Share of women in the economically active population	Unlikely
Tajikistan	<i>Target 1. Eliminate gender disparity in primary and secondary education by 2005 and at all levels of education no later than 2015.</i>	Ratio of girls to boys in primary and secondary education	Unlikely
		Ratio of young literate females to males	On track
		Share of women employed in the non-agricultural sector	Unlikely
		Women's pay as percentage of men's	Unlikely
Turkmenistan	<i>Target 1. Eliminate gender disparity in primary and secondary education, preferably by 2005, and at all levels of education no later than 2015.</i> <i>Target 2. Reduce by 2015 gender inequality as regards incomes in the labour market.</i>	Primary education coverage level of girls to that of boys	On track
		Secondary education coverage level of girls to that of boys	On track
		Higher education coverage level of women to that of men	Unlikely
		Women's pay in non-agricultural sector as percentage of men's	n.a.
Uzbekistan	<i>Target 1. Achieve 100 per cent gender equality in primary and general basic secondary and secondary special and vocational education by 2005;</i> <i>Target 2. Improve gender balance in higher education by 2015</i>	Ratio of boys and girls in primary and basic secondary education, measured by gross enrolment rates	Unlikely
		Share of women in wage employment in the non-agricultural sector	Unlikely
		Representation of women in parliament	On track
		Ratio of men and women in higher education, measured by gross enrolment rates	On track
		Ratio of boys and girls in general secondary, secondary special and vocational education measured by attendance rates	n.a.
		Ratio of women's wages to men's in the agricultural and non-agricultural sector	n.a.

Note: Targets are differentiated by country, according to national characteristics and priorities. This demonstrates that benchmarking does not necessarily have to use inflexibly uniform targets, but can tailor targets to national conditions.

Source: UNDP 2006.

Progress with regional gender initiatives

Some progress has been made nationally and on a regional basis in recent years in terms of raising awareness of gender issues, setting up cooperative structures and engaging civil society. The five Central Asian states participated in the 1995 Beijing Conference on Women and have signed the UN Convention on the

Elimination of all Forms of Discrimination against Women (CEDAW). They have since then taken steps to incorporate gender analysis into their national policies and budget frameworks. National governments have expressed a need to ensure political and economic participation of women by adopting programmes on women's empowerment, and forming national commissions on women's affairs.

National governments have adopted programmes on women's empowerment, and national commissions on women's affairs have been formed

While the extent and precise nature of gender disparities differ across countries, these disparities threaten to undermine human development and human security for everyone in Central Asia

National networks for women and women's NGOs have helped identify country strategies, while NGOs have used modern communications technologies to step up their regional and international networking activities. One long-distance video dialogue series focused on implementing gender-responsive legislation, and was supported by the World Bank, UNDP and bilateral donors. Regional and national websites share best practices in gender policies. Much public information is already available on the Internet, such as statistics, legislation and budget outcomes.

Regionally, the discussion on women's empowerment has received significant external support from UNIFEM, UNDP, USAID, OSCE and the Swedish Agency for International Development Cooperation, among others. An Open Society Institute project, for example, monitors implementation of and compliance with commitments under various UN conventions on promoting women's rights.

The Network Women's Programme of the Open Society Institute seeks to promote the advancement of women's human rights, gender equality and empowerment, and to increase resources available to women's organizations. It supports joint local, national, regional and international projects by encouraging other international foundations and institutions to fund women's organizations and initiatives. Supported by the Open Society Institute, the Central Asian Network for Gender Studies was established in 2002 in Almaty. It allows researchers, graduate and postgraduate students to work together on developing an academic discourse on gender equality, and advocates for gender studies in higher education.⁹³

Despite much progress in putting regional gender development issues on the map in Central Asia, many questions arise about the efficacy of the implementation of conventions, legal frameworks and policy pronouncements, especially given the powerful counteracting forces of economic decline, lack of resources, and a resurgence of traditional cultural values and prejudice.

The response to trafficking illustrates some of these issues. Three countries, Kazakhstan, Kyrgyzstan and Tajikistan, have acknowledged the problem of human trafficking and have introduced laws with stiff penalties for it. But only a few people have been convicted.⁹⁴ Since 1999, the IOM has implemented counter-trafficking programmes in Central Asia, except in Turkmenistan. Over 23 hotlines have been established, and victims have returned to Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan. The agency has also conducted information campaigns and successfully lobbied for the introduction of coherent counter-

trafficking policies in the four countries.⁹⁵ But in general, statistics on trafficking in persons for commercial sexual exploitation and forced labour remain unsatisfactory and imprecise. Like many other countries, the Central Asian republics still lack the recognition that this is not simply a problem of prostitution. Governments underestimate the magnitude of trafficking, so that issues related to it are passed over in silence.⁹⁶ While the extent and precise nature of gender disparities differ across countries, the common bottom line is that gender inequality threatens to undermine human development and human security in Central Asia. Continued regional sharing of the policy lessons being learned will help strengthen partnerships and raise aspirations in all the countries.

Conclusions and recommendations

Conclusions

There are many important cross-border linkages for migration, health, education, knowledge and communication in Central Asia. Even on gender issues, civil society groups and governments have now established cross-border networks and approaches. For all areas of social development, regional strategies and cooperation will help Central Asian countries develop the necessary social sector institutions and policies to advance human development and human security.

Despite many challenges, governments and civil society organizations have already devised responses that promise progress. Examples include the agreement between Russia and Tajikistan on the treatment of Tajik migrant workers in Russia; the regional HIV/AIDS projects sponsored by national governments, CACO and the international donor community; the various regional networks dedicated to improving education; regional projects that expand Internet connectivity; and the many gender-oriented NGOs working together across borders to support each other in their advocacy and action so that women in the region may lead better lives. Building on these and many other examples is an excellent place to start in considering how to improve regional cooperation and integration in the social sphere. The following are some key issues.

First, 'borders with a human face' are important for the social dimensions of human development. Ensuring that people are treated with respect, fairness, according to transparent rules and without having to pay bribes when they cross borders is especially important for migrants as they leave in search of better jobs or return home

Cooperation will help Central Asian countries develop the necessary social sector institutions and policies to advance human development and human security

or try to transmit their earnings to their families. More generally, allowing border communities to benefit from health and education services or cultural opportunities across the border, helping the media establish a regional presence, and encouraging civil society organizations to communicate easily with each other—all of these are elements of a strategy to make national borders serve rather than harm human beings. This requires that the authorities at the local and national level respect the human rights of the vulnerable, be they migrants, women, children, or the victims of drug addiction, communicable diseases or human trafficking.

Second, regional benchmarking and monitoring for measuring progress in health, education and gender, and for learning lessons from experiences and best practices, are so far still underdeveloped. These approaches can help reinforce national policy initiatives, and inform governments and the public about the progress that is being achieved towards commonly identified goals and targets. The MDGs provide an excellent framework for this.

Third, regional statistics in the social sectors remain non-standard and of poor quality. Reliable statistics are essential for a better analysis and understanding of social challenges and for accurate regional benchmarking and monitoring. Regional strategies to strengthen statistics could make the most of scarce institutional and professional capacities.

Fourth, despite some excellent examples, much more could be done to expand the regional networking of governmental institutions and socially focused NGOs. This process could draw upon improved communication tools that are becoming more widely accessible in Central Asia,

reduced official barriers, outright encouragement, and appropriate signals from the leadership of governmental and civil society organizations.

Fifth, the channels and means for cross-border communication and access to information remain weak, and could be improved through cooperation on wider Internet, telephone and media access, and maintenance of Russian as a second language and lingua franca for as many people as possible, along with continued improvements in access to English language education.

Finally, the institutional capacity and governance of social sector institutions remain weak region-wide. As with all other areas of regional development, improved institutional capacity and good governance are essential ingredients to any successful strategy for improving social development. Developing institutional capacity and good governance is mostly a challenge for domestic policy reforms, but the success of these reforms supports improved regional cooperation. In turn, by reinforcing effective national policies, regional institutions and the international community can provide an important political commitment mechanism.

It is impossible to estimate the quantitative impact of better cooperation in the social sectors, not least because it is impossible to separate the impacts of national and regional actions. However, we can briefly summarize some of the quantitative indicators of the opportunities and problems that the Central Asian countries face. Table 6.4 demonstrates the large number of people affected, and the gains or losses that can be found in selected areas. Regional cooperation can help reduce the negative effects and improve the opportunities for people in the region.

Regional institutions and the international community can provide a political commitment mechanism for national reform

Table 6.4

Number of people affected	Economic gains/losses	The impact of social sector issues
Total labour migrants (including daily labour and shuttle trade):⁹⁷ 600,000 – 1.5 million for Tajikistan 500,000 – 1.25 million for Kyrgyzstan 600,000 – 1.82 million for Uzbekistan	Remittances: Up to 20% of GDP in Tajikistan Productivity loss from TB: 0.5 to 0.8% of GDP in Central Asia	
Jobs created by returning migrants: 350,000 in Uzbekistan		
HIV/AIDS infected population: 90,000 in Central Asia 0.1 to 0.2% prevalence rate	Costs of HIV/AIDS prevention and treatment: \$1 billion (2% of GDP) for 2004-2007 in Central Asia	
Intravenous drug users: 500,000 in Central Asia		
People/women trafficked: 10,000 in Central Asia		

Note: The numbers cited are indicative only; sources in text, unless otherwise noted.

Recommendations

For the governments of the Central Asian countries:

- Ensure 'borders with a human face' for migrants, students, NGO network representatives, and citizens of border communities seeking access to health services across the border, so that people can cross the borders without undue hassle, loss of time, corruption and visa requirements. Facilitate repatriation of remittances.
- Join and implement relevant international conventions, and put in place appropriate national legislation, to assure consistency between drug enforcement and the fight against HIV/AIDS, equal rights for women, diploma recognition across borders, etc.
- Join in regional monitoring and benchmarking of progress in the social sectors, using as a key tool the MDGs and their targets. Share experiences and best practices from reform programmes, innovative practices and appropriate financing strategies.
- Strengthen national statistics for the main health, education and gender parameters. Follow international standards so as to permit liable analysis of major trends and issues, and measurement and comparison of progress across countries.
- Support regional information exchange and networking among medical professionals, educators and scientists on an individual and institutional basis; encourage regional media, civil society, and arts and culture networks and exchanges; and support the development of information and Internet technology as a key instrument for linking up with regional and global knowledge networks.
- Specific recommendations include:
 - Support for the country's migrants abroad;
 - Implementation of regional programmes to combat communicable diseases, including regional awareness and education campaigns;
 - Border communities to cooperate with each other to allow residents cross-border access to health and education facilities, cemeteries, etc.;
 - Support student exchanges and ensure diploma recognition;

- Maintain Russian as a second language and hence regional lingua franca;
- Develop programmes to combat human trafficking.

For regional organizations in Central Asia:

- Define clear mandates for selected social sector cooperation activities. CACO, SCO and CAREC would appear to be the regional agencies best suited for these responsibilities.
- Take on benchmarking and monitoring activities, and exchanges of experiences and best practices as a key role. Benchmarks should include consideration of comparators from outside the region.
- Lead or support region-wide programmes, networks and initiatives in the social sectors, including regional HIV/AIDS and TB programmes, and initiatives to harmonize and simplify visa and passport requirements, improve treatment of migrants abroad, facilitate remittance flows, allow the recognition of diplomas, and strengthen women's rights and opportunities.

For international partners:

- Develop regional strategies for supporting improved national and regional social policies and programmes, and for strengthening the capacity of regional organizations to address region-wide social sector issues.
- Support regional monitoring and benchmarking, and the improvement of regional statistics in the social sectors.
- Provide financial and technical support, especially for the poorest countries, so that government agencies, the media and civil society organizations can network across the region, and develop multi-country programmes and strategies.
- Focus priority attention, financing and advocacy on those areas of regional significance that are important but often neglected by the national governments and regional organizations in Central Asia:
 - Migrant, minority and women's rights, health and education;
 - Combating communicable diseases, especially HIV/AIDS and TB;
 - Regional media and civil society networks;
 - Easy access to the Internet.

Chapter 7

Political and institutional constraints and opportunities

"An important risk for the Central Asian states is the decelerating pace of political system modernization and, as a consequence, underdeveloped political parties, overwhelming dominance of the executive over the representative branch and no open mechanism to ensure rotation of the ruling elite."

—*"UNDP Country Background Study, Kazakhstan"*

If the advantages of regional cooperation and integration are clear, why is it that there has been little progress on this score in Central Asia, despite the often stated intentions by the leaders in the region?

Setting the stage: an overview of political trends

Most studies of the challenges to and opportunities for regional cooperation have focused on the economic aspects and the aggregate impact on the population of a region. In this report, however, we want to look beyond the economic dimensions. If the advantages of regional cooperation and integration are clear, as we have demonstrated in the preceding chapters, why is it that there has been little progress on this score in Central Asia, despite the often stated intentions by the region's leaders?

To answer this question, we need to understand the political and institutional dimensions and constraints of regional cooperation. We need to identify who are the potential winners and losers, and examine how the balance of political and economic interests in each country and across countries is intermediated by political processes. In other words, we will try to comprehend what forces shape the 'political will'—or lack thereof—for regional cooperation. We also need to consider the institutional capacities, and in particular the conditions of governance and corruption, and how they undermine the ability to cooperate across borders.

There are no easy answers to these questions. They are especially difficult in Central Asia because of the region's complex history, the dramatic institutional and political changes in recent decades, and the fact that only limited analysis of political and institutional conditions has been carried out. Necessary as this analysis is to an understanding of how regional cooperation can contribute to human development and human security, this report can only make a start in that direction.

Sources of political and institutional constraints

The sources of political and institutional constraints on regional cooperation are varied. Some are rooted in Soviet legacies and some in the post-Soviet period. The Soviet system created a distinctive array of institutions, actors and interests. These have carried over in terms of setting the immediate agenda of nation-building and state-building for the political elites that emerged in Central Asia during the process of independence and transition.

The particular political economy of state socialism in the late Soviet period helped determine which actors and institutions would have power and interests once the union fell apart. The presidential

Security issues, domestically, regionally and internationally, remain at the forefront of political decision-making about issues of regional cooperation in Central Asia

systems that have risen in Central Asia and many other CIS countries, involving a high concentration of power in the president and in his centralized administrative apparatus, are rooted in the Soviet-era executive apparatus of the Communist Party system, and in the security forces and the strong presidencies that were created in 1990 and 1991.¹ Key Soviet-era economic elites, such as enterprise and farm directors, or those with control over cadre policy, were embedded in and bolstered by clan-based patronage networks that persisted into the post-Soviet era and became the basis of new, informal interest groups and political networks. This system also largely prevented the emergence of other pluralist interest groups that have often been advocates of reform in other regions.

Yet the Soviet legacy alone does not explain the political interests of the Central Asian leaders or the political challenges to regional cooperation. Several other factors are at work. Security issues, domestically, regionally and internationally, have changed dramatically in the past 15 years, but state security remains at the forefront of political decision-making about issues of regional cooperation. Related to this is the apparent fear of further disintegration of the new post-Soviet republics, which motivates the leaders of many CIS countries, who lived through the shock of the sudden and unexpected dissolution of the Soviet Union.² Finally, the process of transition has in many cases led to the emergence or strengthening of certain interest groups at all levels—sometimes outside the state, sometimes within it, as will be discussed further in this chapter. But first, we will delve somewhat more deeply into the process of transition from Soviet rule.

From Soviet integration to independence and nation-building

The legacy of Soviet nationalities policy and rule in Central Asia has been critical in shaping the perspectives and interests of the post-Soviet rulers. The Soviet Constitution embraced the principle of ethno-federalism and included a nominal right to sovereignty for each constituent republic. Although for nearly 70 years most ethno-national elites from the Soviet republics did not seek fulfillment of this right, a tide of nationalism emerged in the late 1980s. Many specialists argue that Soviet policies themselves fostered this wave of nationalism and anti-Soviet sentiment.³

Soviet nationalities policy, designed in the 1920s, was essentially an affirmative action policy for the titular or majority ethnic group within each republic. The regime promoted a cadre of Communist Party members from the titular group, and

instilled the notion of self-rule, despite constant and close monitoring by ethnic Russians and by Moscow, and the repression of open nationalism. Although feelings of domination varied across Central Asia and over time, and were less visibly oppositionist than elsewhere in the former Soviet Union (such as in the Baltics and the Caucasus), some nationalist groups and some Central Asian elites—especially Uzbek elites—saw the Soviet Union as something akin to a Russian colonial empire.⁴ Under Stalin, massive purges, particularly harsh in the Muslim republics, bred resentment. Ironically, Gorbachev's reform policies of 'glasnost' and 'perestroika' were accompanied by a new purge, including the removal or arrest of tens of thousands of members of the party and state apparatus in most of the Central Asian republics.⁵

These policies created several serious problems for Central Asia in the wake of the Soviet collapse. First, until its demise, the Soviet Union prevented the development of nation-states. When the republics became independent in 1991, they had to secure their boundaries, territory and legitimacy. In other words, they had to build nationalism and nation-statehood more or less from scratch.⁶ The 'national' identities created and imposed by the Soviets formed the basis for the new nation-states, but they were incomplete and accompanied by many contradictions. Ethno-national identities had been accepted most strongly among intellectual elites, party members and the urban population. Yet the primarily rural population continued to identify with traditional *mahalla* (community/neighbourhood), village, residential, kinship, clan, and regional groups and loyalties.⁷ Although no longer identical with the tribal communities of the pre-Soviet era, these networks had adapted and persisted in various forms throughout Central Asia as an unintended consequence of Soviet policies in the region.⁸ In particular, collective farms had not obliterated clans and tribes, but had become the 'new tribe'.⁹ Intra-ethnic clan networks or 'solidarity groups' became the informal basis of social and economic organization. Some were poised to become vested interest groups within and around the transitional regimes.¹⁰

These local communities did not necessarily feel a loyalty to or identification with the new states, nor did they prioritize the states over their local group interests. The new Central Asian leaders therefore saw the need to develop a new ideology of nationalism as a foundation for their new nation-states. Thanks to moderate nationalist policies, this ideology did not take the virulent form of 'ethnic nationalism', seen, for example, in post-communist Yugoslavia. Nonetheless, the new nationalism did alienate members of ethnic minorities within each

state, and resulted in emigration and fears of inter-ethnic conflict, especially in the early years after independence.

Closely related to the challenge of state-building and nationalism was the problematic legacy of the Soviet delimitation of the 'national' borders in Central Asia between 1924 and 1936 (see Box 2.3 in Chapter 2). The Soviet regime demarcated complicated and seemingly irrational borders between the republics, cutting through linguistic, ethnic and familial groups, poorly dividing natural resources and complicating trade. Major problems have resulted for Central Asia, and for the Fergana Valley in particular, as borders 'hardened' after independence.

The first of these problems is the existence of enclaves where the territory and population belong to the neighbouring country. Territorial enclaves exist within Kyrgyzstan, Tajikistan and Uzbekistan, making both transit and governance issues in these areas very difficult, and the potential for border conflict high. Second, significant ethnic minorities exist within the Fergana Valley region of each independent republic. In Kyrgyzstan, it is estimated that ethnic Uzbeks comprise between 25 and 30 percent of the population in the Osh and Jalal-Abad regions.¹¹ In Tajikistan, a large percentage of people in the Sughd region are also ethnic Uzbeks. In Uzbekistan, Kyrgyz and Tajik minorities live in the Fergana Valley, the Surkhandarya region, and the cities of Samarkand and Bukhara. A third issue involves the fact that under Soviet rule, movement across republic borders was easy and common for both familial and economic reasons. There was little consciousness of borders among local populations. Extended families lived on both sides and were free to visit at will. Traders likewise moved with ease from Osh to Andijan or Khodjent, and back. Similar situations existed along the Kazakhstani-Uzbek and Turkmen-Uzbek borders. After independence, however, new border posts disrupted many traditional ties.

The creation of independent states and international state borders within Central Asia has created difficulties for both local populations, and the regimes that seek to secure these borders and defend their territorial sovereignty. The new Central Asian governments have feared that their neighbours would play the 'ethnic card',¹² inciting protest or secession among their ethnic brethren, or fomenting ethnic conflict within the Fergana Valley region. Fears of ethnic secessionism have been fueled by overwhelming international attention on the possibility of ethnic conflict.¹³ Both the new national governments and international community worried that the inter-ethnic riots and pogroms in the Fergana Valley in 1989 and 1990 were a prelude to another state collapse along

When the republics became independent in 1991, they had to secure their boundaries, territory and legitimacy and build nationalism and nation-statehood more or less from scratch

The creation of international state borders within Central Asia has created difficulties for both local populations and the regimes that seek to secure these borders and defend their territorial sovereignty

Preventing ethnic and resource conflict: the preventive development programme

The Preventive Development Programme supported by UNDP is designed to prevent negative fallout from nation-building and strengthen development aimed at social tolerance, peace and human security. The programme works with local communities and national and local decision-makers to prevent conflict and address problems in a constructive manner. It includes five main components: early warning and monitoring, capacity building of local and national stakeholders, emergency grants, policy advice and networking, and enhanced cross-border cooperation.

Kyrgyzstan and Tajikistan have been active participants. Some initiatives to date include school construction and repair, rehabilitation of pump stations, and road rehabilitation. One important activity is an early-warning project in certain tense villages along the Kyrgyz-Tajik border in Batken and Soghd provinces. Locals have been appointed to monitor the situation, and communities have suggested promoting more inter-ethnic dialogue and cultural activities as well as better law enforcement.¹⁴

Such community involvement is relatively new; in the past the border communities generally did not interact with each other because of fear or anger. Abdiraim Dzhoorokulov, the national coordinator of the programme, said, "The essence of trans-border cooperation is teaching the people how to catch fish, not giving [them fish]. Sometimes it is only necessary to show them the correct way."¹⁵

ethno-national lines in the manner of the Soviet or Yugoslav collapse. Given the high concentration of ethnic minorities in certain geographical regions of each of the Central Asian states, this fear is understandable. National leaders therefore also understandably felt the need to solidify their borders. At the same time, some of them, in particular, in Kyrgyzstan and Tajikistan, have been working with donors to reduce tensions in the region and prevent cross-border ethnic conflict (see Box 7.1)

More often, however, political rivalries between the regional leaders, economic disputes over water and gas, and a desire to control trade flows have exacerbated latent border disputes, and the erection of barriers has frustrated and harmed the local populations on all sides. The placement of harsh border posts and guards and barbed-wire fences on the borders between Andijan, Osh and Khodjent, the restriction and harassment of traders, the frequent closing of the Tajik-Uzbek and Kazakhstani-Uzbek roads and borders, and the Uzbek mining of parts of its Kyrgyz and Tajik borders are all measures that have had negative social and economic consequences. Attempts to improve border management and create 'borders with a human face' have been made with donor assistance (see Box 3.9 in Chapter 3).

Security concerns as political challenge and opportunity

The nation-building goals of the Central Asian leaders have been closely linked to other security concerns in the post-Soviet era. Although none of the Central Asian leaders had initially sought independence from the Soviet Union, which subsidized a large portion of their budgets and provided an overall political and security umbrella for the

local elites, after the Soviet break up, relations with Russia quickly soured in some cases, especially for those leaders who believed they had prospects for region-wide leadership and for economic success irrespective of Russia. Turkmenistan and Uzbekistan preferred to keep Russia at a distance, while Kazakhstan, Kyrgyzstan and Tajikistan saw it either as a benign neighbour or as an unavoidable dominant force in the region.¹⁶ This latter group also viewed a greater engagement with Russia as a suitable counterweight to the increased presence of China in the region, and supported Russian-led regional organizations. In contrast, during the 1990s, Uzbekistan tended to stress its national independence and fostered closer relations with the United States, distanced itself from the CIS and the CSTO, and was slow to join the SCO.¹⁷

Another major issue that has shaped the view of regional leaders was the potential for insecurity to spill over from neighbouring countries. This was the case especially for Tajikistan vis-à-vis Uzbekistan, first because of the Tajik Civil War and then because of the fear of terrorist groups based in Afghanistan and Tajikistan. Of particular concern to Uzbekistan was a religious opposition movement. It had initially emerged after independence under the leadership of Tohir Yuldashev, who demanded an Islamic state and fostered close ties to both Tajik and Afghani Islamist groups. Yuldashev and his followers had fled the Uzbek regime's suppression and set up a base first in the Tavildara Valley of Tajikistan in the 1990s and later in northern Afghanistan. Known as the Islamic Movement of Uzbekistan, the group radicalized its agenda over time, adopting guerrilla violence as its means of overthrowing the secular Uzbek regime and creating an Islamic state.¹⁸ It was responsible for guerrilla incursions into the Fergana Valley in 1999 and 2000.¹⁹ The Uzbeks accused the

Tajik Government of harboring the movement on their territory, while the Tajiks countered with the claim that the Uzbek Government was harboring an insurgent group under the leadership of Makhmud Khudoberdiyev in order to destabilize Tajikistan.

There have been other security threats, real and perceived. During the 1990s, the radical Taliban authorities of Afghanistan laid claim to the right to Samarkand and Bukhara, causing Uzbekistan to fortify its southern border. With the subsequent war in Afghanistan, concern about refugees, often thought to be associated with the flow of weapons and narco-trafficking, gave Uzbekistan further reason to solidify its frontiers. Since 2000, Uzbekistan has also been the heart of a newer Islamic opposition movement in Central Asia—Hizb-ut-Tahrir, which professes to pursue radical goals with non-violent means. Its stated aim is the creation of an Islamic caliphate for all of Central Asia, and it particularly targets the Uzbek regime. By some accounts, tens of thousands of Uzbeks now support this underground movement despite repeated Government crackdowns.²⁰ More recently, Kyrgyzstan and Tajikistan have begun to fear that Hizb-ut-Tahrir's Islamic extremism is spreading to their territories because of the crackdown in Uzbekistan.²¹ Finally, the Rose Revolution in Georgia in November 2003, the Orange Revolution in Ukraine in December 2004, the overthrow of President Akaev of Kyrgyzstan in March 2005, and the violence in Andijan in Uzbekistan in May 2005 reinforced the notion among Central Asian leaders that domestic grass-roots opposition and religious movements pose threats to national security and prevailing regimes.

All these perceived and real cross-border and domestic security threats, absent an effective regional security framework, have helped to reinforce the tendencies of the post-Soviet Central Asian governments to further harden their mutual borders. In Uzbekistan, this has taken particularly harsh forms, including the mining of some of its borders—with some deadly effects for border farming communities—construction of border fences and watchtowers, and intermittent border closures.

In recent years, however, some new elements have begun to shape the mutual security relations among Central Asian countries. First, the long-standing rivalry between the presidents of Kazakhstan and Uzbekistan over leadership in the region, which negatively affected the scope for regional cooperation in the past,²² seems to have abated somewhat. Second, shared concerns over Islamic movements and now the 'colour revolutions' in various CIS countries have led to greater cooperation on security issues among

the Central Asian states, together with China and Russia. Third, apparent disappointment by the Uzbek leadership over human rights-related criticism from the United States, and over the lack of significant financial support from the international financial institutions and from the Western donor community—due to the slow reform process—has led Uzbekistan to look for closer partnership with China, Russia and its Central Asian neighbours. Security cooperation has mainly taken the form of bilateral or trilateral agreements, or has been pursued within the framework of the SCO.²³ Successful progress on cooperation on security issues diminishes one major obstacle to regional cooperation overall, and may prove the basis for cooperation in other areas.

Successes of the post-Soviet period in shoring up regional stability

Despite the significant hurdles faced by the newly independent states of Central Asia, their leaders and their people; despite the strong centrifugal forces at work after the collapse of the Soviet Union; and despite the various security threats, these states have had some major successes in keeping a lid on what might have been potentially explosive political forces.

The need to build cohesive nation-states, national loyalty and international borders respected by their own populations, their neighbours and the international community is a phenomenon common to many states emerging from imperial collapse. Central Asian leaders have been relatively successful both in creating a sense of national identity and the idea of legitimate nation-states in countries where only minimal nationalist movements and no history of a nation-state had existed before 1991.²⁴ Nationalism rapidly replaced communism as the 'ideology' of the new elites, and the new regimes have been drawing on symbols, literature and their newly written histories to imbue youth with a sense of national pride and sentiment.²⁵

At the same time, the post-Soviet elites have successfully averted two extreme outcomes since independence: the new nationalism turning violent, or ethnic differences leading to violent ethnic secessionism. Central Asian nationalism has usually taken a relatively tolerant form. There is no legal discrimination against ethnic minorities; legislation and its implementation mostly meet international standards on the treatment of ethnic minorities. In general, tolerant ethnic and nationalist policies have fostered stable inter-ethnic relations. Surveys suggest an improvement of inter-ethnic relations since the early 1990s, when the shock of ethnic riots in the towns of

Perceived and real cross-border and domestic security threats have reinforced the tendencies of the post-Soviet Central Asian governments to further harden their mutual borders

Central Asian leaders have been relatively successful both in creating a sense of national identity and the idea of legitimate nation-states

Despite frequent border closings between Uzbekistan and its neighbours, no inter-ethnic or inter-state violence has erupted

Osh, Uzgen and Fergana still reverberated in the Fergana Valley.²⁶ This has over time led to a significant decrease both in ethnic out-migration as well as in the fear of potential ethnic conflict.²⁷

In large part because of tolerant ethnic and nationalist policies, the Central Asian states have also avoided inter-state conflict over borders. The boundaries of the Fergana Valley have not been challenged in a conflictual way. Boundary disputes between China and Kazakhstan, China and Kyrgyzstan, and China and Tajikistan have not led to war. And despite frequent border closings between Uzbekistan and its neighbours, no inter-ethnic or inter-state violence has erupted.

Even water disputes among countries have been handled in a non-violent manner. Although the governments and international organizations generally recognize that the current year-to-year agreements over water usage are not the optimal solution,²⁸ these agreements have at least eased the situation for agriculturalists and have prevented the outbreak of inter-state conflict. Local officials, with the aid of donor programmes such as the UNDP Preventive Development Programme (see Box 7.1) and efforts by international and local NGOs, have become increasingly engaged in solving water and other border problems at a local level.²⁹

Decisions to cooperate across borders and to integrate national economies will produce winners and losers; the question is how the political system mediates these opposing interests

Overall, the relatively stable and peaceful conditions that have prevailed in the region during most of the turbulent post-Soviet years have been impressive. Unfortunately, this stability has not been accompanied by the development of democratic political institutions, and has been used to justify considerable repression of important human rights in some of the countries. And regional cooperation has fallen far short of reaping the benefits that would come from economic integration among the countries of the region, with their big neighbours and with the rest of the world. In order to better understand the continuing political obstacles to closer cooperation, we now turn to an analysis of the key political actors, interests and institutions in Central Asia.

Political actors and interests: the political economy of regional cooperation

By 1996, all the Central Asian regimes had become 'super-presidential' systems, in which the president and his administration control political decision-making while the parliament and courts are only nominally independent

Decisions to cooperate across borders and to integrate national economies will produce winners and losers (see Box 7.2 for a Kyrgyz perspective). Key questions are whether the societal actors who will benefit or lose from such decisions are fully aware of the benefits and losses, and whether and how they can effectively promote or oppose re-

gional cooperation. These actors typically include labour unions, business associations of small or large enterprises, traders' and farmers' associations, and environmental lobbies and other NGOs. They also comprise the various bureaucracies and power structures in governments at the national and local levels.

Since the effects of regional cooperation are likely to benefit the average farmer, trader and businessperson, as well as the average consumer, one would expect these groups to be lobbying for cooperation. But protected businesses and their employees, public employees who enforce restrictions on trade and commerce, and others who have gained from a less cooperative system of economic and political institutions, may perceive themselves as the 'losers' and try to block initiatives for regional cooperation. The questions then relate to how the political system mediates these opposing forces, and whether it gives the opponents of regional cooperation and integration the upper hand, irrespective of where the greater good lies for the country and region as a whole. In this section we look at the key players on the Central Asian political stage to assess the roles they play in advancing or hindering regional cooperation and integration.

The role of the presidency

Strong presidencies emerged from the institution of the Communist Party's First Secretary in each republic at the end of the Soviet era. Presidential elections took place in all the new states shortly after independence, but their competitiveness was severely circumscribed. Subsequent presidential referenda, constitutional changes and presidential elections were designed to increase and consolidate the power of the chief executive. Even those regimes that had initially liberalized the political and/or economic spheres in the early post-Soviet years increasingly followed the more autocratic political model of Turkmenistan and Uzbekistan. According to constitutional scholars, by 1996, all the Central Asian regimes had become 'super-presidential' systems, in which the president and his administration (the 'apparat') control political decision-making while the parliament and courts are only nominally independent.³⁰ Even in Kyrgyzstan, which had the most democratic track record after independence, the legislature and the opposition within it has had relatively little power since 1996, although it has maintained some autonomy and functional roles.³¹

A direct holdover from the Soviet system and political culture is the centralized level of control with which the Central Asian presidents seek to

Box 7.2

A view from Kyrgyzstan on the political economy of cooperation

A review of economic impacts shows the many potential benefits from cooperation as well as the large losses from non-cooperation for Kyrgyzstan and other countries in Central Asia. Still, it is obvious that in general regional cooperation is much less intensive than one would have expected, given the acute problems that cannot be solved without cooperation. There must be good reasons for this.

When regional cooperation problems are discussed, benefits for the country are considered benefits for everybody in the country. If so, it is difficult to understand why governments and other stakeholders fail to cooperate. However, one must not ignore the multiplicity of interests within countries, which imply that benefits for a country are a net result of gains for some and losses for others. The resulting position of the country's leadership may not coincide with the interests of those who benefit from cooperation. This relates, of course, not only to Central Asian countries, but possibly to every country in the world. However, the countries of Central Asia face some specific issues that make the non-uniformity of domestic interests especially significant.

Central Asian countries are newly independent states with transitional economies and institutions. Societies in these countries are not well structured yet, and interest groups based on long-term interests have not yet formed. The countries had lost their statehood long before regaining independence in 1991, so no traditions of stakeholder interaction and coordination of interests for developing unified external positions exist. The necessary institutions are emerging now, but are still not sufficiently developed. The rapidly changing policy environment during the transitional period has not helped in developing a long-term vision; therefore, the stakeholders' interests are predominantly short term. From theory we know that if stakeholders do not see their interaction as a repeated and long-term game, the chances for a cooperative outcome are low.

In fact, this theoretical prediction is borne out by reality. In the absence of effective coordination mechanisms and with a preponderance of short-term interests, key decisions on regional cooperation issues are made by those who lose in the short term from the removal of barriers to integration. For example, a Kyrgyz customs officer who extorts bribes from those crossing the Kazakhstani-Kyrgyz border would be unhappy to learn that an open economic space will eliminate his or her customs post, even though this would create many additional jobs and reduce poverty in Kyrgyzstan.

Insufficient experience of international cooperation leads to a situation where many stakeholders tend to underestimate the benefits from it. Moreover, for people with a long history of living in a planned economy, cooperation, integration and competition are associated with uncertainty and psychological discomfort. This perception also contributes to undervaluing cooperation benefits. Since the self-identification of stakeholders as winners or losers depends on their sense of the cooperation outcome, it is important to make available accurate information on these outcomes.

It is also necessary to distinguish cooperation's winners and losers. The position then adopted by a country's leadership depends on who—the winners or the losers—is currently in power. This explains also why some pro-cooperation agreements are poorly implemented. Those who conclude the agreements (national government officials) could be interested in cooperation, while those implementing them (local officials) may lose and therefore sabotage the agreements deliberately or unwittingly.

Who are the winners and losers from cooperation? As cooperation brings increased efficiency, transparency and long-term gains, winners would be those who are competitive, who are poor (because cooperation lowers prices and creates jobs), and who have a long-term perspective. Losers would be rent-seekers of all kinds—corrupt government officials, businesspeople preserving their monopoly and/or economizing on environmental protection, and unskilled workers fearing competition from migrants.

Based on this discussion, it is possible to state that regional cooperation is lagging because the potential losers currently prevail over the winners. This is particularly true in countries that have many sources of rent and where, therefore, rent-seekers are strong. Kyrgyzstan does not have many natural resources and does not have an exclusive geographical location, allowing it to make easy money on transit. In other words, there are few possibilities for rent-seeking, and those that do exist often are not directly related to barriers to regional integration. This explains why in Kyrgyzstan a majority of the population supports regional cooperation.

Source: "UNDP Country Background Study, Kyrgyzstan"

manage domestic political and economic systems and relations with their neighbours. Although the ideological belief in communism has all but disappeared, the belief in the need for state-directed and state-managed economic activity has persisted. The presidents characteristically have a high level of distrust of their counterparts in the region, despite a significant number of shared interests. They have worried that their neighbours' actions—whether in the area of political liberalization or economic reform or security measures—will impede the security,

sovereignty and legitimacy of their own state and regime.³²

Moreover, these presidents' general perspectives on key foreign policy issues have varied substantially, while shaping the framework within which they view issues of regional cooperation and integration. The Uzbek leadership had since the early 1990s been opposed to a Russian presence on Uzbek territory, although most recently Uzbekistan has turned more towards Russia in an apparent reversal of external political direction. At the same time, it has favoured bilateral

There are indications that some Central Asian leaders would in principle be ready to engage in greater regional cooperation

regional relations over multilateral approaches, and generally has not played a lead role in any of the regional institutions. Since 2004, however, Uzbekistan has become more active in supporting the work of CACO and the SCO, and has made significant proposals for more intensive regional cooperation, including the creation of a Central Asian Common Market (see Box 3.4 in Chapter 3).

Kazakhstan, with its large ethnic Russian minority (37.7 per cent in 1989, but down to 29.9 per cent in 1999), was initially very susceptible to Russian influence.³³ As the Kazakhstani president has consolidated institutional power, a process aided by substantial FDI and revenues from the oil sector, Kazakhstan has become a more influential player in the region, establishing close ties both with Russia, as well as with China and the United States, and attaining greater influence with Central Asian neighbours. The Kazakhstani leadership has generally been supportive of various regional institutions, especially the CIS, EEC and CACO, and with a relatively open border regime has in effect applied a policy supportive of regional economic integration.³⁴ At the same time, Kazakhstani leaders see Kazakhstan at the intercept of Europe and Asia, and have pursued very deliberately a 'multi-vector' foreign policy in which Kazakhstani relations with the big powers, especially China, Russia and the United States, occupy the highest priority.³⁵

Kyrgyzstan and Tajikistan have both been strapped by limited economic resources, and are highly dependent on Russia for economic and political stability. They also need Russia to balance the potential influences of China and Uzbekistan. While Tajikistan agreed with Russia in late 2004 to phase out the presence of Russian border guards on its border with Afghanistan, it continues military cooperation with Russia in other ways. Kyrgyzstan's first post-independence president had initially sought close ties with the West, but then increasingly resisted external pressure to democratize political processes. The presidents of both states have welcomed the establishment of regional institutions and played an active role in their development.

The president of Turkmenistan has insisted on 'constructive neutrality' and has engaged primarily in narrowly focused bilateral relations dealing with key commercial and security issues, rather than seeking to participate in regional or multilateral agreements.³⁶

The rise of powerful interest groups

Presidentialism and authoritarianism per se have not impeded regional cooperation among states in other regions, such as East and South-East

Asia. Although the vision of the Central Asian executives has been highly influenced by their command-style communist experiences and subsequent 15-year quest for sovereignty and security, there are indications that some Central Asian leaders would in principle be ready to engage in greater economic reform and regional cooperation. President Karimov's proposal in 2004 for a regional Common Market and President Nazarbayev's call for closer economic integration in February 2005 are prominent examples of promising new regional initiatives. The question remains, however, whether this new thinking will be translated into effective action to open up regional economic relations and to tie themselves into regional agreements that may be seen as compromising the new-found sovereignty of their countries. One major obstacle for action may be that even in these super-presidential systems, the presidency and executive apparatus are neither as consolidated nor as powerful as observers often assume.³⁷

Power in Central Asian countries is informally held by the leaders of groups or clan networks based partly on business interests, and partly on shared family, kin and regional ties. Even under the Soviet system, despite the appearance of totalitarian control exercised from Moscow, party power in fact reflected local historical realities of sub-national factions, and intra-ethnic division and balancing of power.³⁸ Post-Soviet power is also informally decentralized among patronage networks.³⁹ In policy-making and implementation, leaders therefore have to allow for the powerful groups that surround them. The extent of this diffusion of power varies in the states across the region, and takes on somewhat different forms in each country, but generally combines Soviet-era reliance on institutions of state control with a local tradition of reliance on personalistic ties and patronage. The president patronizes and balances various informal networks in order to maintain control, loyalty and legitimacy. The system of informal rule intensified during the transition process, allowing existing informal patronage networks to become vested interests with significant leverage over the state, which consequently weakened the formal state institutions, especially those outside the president's office.

One strand of the political economy literature of transition has argued that the major challenge and obstacle for successful completion of liberal economic reforms is the emergence of elite interest groups.⁴⁰ These actors, including enterprise directors, some government officials, bankers and mafias, surfaced during the initial phase of political and economic 'partial' liberalization. They took advantage, often through illegal or

non-transparent means, of the opportunities presented by the collapse of communism and initial reforms to establish monopolistic economic interests, and then became vested in a system that allows them a certain amount of economic freedom, but does not hold them politically or economically accountable. They bolstered the transitional regimes, which had allowed them to make such illicit gains, so as to have an ongoing political cover for their wealth and power. They blocked further political reforms, including further economic liberalization, which would have forced them to compete with a wider set of economic actors or share the wealth of their monopolies.

These ‘winners’ of the transition process did not oppose initial reform, nor did they seek to reverse reform and return to a communist system. Rather, “they have frequently attempted to block specific advances in the reform process that threaten to eliminate the special advantages and market distortions upon which their own early reform gains were based.”⁴¹ As they gained concentrated rents (i.e., abnormal profits) from their positions, and then stalled further reform, the initial winners created a ‘partial reform equilibrium’.⁴² The rest of their economies and societies meanwhile suffered high costs from market distortions, but lacked the political and economic power to change the equilibrium and continue reforms that would distribute economic benefits to society more broadly.⁴³ This outcome aptly characterizes the problems faced by the partial reformers of Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan (after signing the peace accord in 1997) and Ukraine. Each of these countries faces the accompanying problems of monopolistic groups, concentrated rents, dispersed costs, high corruption and resistance to further reforms.⁴⁴

The partial reform equilibrium trap, according to the same theory, contrasts with two alternative scenarios. Under the first alternative, full and rapid economic and political liberalization leads to short-term losses, but in the medium to long term produces widely dispersed gains. This model of reform was adopted by most countries of post-communist Central Europe, including the Baltic republics, the Czech Republic, Hungary, Poland and Slovenia. Although one effect of this model has been government turnover—in some cases, in the first elections after the implementation of radical economic reforms that caused high unemployment—these countries have persisted with economic reforms under subsequent governments, resulting in a significant economic recovery over the medium to longer term. They do not face extensive problems from monopolies and the capture of state policy by a few vested interests.

Under the second scenario, there is no reform or only very limited economic liberalization without political liberalization. Theory and some empirical evidence suggest that this case avoids the establishment of vested interests and is consistent with some recovery of economic growth. In Central Asia, two countries would fit this category: Turkmenistan has exhibited virtually no reform; Uzbekistan is characterized by minimal economic or political reform.⁴⁵ Theoretically, in these countries there should be fewer and less powerful vested interests and therefore there should be less if any special-interest resistance to the executive’s economic policy-making, including decisions about regional integration.

This political economy argument offers some useful insight for understanding the politics of reform in post-communist Central Asia, as well as the constraints on regional economic cooperation. The initial winners of transitional reforms gain monopolistic control over industries and economic sectors, and then are likely directly or indirectly to block regional economic cooperation. Why would this be the case? For two reasons: First, because the very willingness to adopt and implement regional economic cooperation measures depends in large part on the willingness to liberalize one’s border, currency and trade policies. Greater trade liberalization and integration in turn means greater competition, and therefore is a threat to the monopolies and rent-seeking potential of leading firms and agencies in the protected sectors of the economy. Second, regional economic cooperation and integration policies demand a certain amount of centralized and coordinated state economic policy. In order to be effectively implemented, and for individuals and businesses to gain from them, these policies also demand a relatively well-trained, honest and effective state bureaucracy, civil service, judiciary, customs agency and police force to protect the property rights of individual economic actors as they engage in economic transactions in their own countries, as well as in other countries within their region.

With this analytical framework as a reference, let us consider how various interest groups have fared in the post-Soviet transition in Central Asia.

The rise of political/economic interest groups during the transition

The partial reformers in Central Asia—Kazakhstan, Kyrgyzstan and Tajikistan—have seen the rise of vested interests that have blocked further reform. For example, the Kyrgyz reform process, led by President Akaev and pro-Western, pro-market, and

Rapid economic and political liberalization leads to short-term losses but in the medium to long term produces widely dispersed gains, as happened in Central Europe

But the initial winners of transitional reforms may gain monopolistic control over industries and economic sectors, and then block regional economic cooperation

Vested interests close to the regime opposed liberalization and reforms that would threaten their political and economic gains

Each government talks about the need to crack down on corruption to stimulate private business and encourage investment, trade and regional integration, but action has been limited

pro-democracy technocrats and intellectuals, was running out of steam by the mid- to late 1990s. The privatization of significant industries and the control of certain trade sectors and key economic ministries primarily went to those close to the regime, through personal ties and networks. Those excluded from the patronage system, especially in the southern regions, became the regime's opposition. Their dissatisfaction threatened a turnover in the 1995 and 2000 elections, leading the Government to renege on its commitment to democratic reforms. The combination of the country's Soviet legacy, its landlocked and resource poor location, and stalled reforms led to high poverty, limited economic recovery, increasing dependence on foreign aid and mounting debt. With fewer resources in the state coffers, the regime began alienating some former allies by cutting them out of their access to power and economic resources and rents. Meanwhile, society as a whole was largely excluded from this process of insider privatization and resource allocation, and therefore experienced mostly the costs of partial reforms. Major state assets and most significant joint ventures were widely thought by the Kyrgyz people to be in the hands of the Akaev family and clan connections. The resulting widespread popular frustrations and the discontent of those clans excluded from power in large part account for the political upheavals that led to the removal of President Akaev from office in March 2005.⁴⁶

In Kazakhstan, after independence the new Government was quick to adopt pro-market reforms, including price liberalization, banking reforms, creation of a positive regime for FDI, currency reforms, trade liberalization, and privatization of small and medium enterprises. Privatization of large assets remained limited, and insider privatization worked to create vested interests.⁴⁷ The Kazakhstani Government, however, has carried out only limited enterprise reform and corporate governance measures, and it continues to interfere in the economy.⁴⁸ Yet in comparison with the rest of the region, its economy is considered freer, and its real GDP has grown at an estimated 9 to 10 per cent per year since 2001, in part but not only because of oil.⁴⁹ President Nazarbayev also introduced limited political liberalization, although by 1994 the regime was already cracking down on opposition parties and the media, and cancelled presidential elections. Vested interests close to the regime opposed further liberalization and reforms that would threaten their political and economic gains. After the 2004 parliamentary elections, OSCE, EU and US election observers characterized the poll as having fallen well short of international standards for fair and open elections. Since then, new restrictions have

been imposed on the major opposition groups, supported by the business sector outside of the state's patronage network, and on civil society organizations.

In Tajikistan, transitional reforms were initially stalled by regime collapse, civil war and near breakdown of the state. After the signing of the peace accord in June 1997, the Tajik Government began to implement a programme of economic and political reforms. For example, the currency was liberalized, as was legislation on FDI. Privatization, however, was plagued by insider deals, often involving former warlords, who agreed to the peace in exchange for a share of the state pie. Criminal elements, some of them linked to former warlords and clan networks, became serious threats to society.⁵⁰ Parliamentary and presidential elections have been considered less than free and fair, despite the presence of opposition parties, including the Islamic Renaissance Party, which together with the United Tajik Opposition was supposed to occupy a guaranteed share of 30 per cent of the seats in Parliament, a commitment not fully delivered. The increasingly exclusive control of the very narrow presidential clan has reportedly led to popular dissatisfaction; some defections; behind-the-scenes, at times violent, power struggles between former warlords and the regime; and possibly to rising grass-roots support for alternative political opposition and religious extremist groups, such as Hizb-ut-Tahrir.⁵¹

While the leaders of all three countries have advocated greater regional cooperation, in practice they have taken only partial steps to pursue it. A plausible explanation for this is that regional integration and the associated liberalization and competition would cut the rents and monopolies of vested interests either close to the regimes or those whose disaffection as a result of loss of rents could pose a potential threat. Each government talks about the need to crack down on corruption to stimulate private business and encourage investment, trade and regional integration, but action has been limited. Those institutions most ridden by corruption—the police, customs, border guards and the courts—are those most necessary to establish the rule of law essential to economic development and regional cooperation, and to manage borders in an efficient manner and 'with a human face'.⁵² These same agencies are also deeply intertwined with the vested interests that have significant leverage over the state. Key people are generally appointed through patronage connections with the regime.⁵³ They then use their agencies to establish a patronage network and engage in rent-seeking.

Yet these three countries with their partial reforms do suggest that even limited political

Even limited political and economic reforms have had some positive effects

and economic reforms have had some positive effects. Small and medium enterprises, privatized in the early 1990s, operate more freely and have organized business associations and coalitions that seek and advocate for greater inter-regional trade, transit and cooperation. In Kazakhstan especially, the local business sector has benefited from liberalization of FDI and trade, and forms a lobby, albeit a weak one, for further economic and political reforms. The boom in the Kazakhstani economy, moreover, has recently spurred Kazakhstani businesspeople to begin seeking investment and trading opportunities among the more open neighbouring states, Kyrgyzstan and Tajikistan.⁵⁴ These countries, eager for FDI in industry and the agro-sector, stand to gain from this trend.

The two Central Asian countries that have implemented little or no economic and political reform during the transition—Turkmenistan and Uzbekistan—have also been confronted with the rise of political and economic interest groups, contrary to what the theory of political and economic reform presented earlier would have predicted. Avoiding reform does not preclude the problem of vested interests. In these countries, most major assets have remained in state hands. But vested interests have still emerged and played significant roles in blocking reform. The presence of monopolies (governmental, semi-governmental or private); concentrated rents; elite resistance to economic reforms, including to regional cooperation and integration; and the consequent high costs to society broadly characterize the situation in Uzbekistan and in Turkmenistan.

The impact of vested interests on policy-making in Uzbekistan appears to be very significant. Informal networks that gained power in the late 1980s and early 1990s quickly established vested political interests in the political and economic status quo. By 1995, when the leadership was considering reforms backed by the International Monetary Fund (IMF), these interests blocked the agreed measures. Likewise, they opposed political reform, since they knew they had leverage in the prevailing political conditions, which they might lose under more transparent political and economic procedures. Vested interests also blocked agricultural reform, since it would have undercut their cotton monopolies. When world cotton prices dropped in the mid-1990s, they sought new sources of revenue, and pushed the Government to stop currency convertibility, which would have undercut their rents. The subsequent convertibility crisis was one prominent example of domination of clan interests.⁵⁵ For over six years, the Government consistently deferred currency convertibility despite IMF, World Bank and bilateral donor arguments for

it. In 1999, President Karimov announced that the Uzbek currency would be made convertible by 1 January 2000; however, implementation faltered because of the opposition from special interests who hold monopolies over alcohol, sugar, oil, automobiles and other import-export businesses, since restricted convertibility permitted them to sell their hard currency earned from the gas, gold and cotton sectors on the black market at distorted and highly profitable rates.

The lack of currency convertibility together with restrictions on privatization has inhibited foreign investors from entering the market to compete with the local monopolies.⁵⁶ While clans used their informal networks to change their Uzbek currency profits into dollars, foreign businesspeople could not do so without a special deal with the Government, and therefore could not repatriate profits. Consequently, FDI has been very limited.⁵⁷ In 2003, when Uzbek banks did finally introduce nominally free convertibility, the vested interests that might have suffered as a result pushed through trade restrictions that gave them new monopolies and new sources of rent.

In Turkmenistan, an authoritarian presidential regime and constant purges of senior and junior Government officials prevent informal networks from becoming powerful vested interests, although the trials and exposés of certain elite groups and their wealth suggests that a significant amount of corruption is taking place. The informal interest groups probably have less influence on or control over state policy in Turkmenistan than do vested interests elsewhere in Central Asia, simply because the Turkmen regime is so extremely centralized under one leader.

The specific political and economic interest groups vary in each country in Central Asia. Nonetheless, in all five states there are powerful groups averse to regional economic integration and cooperation. In all five, there are important monopolists who will, at least in the short term, not benefit from greater trade liberalization or more open, competitive and integrated economies. In Turkmenistan and Uzbekistan, a handful of powerful interest groups fear losing their rents and control if policies in support of regional cooperation and integration are pursued. In Kazakhstan and Kyrgyzstan, and perhaps increasingly in Tajikistan, more forward-looking elites and economic interests, representing a larger and less concentrated private sector, have begun to see the benefits that could result.

However, a second major problem plagues these three countries as much as the others. Local and transnational mafias, border guards, police and security forces, and civil servants often impede the adoption or implementation of regional

In all five countries there are important monopolists who will, at least in the short term, not benefit from greater trade liberalization or more open, competitive and integrated economies

Local and transnational mafias, as well as border guards, police and security forces, and civil servants, often impede the adoption or implementation of regional cooperation initiatives

Problems of poor governance emerge within all levels of the state bureaucracy, the presidential apparatus, state and semi-state enterprises, and the private enterprises close to the state

cooperation initiatives through corruption. In doing so, they make trade and transit extremely costly and dangerous, and they create very high transaction costs for local and foreign investors. Good governance and the rule of law, which we will discuss in greater depth in the next section, remain very weak. Therefore, despite a greater readiness for regional cooperation and integration in Kazakhstan, Kyrgyzstan and Tajikistan, serious obstacles still block progress. The hurdles appear even higher in Uzbekistan. In Turkmenistan they look prohibitive.

The role of good governance and institutions

Closely related to the issue of political interests and institutions that have opposed regional cooperation is the issue of good governance. Good governance refers to a strong and effective state that is accountable to its people, governed by a constitutional rule of law and able to provide a stable political environment. According to one widely used set of indicators that attempts to measure governance worldwide, Central Asian countries generally rank in the lowest quintile among all countries covered (see Table 7.1).

Super-presidential systems are inherently characterized by the absence of accountability mechanisms, as the leadership focuses on controlling or preventing a political or democratic opposition. However, these systems generally ignore or fail to control problems within the state apparatus or the system of patronage on which they rely, not least because they are unaware of its consequences, since they have no feedback information in the absence of a free press, a parliament, civil society and all the other accountability mechanisms available in more open and transparent societies. As a consequence, problems of poor governance, especially political

and economic corruption, emerge within all levels of the state bureaucracy, the presidential apparatus, state and semi-state enterprises, and the private enterprises close to the state. Below we will look at the political and economic dimensions in turn.

Such governance problems have several negative effects. First, they undercut the effectiveness and efficiency of state policy. Second, they even undermine the formulation of a rational state policy itself by allowing corrupt interventions by interest groups and powerful firms, networks or mafias. For example, some protected domestic monopolists may bribe or otherwise influence state officials to block trade liberalization and other economic reforms necessary for regional cooperation. This form of corruption is often referred to as 'state capture' by special interests. Third, pervasive corruption subverts a stable and predictable business environment for both domestic business and FDI. Fourth, corruption within the state police and security services, and among customs officials, border guards and tax officials, negatively affects the ability of businesspeople to engage in profitable and safe trade and transit of goods. Finally, all these factors foster public disillusionment and the de-legitimization of the state and regime, and weaken long-term political stability. This phenomenon feeds a vicious cycle that weakens economic performance, regional integration, and human development and human security. This section will briefly explore the potential for this pattern in Central Asia.

Political transformation and governance

Elections with independent parties, an independent judiciary and parliament, a vibrant civil society and a free media are all means by which citizens feed essential information back to their leaders, hold their government accountable

Governance and stability indicators in Central Asia, 2002

Country	Government effectiveness (percentile rank)	Rule of law (percentile rank)	Voice and accountability (percentile rank)	Political stability (percentile rank)
Kazakhstan	21.6	18.6	17.7	62.2
Kyrgyzstan	20.6	22.2	19.7	16.2
Tajikistan	8.8	6.7	21.2	17.8
Turkmenistan	3.6	10.8	2.5	37.8
Uzbekistan	11.9	10.3	5.1	18.9

Note: Percentile rank refers to the percentage of countries globally that rate below the selected country (subject to margin of error). The best score is the 100th percentile, the worst, 0.

Source: Kaufmann et al. 2003. See also the World Bank Governance Dataset at http://info.worldbank.org/governance/kkz2002/mc_region.asp.

and express their demand for good governance.⁵⁸ Governments that ensure these features of liberal political governance are typically more effective, more representative, and therefore more legitimate and ultimately more politically stable. Table 7.2 highlights several measures of political liberalization, comparing indices for Central Asia with those for Hungary and Russia. There is a striking consistency in the ratings assigned to the Central Asian states by several different research centres and international organizations. The broad consensus is that little political liberalization has taken place, and that the key elements of democracy and good governance are not present in Central Asia more than a decade after independence.

The most basic and necessary, but not entirely sufficient, indicator of good governance is the holding of regular, free, fair and transparent elections. Most of the Central Asian governments have adopted legislation creating a multi-party system and elections. These are significant advances in laying the groundwork for good governance. However, throughout Central Asia, political parties remain overwhelmingly created by and controlled by governments. Nowhere in Central Asia have parties been allowed to serve as a regular and open mechanism for participation and representation, for demanding accountability from public officials, or for pushing for governance reforms.

In Uzbekistan, the Ministry of Justice refused to register the independent opposition parties, Erk, Birlik, the Party of Agrarians and Entrepreneurs,

and the Free Farmers Party. The Kazakhstani, Kyrgyz and Tajik governments have allowed several opposition parties to register and compete, but subject to various restrictions. In Kazakhstan, a few months after the 2004 elections, a court ordered the closure of Democratic Choice of Kazakhstan, a leading opposition party.⁵⁹ The Tajik police arrested the Democratic Party leader a few months before the 2004 parliamentary elections, and the Islamic Revivalist Party and the Communists have remained under pressure. In Kyrgyzstan, parties have remained less restricted, but numerous opposition party candidates were denied registration in the parliamentary elections in early 2005. Meanwhile, the most powerful party to emerge—Alga Kyrgyzstan—was widely known to be the party of the president's daughter and was cited for electoral abuses. These factors played a large role in sparking the biggest protests ever to take place in the country, in February and March of 2005.

In the absence of, or with only weak independent political parties, elections throughout Central Asia since 1991 have been problematic at best, and widely discredited as unfree in many instances. Because of unsatisfactory legal frameworks for free elections as well as serious violations before elections, the OSCE has in some cases not even sent a monitoring mission to observe the poll. With few exceptions, elections therefore have not been an adequate means for populations to express their voices, or a sufficient mechanism for demanding government accountability. The

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Table 7.2

Country	Political Transformation Index, 2004	Constitutional Liberalism Index, 2003	Polity Openness Index, 2003	Polity Type, 2004	Civil Liberties Index, 2004	Political Rights Index, 2004	Index of Freedom, 2004	Indices of political transformation and liberalization
Kazakhstan	2.0	0.25	-6	Autocracy	5	6	Not free	
Kyrgyzstan	1.8	0.28	-3	Autocracy	5	6	Not free	
Tajikistan	1.6	0.20	-3	Autocracy	5	6	Not free	
Turkmenistan	1.4	0.18	-9	Autocracy	7	7	Not free	
Uzbekistan	1.4	0.20	-9	Autocracy	6	7	Not free	
Russian Federation	3.8	0.28	7	Partial democracy	5	6	Not free	
Hungary	5.0	0.70	10	Democracy	1	1	Free	

Sources:

Column 1: Bertelsmann Transformation Index, Bertelsmann Foundation. Scale is 0 to 5, low to high transformation.

Column 2: Constitutional Liberalism Index (EBRD 2003b). Scale is 0 to 1, low to high quality constitutional governance.

Column 3: Regime Authority Index (Polity IV), based on a scale of -10 to 10, most authoritarian to most democratic.

Column 4: Regime Type Assessment, based on Polity IV score. Negative scores reflect autocratic regimes.

Column 5: Civil Liberties Index, Freedom House. Scale is 1 to 7, most to least civil liberties (including rights of media, association, assembly, protest, religion, etc.).

Column 6: Political Liberties Index, Freedom House. Scale is 1 to 7, most to least political rights (including right to form opposition, free and fair elections, freedom from political persecution, etc.).

Column 7: Freedom House, Assessment of Freedom. Based on combined political rights and civil liberties scores.

Although the levels of political and civic freedom have varied across Central Asia over time, the range of civic space has remained generally very small

upcoming presidential elections between 2005 and 2007 in Kazakhstan, Tajikistan and Uzbekistan will be a major test of the governments, the populace and stability in the region. The political upheavals in Kyrgyzstan in March 2005, the sudden departure and resignation of President Akaev, and the subsequent presidential elections in July 2005 demonstrated the potential for change. The Kyrgyz presidential elections were overall judged by OSCE to have made significant progress towards democratic standards and represent a benchmark for other elections to follow.⁶⁰

Other key ingredients of political accountability and good governance are a free media and an active civil society. In Central Europe's post-communist countries, civil society became active in the 1980s, and played a major role in ending communism and forcing a political transition to democratic regimes. Civil society organizations—including the media and NGOs of many flavours (business groups, environmental groups, human rights groups, etc.)—then continued to act as a check on the government and state bureaucracy. Civil society pushed for economic and political policies that would benefit the broader populace, and strongly advocated engagement with the West and integration into the European Union.

In Central Asia, by contrast, the post-Soviet super-presidential systems, drawing on their Soviet experience of rule, have minimized or eliminated the accountability and transparency mechanisms of the independent judiciary, media, civil society or independent parties that might expose and check individual, family, clan or regional interests from influencing, capturing or dominating state policy and resources. This represents a major problem for the establishment of good governance.

Part of the weakness of civil society may be attributed to tight political control in Central Asia during the 1980s and even during the era of Gorbachev's 'perestroika'. Civil society leaders also had less access to Western democratic institutions and less financing for their organizations. Still, a grass-roots civil society has developed in the past 15 years, especially in Kyrgyzstan, where President Akaev's initial political liberalization fostered the growth of a democratic civil society and a free media. In Tajikistan, numerous civic organizations flourished in the wake of the civil war, as they engaged in prevention of renewed conflict. In Kazakhstan, civil society has been particularly active in the environmental sphere and has played a limited role in the private business sector. In Uzbekistan and Turkmenistan, civil society has been strictly under the control of the state and NGOs work mostly on less politically sensitive issues.

Although the levels of political and civic freedom have varied across Central Asia over time, civic

space has remained generally constrained. Labour unions were strongly under party control before 1991, but have almost disappeared in post-Soviet Central Asia or remain vehicles for state control. With the collapse of industry and lack of government financing, unions have few members and little power. The governments closely monitor private farmers' associations. Private business associations were non-existent in the Soviet era of central planning, and have had limited support in organizing and mobilizing the new business or middle class, which remains small despite government claims of high levels of privatization. Even the chambers of commerce generally have little clout with the governments in fighting for liberalization and deregulation. In general, business associations have been unable in the current political environment to act as lobbying groups in favour of regional cooperation. While the governments have increasingly recognized and allowed civic organizations that work on social issues, such as HIV/AIDS prevention or gender equality, organizations that promote political transparency, better governance and economic reform are vulnerable to interference and risk being shut down. Moreover, civic organizations of all kinds face great difficulties in operating on a regional level; national governments generally oppose transnational civic groups that attempt to put pressure on government policy.

From the limited political space that civil society, including the broader business community, had in the 1990s in Central Asia, the ability of civil society organizations to function has narrowed further over the last few years. Most recently, this was due to the reaction by the Central Asian authorities to the Rose Revolution in Georgia and the Orange Revolution in Ukraine. The full impact of the overturn of the Kyrgyz Government in March 2005 remains to be seen, but it will most likely add to the shock waves that the Georgian and Ukrainian examples of successful grass-roots accountability sent through the Central Asian governments. In response, they have turned to restrictive measures to prevent such a civic revolution from occurring in their states, with state control being exerted on civil society, especially the media and politically oriented NGOs. Internationally sponsored civic organizations have also been restricted in Tajikistan, Turkmenistan and Uzbekistan.

Finally, the local media, especially television and the central newspapers, are under rigorous control in most of Central Asia. Although some smaller, private newspapers circulate in a few provinces, they are not widespread, and their journalists operate under self-censorship or run into problems with authorities. In Kazakhstan and Kyrgyzstan, people close to the regime have bought several

Civic organizations of all kinds face great difficulties in operating on a regional level

major independent printing houses and papers. Foreign-sponsored media organizations, such as the British Broadcasting Corporation, Radio Free Europe/Radio Liberty, and the Institute for War and Peace Reporting, have had problems with reporting freely. The independent media has been particularly targeted during election periods.⁶¹

In sum, the Central Asian governments have largely subdued, co-opted or in some cases eliminated the civic actors that could help them foster good governance. They have commonly operated on the assumption that all of these groups are anti-governmental. In fact, they might work together to address issues of corruption or environmental problems, and help ensure more closely knit regional networks for a better understanding of common regional challenges, a more effective search for solutions, and better implementation of regional policies and programmes.

Economic transformation, corruption and governance

A second element of good governance is freedom of action in the economic sphere. Table 7.3 displays several indicators of economic freedom and quality of economic regulation. Here, too, indicators for Central Asia generally fall far short of international standards for economic freedom, despite the recent upturn in macroeconomic indicators across the region. According to the Wall Street Journal/Heritage Index of global

economic freedoms, the Central Asian countries all fall in the bottom quartile of countries in the world. Kazakhstan and Kyrgyzstan are evaluated as 'mostly unfree', while the others are 'repressed'. Uzbekistan and Turkmenistan rate among the 10 countries with the least economic freedom. All countries fall far below the level of Hungary and other Central European states, but in roughly the same range as Russia. In terms of the quality of economic regulation, Central Asian countries also rank far down among countries in the world.

The Central Asian states' low ranking on political and economic indicators of transformation reflects not only limited economic and political freedoms, but also a very weak rule of law in general. One of the major factors behind this is the absence, or the corruption, of the critical institutions necessary to uphold the law—such as the civil service, courts and police.⁶² When these institutions are seen to be pervaded by corruption, the regime further loses legitimacy. In fact, the shouts of demonstrators in Kyrgyzstan in February and March strongly suggest that frustration with corruption was one of the main factors that motivated people to protest and demand the regime's resignation.⁶³ More generally, popular impatience with poor governance, corruption and lack of participation for the opposition is high across the region. In the 2004 public opinion survey of 6,000 respondents organized by the World Bank (see Chapter 2), probably the single strongest expression of dissatisfaction was around the question of

The Central Asian states' low ranking on political and economic indicators of transformation reflects very weak rule of law in general

Table 7.3

Country	Global ranking of economic freedom	Composite score of economic freedom	Economic freedom evaluation	Regulatory quality (global percentile rank)
Kazakhstan	130	3.66	Mostly unfree	24.2
Kyrgyzstan	97	3.29	Mostly unfree	37.6
Tajikistan	144	4.00	Repressed	7.7
Turkmenistan	151	4.36	Repressed	1.0
Uzbekistan	147	4.10	Repressed	5.7
Russia	124	3.56	Mostly unfree	44.3
Hungary	35	2.40	Mostly free	84.0

Indices of economic transformation

Sources:

Columns 1, 2 and 3: Wall Street Journal/Heritage Foundation. For Column 1, see <http://cf.heritage.org/index/indexoffreedom.cfm>. For Column 2, see <http://cf.heritage.org/index/indexoffreedom.cfm>. Both indices rate countries globally. Column 2 is a composite score of individual indices of economic liberty (including privatization, government intervention, property rights, fiscal burden, monetary policy, foreign investment, banking sector, and wages); 1 is best, 5 is worst. For Column 3, a global overall assessment, see <http://cf.heritage.org/index/indexoffreedom.cfm>.

Column 4: Kaufmann et al. 2003 and the World Bank Governance Dataset at http://info.worldbank.org/governance/kkz2002/mc_region.asp. Percentile rank refers to the percentage of countries globally that rate below the selected country (subject to margin of error). The best score is the 100th percentile, the worst, 0.

Note: In columns 1 to 3, data on Russia and Hungary is from 2003. Data on the Central Asian states is from 2004.

At all levels of the state, civil servants and members of law enforcement agencies use their positions to demand bribes; these practices make business costly, difficult and uncertain

corruption. Sixty-seven percent of the respondents said that corruption is very or somewhat serious in their country, while 61 percent felt so for corruption in the courts. Sixty-three percent reported they had grievances that they would have liked to bring to the attention of the authorities. While the incidence of dissatisfaction was particularly high in Kyrgyzstan, it was also substantial in the other countries.⁶⁴

Corruption has been deep-seated in the political and economic systems of Central Asia. During the Soviet period, an extensive system of patronage and nepotism existed, and has persisted or even intensified since. In using ties of kin, clan and region as a basis for making cadre appointments, government officials have created a network of loyalists. However, this system has the severe disadvantage of informally discriminating against other qualified job candidates, and of creating an unprofessional and often poorly trained and educated government administration. The civil service suffers as a result. Civil servants often do not understand or have no incentive to introduce or implement measures to promote the liberalization policies necessary for successful regional cooperation. Kazakhstan is thus far the only country in the region that has begun a civil service reform programme.

Even more problematic is the effect of corruption on the business and trade climate. The practice of treating political institutions as personal

property—either for handing out rewards to one's friends or for enriching oneself—is widespread. Multiple independent corruption indices evaluate the states in the region in roughly the same way (see Table 7.4)—at the low end of the governance spectrum. While indices of corruption are always imperfect and generally measure perceptions of corruption rather than actual amounts, the cross-national surveys and rankings of the Central Asian states are strikingly negative, especially when contrasted with scores for Central Europe. These perceptions, as well as other opinion surveys in the region, suggest that there is deep popular mistrust in the state and its economic and political institutions. At all levels of the state, civil servants and members of law enforcement agencies use their positions to demand bribes and other unofficial payments; these practices make business costly, difficult and uncertain. Meanwhile, small business and the poor—who are particularly vulnerable to demands for bribes or side payments—suffer greatly.⁶⁵

While the motive of state agents may not necessarily be to undercut trade or regional cooperation, the absence of the rule of law, together with the corruption of institutions critical to the effective implementation of trade, economic cooperation and integration—e.g., customs agencies, tax agencies, and ministries for foreign economic relations or investment—de facto undermines the potential for cooperation

Corruption perception indices in Central Asia

Country	Nations in Transit Corruption Score	Percentage of countries in the world ranking worse in terms of corruption	Corruption perception, 2003	Global Corruption Ranking, 2003	Survey response to the question: Is corruption very or somewhat serious? (per cent)	Survey response to the question: Is corruption very or somewhat serious in the courts? (per cent)	Survey response to the question: Is corruption very or somewhat high among staff of passport and registration offices? (per cent)
Kazakhstan	6.5	10.8	2.4	100	85	81	n.a.
Kyrgyzstan	6.0	23.7	2.1	118	81	77	70
Tajikistan	6.25	10.3	1.8	124	79	79	61
Turkmenistan	6.5	4.6	n.a.	n.a.	n.a.	n.a.	n.a.
Uzbekistan	6.0	11.9	2.4	100	77	72	50
Russian Federation	5.75	29.1	2.7	86	n.a.	n.a.	n.a.
Hungary	2.75	74.4	4.8	40	n.a.	n.a.	n.a.

Table 7.4

Sources:

Column 1: Freedom House. See www.freedomhouse.org/research/nittransit/2005/addendum2005.pdf.

Column 2: Kaufmann et al. 2003 and the World Bank Governance Dataset at http://info.worldbank.org/governance/kkz2002/mc_region.asp.

This is an aggregate indicator. The percentile rank indicates the percentage of countries worldwide that rate below the selected country (subject to margin of error). Rankings for Russia and Hungary are from 2004.

Column 3: Transparency International Index, 2003. Scores range from 0 to 10, high to low corruption.

Column 4: Transparency International Index, 2003. Ranking is from 1 to 133, least to most corrupt countries globally.

Columns 5, 6, 7: World Bank Public Opinion Survey. Results are per cent of respondents answering yes in a 2004 random sample survey carried out by the World Bank in four Central Asian countries (excluding Turkmenistan).

as well as international interest in investment. The economies of individual states and of the whole region consequently suffer.

The results of an Asian Development Bank survey in Kyrgyzstan show that the population perceives corruption to be the major inhibitor of economic growth and reform, and that it is most prevalent among law enforcement agencies, including the police and courts, customs and tax agencies.⁶⁶ Without sufficiently clean law enforcement agencies, investment becomes very risky, and trade and transit very costly. Local journalists and businesspeople in Kyrgyzstan and Tajikistan argue that corruption among border guards, customs and police in their own countries, as well as in Kazakhstan, Russia and Uzbekistan, is one of the major inhibitors to more active trade, in spite of government legislation to promote it. Corruption in the court system and among government procurators makes locals and foreigners wary of investing capital in the private sector economy.⁶⁷ Poor governance and a poor investment climate, and most specifically poor border controls, in turn thwart the possibility of fruitful regional cooperation and integration.

The consequences of vested interests and poor governance

A number of the social and political consequences of the rise of vested interest groups, blocked reforms and poor governance have been explored as issues in previous chapters. When rulers make critical appointments to create a loyal cadre, the quality of governance suffers. The civil service becomes filled with individuals who lack training and professionalism, and who view their post as an opportunity to seek rents or strip state assets. Disillusionment over job prospects among the less-well connected, especially among youth who lack powerful networks, leads to a brain-drain of the well-educated, rising drug and alcohol problems, and sympathy for extremist groups.

There are concrete consequences from maintaining the status quo in Central Asia, not only for society at large as the major loser from forgone economic opportunities and corruption, but over the medium to longer term also for the elites. Aside from contributing to the deterioration in income distribution, poverty, social services and general living conditions (see Chapter 2), the political patronage system and corruption in Central Asia have also been key reasons for the low degree of civic and political rights during the transition.⁶⁸ Evidence from Central Asia and elsewhere, especially Africa and South-East Asia, strongly suggests that political systems ruled by patronage and vested

interest groups and plagued by high corruption are inherently unstable over the medium to longer term.⁶⁹ Unfulfilled economic expectations, weak state capacity and effectiveness in providing basic public services, and political disaffection with corrupt state officials all contribute to declining popular legitimacy of the regime; these factors set the stage for protest, and potentially violence and state collapse.⁷⁰ Moreover, other research has shown that in numerous cases in the Muslim world, social opposition to increasing corruption, inequality and ineffectiveness may lead to rising support for a radical Islamic political opposition, which becomes seen as the only alternative to illegitimate, unjust and ineffective governance.⁷¹ Governance reform is crucial not only for democratization and human rights, but also for the stability of the regime and state.

In fact, economic, institutional and political forces can interact in a vicious cycle when economic crisis and corrupt governance lead to social unrest and decreased local and foreign investment. These in turn worsen the economic crisis, which makes government even less able to provide social goods. In order to prevent themselves from being voted out of power, elites cancel or corrupt elections. This fosters more social unrest and political instability, and in some cases encourages open resistance and even revolution. From Algeria to Georgia to Iran, a cycle along the lines described here has led to social protest, unrest and change in the governing regime. Instability and unrest in one country tend to affect the trade and investment climate in the neighbouring countries, since they often lead to border closures, economic disruptions and loss of investor confidence region-wide.

In the case of Kyrgyzstan, the process has already yielded serious consequences. By the late 1990s, Kyrgyz society had become increasingly dissatisfied with the Akaev regime and its version of democracy. Small demonstrations and hunger strikes followed serious electoral violations in the 2000 election. In the first half of 2002, opposition complaints spiralled into demonstrations, arrests and finally violence.⁷² Negotiations between civil society leaders and the president in 2003 led to a referendum and several changes, which democratic activists had hoped would allow for a more influential legislature. Yet the rise of a powerful new presidential family party and repression of opposition parties triggered more dissatisfaction and protests. By some accounts, the underground Islamic opposition group Hizb-ut-Tahrir began gaining greater credibility and a following among those disaffected with the corruption of the regime.⁷³ In March 2005, a broad-gauged if disparate opposition movement rejected the results of the parliamentary elections

Corruption in the court system and among government procurators makes locals and foreigners wary of investing capital in the private sector economy

Governance reform is crucial not only for democratization and human rights, but also for the stability of the regime and state

Governments need to find ways to avoid instability on a sustainable basis; one way is to foster more cross-border cooperation and integration

and reacted more generally to the widespread frustrations about corruption in the Government and the continuing economic hardships in parts of the country. This led to sporadic violence and the overthrow of the regime of President Akaev.⁷⁴

Elsewhere in Central Asia, this process has not run its course and does not necessarily have to. There are some potentially offsetting factors at work. One is the general economic recovery in the region. This has been especially pronounced in Kazakhstan and Tajikistan, less so in Kyrgyzstan and Uzbekistan. According to the World Bank survey results cited in Chapter 2, the prevailing public perception of the current economic condition in Central Asia is quite upbeat. Another factor, according to other surveys, is that the perception among business people of the severity of corruption has improved between 1999 and 2002 in Kazakhstan, Kyrgyzstan and Uzbekistan.⁷⁵ A third factor is that the governments of Central Asia are well aware of the domestic security risks they face, in the wake of violence including the outbreak in Andijan, Uzbekistan, in May 2005, following a string of other violent events in the country and elsewhere in the region (see Chapter 5, Box 5.4), and the revolutions in Georgia and Ukraine. Accordingly, they have taken steps to control any remaining elements of open opposition. During the July 2005 SCO summit in Astana they—together with China and Russia—pledged to support each other in maintaining regional security.

These and perhaps other elements—for example, the Tajik population still remembers the horrors of the civil war of the 1990s—may help Central Asia for some time avoid a full dose of the consequences of autocratic and special-interest-driven government, poor governance, poverty and radicalization, and the resulting political as well as economic instability. However, economic recovery doesn't last forever and doesn't necessarily help everyone.

Pockets of popular resentment clearly exist in the region, and political repression risks aggravating governance problems and radicalizing the opposition in the long term. In fact, as we saw in Chapters 3 and 5, the policies of restricting trade and commerce, especially in the border regions, are among the key factors fanning popular resentment. Governments need to find ways to avoid instability on a more sustainable basis. This could involve a two-pronged strategy: first, to open up the political process at home, and to allow more open debate and the development of pluralistic and accountable government; and second, to foster more cross-border cooperation and integration along the lines suggested in this report.

Conclusions and recommendations

Conclusions

Several political obstacles have posed serious constraints to regional cooperation and integration since the independence of the Central Asian Republics. Some of these have been resolved in a positive manner; others remain as obstacles. Initially at least, the policies of the national elites were largely shaped by the legacy of Soviet rule and the experience of the disintegration of the Soviet empire. New leaders and elites engaged in nationalist policies to build independent nation-states, sovereign from their neighbours, with borders securing their populations from ethnic violence or the threat of ethnic secessionism. The new leaders also sought to insulate their borders from external threats, guerrilla insurgencies and Islamist opposition.

Gradually, the national elites' fears of border contestation, state disintegration, ethnic separatism and inter-state conflict has declined, allowing leaders to focus more on regional rather than strictly national initiatives. Selective trade and transport links have been maintained and improved. Regional water and energy issues have been addressed in a non-violent, albeit economically costly way. Internet communication has helped build cross-border connections among the people of the region. The growing sense of mutual security interests and the utility of the SCO in addressing those interests have opened up a basis for greater trust and cooperation in other areas. There is an opportunity now to build on the shared perception of a need to address common security concerns, and on the recognition that economic cooperation is an important ingredient in fostering better regional development, security and stability.

However, hindrances to further economic reform and regional cooperation and integration have emerged from the presidential institutions, from powerful business interests linked to governments, and from the middle and lower levels of the public administrations and security services. These obstacles are closely related to problems of political and economic governance. The formal governmental institutions and the widespread informal networks and interest groups have developed a symbiotic relationship that benefits from the status quo, at least in the short term. In one country, Kyrgyzstan, the political economy has already led to the completion of a vicious cycle in which these powerful interest groups have exploited their privileged positions, avoided accountability, and repressed competition and

opposition, to the point where the opposition reacted in a radical manner and overthrew the regime.

Such a cycle, when it is unleashed, wreaks political and economic havoc in the country and the region, and undermines the basis for regional cooperation on key economic issues. As governance problems become entrenched, especially corruption, they lead to an inability to manage borders and cross-border transactions in an efficient, humane and predictable manner. They also lead to declining state resources, dropping FDI (outside of the extractive sectors), increasing social inequality, blocked reforms and rising discontent among most of the population. Unstable social and economic conditions threaten to bring political instability and regime breakdown unless the underlying problems are addressed. The collapse of the Kyrgyz regime and recent violence in Uzbekistan to differing degrees and in different ways demonstrate this process.

It is impossible to predict how political developments in the region will unfold, but the Kyrgyz and Uzbek events in the spring of 2005 provide a warning signal to Central Asian governments. How they interpret and react to this will determine the future of the region and the human development and human security of the people of Central Asia. There are broadly three scenarios: the first, under which the countries' leaders clamp down further on political and economic freedoms; a second, which combines political repression with economic freedoms; and a third, under which they pursue a process of at least gradual liberalization in both the political and economic spheres.

In the first scenario, the leaders' resistance to open political competition and elections, increasing repression of civil society, state intervention in economic reforms, tolerance of corruption, and limited integration with neighbours and the rest of the world may quite possibly lead to more widespread popular protests, with an uncertain and perhaps violent outcome. Destabilization of the region will in turn very likely undermine efforts to achieve more open borders and greater regional cooperation.

The second scenario, while in principle feasible, in practice is not likely to be a lasting option, since none of the authorities in Central Asia are likely to have the institutional capacity or the ideological foundations to manage successfully the fundamental contradictions and tensions that are inevitable in a system combining political repression with economic freedoms.

The third scenario should open the door to lasting political and economic stability. Greater regional

cooperation could provide a significant boost to the hopes for political and economic success under this alternative. However, it would also require a convinced and courageous leadership that is willing to take some risks in terms of heightened social tensions in the short-term, and that would be willing to take on the special interests strongly opposed to any political and economic liberalization. Neighbours and the international community could help support this outcome.

In light of the political, economic and institutional realities in Central Asia, we should expect only limited region-wide cooperation in the short to medium term. The most likely evolution in the near future is bilateral or trilateral cooperation among Kazakhstan, Kyrgyzstan and Tajikistan. This cooperation is especially likely to advance in cross-border trade, transport and transit, water and energy, resolution of border disputes and inter-ethnic conflict prevention. These are areas in which these states agree on the issues and see common interests. For such cooperation to succeed, however, even these three countries will have to deal with political interests at home, including corrupt public officials at all levels, who have effectively blocked the implementation of regional cooperation agreements in the past.

The leaders of Turkmenistan and Uzbekistan are less likely to see benefits from implementing economic regional cooperation in the short term, since the dominant political institutions and interests will likely feel threatened by open trade and liberalized economies. However, as these countries and their leaders see their neighbours gain from liberalization and cooperation, and as they seek to decrease risks from poverty and internal instability, they too may eventually move in this direction.

As governance problems become entrenched they lead to an inability to manage borders and cross-border transactions in an efficient, humane and predictable manner

The most likely evolution in the near future is bilateral or trilateral cooperation among some countries

Recommendations

The analysis of political and institutional constraints, challenges and opportunities in this chapter suggests that the Central Asian governments and the international community focus on several key policy issues. Most of the actions by necessity fall in the realm of the responsibility of individual governments and especially their presidents, who have to take a lead in putting in place the political and economic prerequisites to support the countries' long-term political stability and their integration into a prosperous regional economy. The required reforms are difficult under the best of circumstances, and are especially hard to implement in the current political, institutional and economic environment in Central Asia.

As the other countries see their neighbours gain from liberalization and cooperation, they too may move in this direction

For the governments of the Central Asian countries:

- Reform the ‘super-presidential’ system with its lack of accountability and transparency into a more open, accountable, pluralistic and participatory form of government, along with continued economic, social and institutional reforms; this is likely to require a gradual and long-term process of political transition. It calls for leadership willing to take a long-term view and ready to take on vested interests, including those supporting the regime, which sees itself losing out from such reforms.
- Reform the civil service as a way to improve the state institutions, their bureaucratic quality and effectiveness, and address some of the corruption and governance problems that have erected so many barriers to effective cooperation.
- Reform the police and border guard services to eliminate one major obstacle to economic cooperation in investment, trade and transit. Since these security services are the everyday face of the government, abuses create a perception that the government is illegitimate, and feed social discontent and political instability.
- Implement broad anti-corruption programmes led from the top levels of government; they should target areas of particular concern—the collectors of state revenues, including the tax and customs agencies, the judiciary, the courts, procurators, police and border guards.
- Participate in regional cooperation and regional organizations as a way to reinforce economic reforms and political commitment to anti-corruption programmes and good governance, and to reap the economic and social benefits from integration that in turn provide the political momentum for further domestic reforms.

For regional organizations in Central Asia:

- Reinforce national reforms and promote regional cooperation and integration by establishing peer reviews of key areas of reform, with agreed benchmarking and conflict resolution mechanisms where appropriate; this is a long-term goal, given the likely lack of readiness in the near future by the national authorities in Central Asia to adopt this kind of process.
- Support regional civil society networks, including regional chambers of commerce and industry; regional associations of farmers and trade unions; and regional networks of NGOs dealing with essential issues such as the environment, gender, human rights, disaster prevention, etc. Such regional civil society networks could play a significant role in monitoring progress and providing feedback on areas for national reform and regional cooperation.

For international partners:

- Support national reforms for good governance, the development of accountable and transparent government, and anti-corruption initiatives with analytically based advice, and technical and financial assistance. Such support will have to be tailored to the receptiveness of the governments.
- Help develop regional cooperation among governments and support the regional institutions in the development of region-wide programmes at the national and community levels, including through targeted programmes for conflict resolution, border management and the development of regional civil society networks. Progress in these areas will contribute directly and indirectly to better human development and human security in the region.

Chapter 8

Regional and international cooperation with neighbours and partners

"The main external role in the regional integration process of Central Asia can be played by Russia, China and the major international technical assistance agencies operating under the aegis and in close cooperation with the UN. At the same time, Afghanistan and Iran are the most appropriate and strategic transport bridges to the global economy."

—“UNDP Country Background Study, Uzbekistan”

Substantial benefits will accrue to all Central Asia's neighbours and other international partners from peaceful cooperation and integration of the region

Central Asia's position in a broader international context

Central Asia has been at the centre of geopolitical developments in the past, for example during the times of the 'Great Game' in the 19th century. Today, the region has once again caught international attention: It neighbours on some of the more troubled parts of the world (Afghanistan and the Middle East) as well as on some of the most dynamic emerging market economies (China and Russia). It harbours large energy resources of global significance, is a transit corridor for illicit drugs, and could become a major transit hub for Eurasian cross-continental commerce and trade. Central Asia could also become a source of instability and friction. For its neighbours and partners, a secure, stable and prosperous Central Asia has to be an important shared goal. None of them can expect to derive any benefit from Central Asian countries turning into failed states, falling into internal or cross-border conflict, or continuing as a corridor for continental drug trafficking. Substantial benefits will accrue to all from peaceful co-operation and integration (see Box 8.1). Central Asia's neighbours and other principal partners in the international community can contribute to the goals of human development and security in the region, as well as significantly influence the pace and pattern of regional cooperation.¹

The most important economic partner for the Central Asian republics is Russia. It has fewer language and cultural barriers than others, and offers a vast market, a haven for job seekers, a centre for higher education and a source of investment capital. An active partner bilaterally, Russia is engaged in most of Central Asia's regional organizations. The second most important regional economic partner is China. With China engaged in an intensive search for new sources of energy

to fuel its rapid economic growth, its capital investment in Central Asia's energy sector has grown rapidly. In addition, China's interest in having stable neighbours has kindled its engagement in Central Asia's economic and political future. Both China and Russia are key security partners for the region, mainly through the SCO, which addresses the region-wide problems of terrorism, and illegal trafficking in drugs and weapons.

Afghanistan and Iran are the other immediate neighbours of Central Asia; somewhat more distant are India, Pakistan and Turkey. All have had an evident interest in good neighbourly relations. Among the other bilateral partners and donors of economic assistance to the region, the United States is a key player, particularly with respect to security, promotion of democracy and economic assistance. The European Union and Japan have also been significant donors, and, along with Germany, Switzerland and the United Kingdom, have leveraged their foreign assistance through strategic partnerships to contribute to the region's recovery and development.

The Asian Development Bank is the largest multilateral donor in the region. Through the CAREC programme, it has played a leadership role in encouraging other multilateral donors to support regional cooperation with concrete measures. The bank has led the donor effort to plan and implement a regional transportation network, for example. The World Bank, the EBRD and UNDP have also developed targeted efforts to promote regional cooperation and continue to operate bilateral assistance programmes geared towards achieving human development and security goals. The IMF has also supported regional cooperation initiatives in recent years. UNECE and UNESCAP have brought together Central Asian countries and neighbours under the Special Programme for the Economies of Central Asia (SPECA).

Box 8.1

Benefits for neighbours and partners from regional integration in Central Asia: an Uzbek view

Speeding up the integration process in Central Asia is important for neighbouring countries and for the international donor community:

- Integration will ensure long-term internal sustainability, and the recovery of agricultural and industrial production in Afghanistan.
- China will get an opportunity to strengthen the production capacity of its western and central provinces, and to expand their foreign trade relations.
- Iran will gain an opportunity to achieve rapid industrial development and reduce the high dependence of its economy on oil exports. This will lead to the increasingly positive role of Iran in the region.
- Russia will preserve high-tech sectors due to the re-establishment of economic relations with Central Asian countries.
- The international donor community will increase the efficiency of projects and programmes in the area of political and economic reforms aimed at ensuring human development and human security.

Source: "UNDP Country Background Study, Uzbekistan."

Table 8.1

	Aid (% of GNI)		Aid per capita (current \$)		Official development assistance and aid (current \$ millions)	
	2000	2003	2000	2003	2000	2003
Kazakhstan	1.10	0.96	12.56	18.04	189.11	268.36
Kyrgyzstan	16.71	10.70	43.70	39.12	214.80	197.65
Tajikistan	13.35	9.85	20.14	22.85	124.70	144.08
Turkmenistan	1.18	0.44	6.79	5.59	31.51	27.17
Uzbekistan	1.37	1.98	7.54	7.60	185.91	194.36

Source: World Bank 2005e.

External aid to Central Asian countries

Of course, the relationships between the Central Asian countries, their neighbours and the international community are by no means uniform, due to differences in size, location, and strategic and economic importance, as well as to their different development needs, political orientation, and interest in integrating with their neighbours and the world economy. These differences have resulted in significant variations in the financial support from the international community, as shown in Table 8.1. Kyrgyzstan and Tajikistan, as the poorest countries and also the nations most willing to work with donors on policy and institutional reforms, have received by far the most external financial assistance as a proportion of GDP.²

In this chapter we describe and assess the key elements of the involvement of Central Asia's neighbours and partners in the region, particularly as it relates to regional cooperation for human development and human security. We look separately at the relations with near neighbours, industrial countries and the multilateral institutions. The line between these different types of partners should not be too sharply drawn, as their interests in and significance for Central Asia overlap. However, the roles they play are sufficiently different to warrant separate consideration.

Central Asia's relations with its near neighbours

Central Asia's landlocked location requires the five countries in the region to maintain good relations with neighbouring countries for international trade (markets and supplies), for transport and transit routes beyond the region and to major international shipping ports, and for dealing with external threats from terrorism, the drug trade and human trafficking. The immediate neighbours, Afghanistan, China, Iran and Russia, have become important partners in many of these areas. Except for Afghanistan, their relative size and wealth offer

opportunities to obtain investment capital as well as access to new technologies, and expanding markets for Central Asia's natural resources, agricultural products, other raw materials and some manufactured goods. Even Afghanistan offers business opportunities to its Central Asian neighbours due to the flow of foreign and military assistance to that country. At the same time, Central Asia's relations with its neighbours reflect complex national interests and risks that can spark tension in bilateral relations, and in regional organizations and programmes.

Russia plays a special role in Central Asia; the relationships between the republics and Russia are complex and deep

Russia

Russia plays a special role in Central Asia by virtue of its history as the former imperial power in the region for more than a century, and as the architect of its modernization and industrialization. The relationships between the republics and Russia are intricate and deep. Russia remains the 'economic engine and economic pole of attraction'³ for Central Asians, the region's largest trading partner, a supporter of the status quo for the current political elite, and a source of technical and military assistance. The Russian language is widely used as the lingua franca in the region (see Chapter 6).

Russia's principal goals for Central Asia are generally aligned with the Central Asian governments' own aspirations for economic growth and political stability. While Russia's primary focus has been on developing its bilateral relations with each country, it has also participated in an array of regional organizations. These include CACO, the EEC, the SCO and the CSTO. CACO, which Russia joined in May 2004 at Uzbekistan's initiative, may turn out to be the most important instrument through which Russia is able to achieve its economic objectives in the region.⁴ According to some observers, Russia's recent accession to CACO reflects a new 'southern policy' that indicates a shift away from Russia's traditional focus on CIS-wide regional approaches and organizations to a leadership role in regional sub-groupings within the commonwealth.⁵

Russian investments are expected to play a major role in the long-term development of the region's large oil, gas and hydro-power resources

Aside from such investments, the most important economic links between Russia and Central Asia are the remittances from workers who have migrated to Russia

Although Russia does not have a big foreign assistance programme,⁶ its state-owned and private companies pursue strategic direct investments and joint ventures in key sectors that help boost the region's economic growth, while also yielding economic and political benefits for Russia, including a growing political stature in Central Asia. Russian investments have been particularly focused on the energy sector and are expected to play a major role in the long-term development of the region's large oil, gas and hydropower resources (see Box 8.2). But in recent years, Russian firms have also ventured into other sectors. For example, Russian firms are investing in manufacturing operations in Kyrgyzstan, where low wages make it attractive for Russian firms to outsource manufactured goods for export back to Russia.⁷ In 2004, Moscow-based Mobile Telesystems acquired 74 per cent of Uzdunrobita, Uzbekistan's cell phone company, for \$121 million, with an option to buy the rest of the company for \$38 million within three years.⁸ Russian state-owned and private firms have also been active investors in Tajikistan, including through barter deals that trade equity in state-owned Tajik firms for debt relief owed to the Russian Federation, on a scale that may give Russian investors control over a significant portion of the Tajik economy—in

particular, Tajikistan's important hydropower and aluminium sectors.⁹

Aside from such investments, the most important economic links between Russia and Central Asia are the remittances from Kyrgyz, Tajik and Uzbek workers who have migrated to Russia (see Chapter 6).¹⁰ Remittances have been a significant factor in combating poverty in these three countries, but also represent a risk factor, should the economic or political situation in Russia ever result in a serious disruption of their flow.¹¹ Most of the migrant workers are illegal immigrants with no employment rights. They tend to work in the lowest-paid jobs, are subject to being fired at any time, and are often poorly treated by their employers and by local officials if they get into trouble. Recognizing the importance of these workers' remittances to their home countries' economies, the Russian Government is trying to improve the legal framework for migration.¹² However, as in other countries that receive a lot of immigrants from relatively poor neighbours, resentment is growing in Russia about the increasing numbers of Central Asian migrants. This pressures the Government to take steps to limit and control their presence. The situation is a difficult one, because if the Government severely restricts immigration, the resulting loss of remittances could cause serious economic

Box 8.2

Russian companies invest in Central Asia's energy sector

In April 2004, the Russian company GAZPROM agreed to provide \$16 million to develop gas deposits in Karakalpakstan in the western part of Uzbekistan.¹³ Two months later, Uzbekistan's Uzbekneftegaz and Russia's Lukoil signed a \$1 billion contract for oil exploration. If successful, these investments could lead to the identification and development of up to 500 million barrels of oil in Uzbekistan and 600 million in Turkmenistan. In June 2004, Uzbek President Karimov and Russian President Putin signed a \$1 billion, 35-year production-sharing agreement for the development of Uzbek natural gas deposits in the southern gas fields of Kandy, Khauzak and Shady, an area estimated to contain 280 billion cubic metres of proven reserves. Lukoil owns 90 per cent of the venture and Uzbekneftegaz 10 per cent. Annual gas production, expected to begin in 2007, will reach about 9 billion cubic meters, and will be transported back to Russia through GAZPROM's pipelines.¹⁴

GAZPROM is also investing in Kazakhstan and has recently entered into a joint venture with the Kazakhstani company KazMunaiGas to develop the Imashhevskoye natural gas field located at the Caspian border between the two countries. This agreement was part of the border agreement signed in January 2005, in which Russia ceded sovereignty over the gas field in return for the right to own 50 per cent of the company that will develop the field. After the agreement was signed, Kazakhstani President Nazarbayev stated, "Russia is Kazakhstan's long-term strategic partner, as we hope Kazakhstan is for Russia."¹⁵

Even though the Kyrgyz hydroelectric sector operates at a loss, Russia's national electricity company, RAO-UES, has agreed to invest \$350 million in the Kambarata #2 hydroelectric station and to develop a larger investment package for Kambarata #1 station by 2007.¹⁶ In 2003, Russia signed a major 25-year agreement with Turkmenistan to import and re-export Turkmen gas to the European Union through the Russian pipeline system at a purchase price that is extremely favourable to GAZPROM.¹⁷ In 2004, GAZPROM created a new firm, ROSUKRENERGO, which has exclusive rights to market Turkmen gas in the Ukrainian market.¹⁸

Russia's RAO-UES also plans to invest \$250 million in the Sangtuda hydroelectric station, Tajikistan's second largest hydropower station, with Russia eliminating \$50 million in Tajik debt owed to Russia as part of this deal.¹⁹ In 2004, RAO-UES formed a partnership with the Tajik and Iranian energy ministries to build and operate this plant, with a total investment of \$480 million. This investment substantially increases RAO-UES' share of the electricity sector in the CIS. For Iran, it will provide cheap electricity to ease a power deficit, even though the power lines and transit arrangements remain to be worked out.²⁰ In October 2004, during a visit of President Putin to Dushanbe, agreement was also reached in principle for the Russian aluminium company RusAl to invest up to \$1.6 billion in the Tajik aluminium company TADAZ and in Rogun, the unfinished hydroelectric power station and dam.²¹

instability in all three of the source countries. But if illegal immigration continues to expand uncontrollably, the Government faces domestic political fallout. Proposals have been under consideration in the Russian Parliament that would require installing identification and registration systems, and issuing biometrical passports and visas at fees that could be prohibitive for poorer workers from Kyrgyzstan or Tajikistan.²²

Russia also has security interests in Central Asia. Under an agreement involving the withdrawal of Russia's troops from Tajikistan's borders, Russia has gained free, indefinite use of a military base and ownership of a former Soviet space surveillance centre in Tajikistan.²³ The new military base will hold 5,000 Russian soldiers from the 201st Motorized Rifle Division with air support. It will formally control the Russian space-monitoring centre.²⁴ From Tajikistan's perspective, the continued Russian presence provides security against potential terrorism, internal violence, drug trafficking and military threats from neighbouring countries. In Kyrgyzstan, Russia has leased the Kant air base since December 2002.²⁵ Regionally, Russia has been an active participant in the discussions on security in the SCO.

Despite the significant positive economic benefits that accrue to the Central Asian republics from their relationships with Russia, there are risks. For example, the gas and oil pipeline monopoly that Russia exercises over Turkmenistan and Uzbekistan limits these countries' abilities to reap the full benefits of world market oil and gas prices that direct access to broader world markets would allow. A similar concern could arise over Russia's emerging dominance of the Tajik power sector. Another possible risk relates to the fact that Russia places little priority on human rights or on democratic political structures and freedom of the press, in contrast to its support for governmental control over all opposition as a way to ensure political stability.²⁶ This could undermine the long-term development of stable political institutions and economies in the region.

China

China's general geopolitical strategy aims to establish its international influence in regional and world affairs. In addition, China needs energy and other natural resources to fuel its rapid economic expansion and ensure its growing importance in the global economy. Close relations with the Central Asia republics are valuable to China as sources of energy and a bridge towards expanded international influence in the Middle East and Europe.²⁷ It also seeks political stability in the region to assure a stable neighbourhood and to

minimize any risk of outside support for Uyghur separatism in its Western province of Xinjiang.

China has adopted a highly pragmatic policy towards Central Asia.²⁸ Ties are principally bilateral, with trade and investment in the energy sector a major preoccupation. But China also engages in regional cooperation through its active engagement and lead role in the SCO.²⁹ This offers China a framework within which it can pursue its strategic goals. In particular, the organization's military initiative against terrorism provides China with a basis on which to cooperate with its neighbours to suppress terrorism in the region, as well as separatist movements within its own borders.³⁰ An added benefit is the counterbalance to what it perceives as the undue growth of US influence and military presence in the region. A case in point is the call by leaders at the 2005 SCO summit for the United States to set a timetable for withdrawing its military forces from Central Asia. The organization is also a useful mechanism for China to assure border security, and combat drug trafficking and the spread of HIV/AIDS.

For Central Asia, Chinese investments bring needed capital and technical knowledge, and Chinese development assistance offers trade credits and investment capital. At the 2004 SCO summit in Tashkent, China agreed to provide \$900 million in trade credits to other member states to buy Chinese goods. China also agreed to contribute to a \$20 million Development Fund to support a variety of projects to enhance the infrastructure for regional economic cooperation.³¹ In announcing the Chinese assistance, China's President Hu Jintao pointed out that China was not just trying to tamp down domestic Uyghur separatism, but also was seeking to address the relationship between poverty and terrorism in Central Asia. "Efforts should be made to tackle the problem of regional confrontation and poverty, which are considered the roots of terrorism. Terrorism is not automatically related to certain ethnic groups or religions," he said.³²

Kazakhstan has particularly strong economic ties with China³³ (see Box 8.3). At least 40 Chinese companies and 70 Chinese-Kazakhstani joint ventures were operational in Kazakhstan in 2004. Between 1992 and 2002, total Chinese investment in Kazakhstan reached some \$800 million, principally in the energy sector, but also in banking, food processing, construction materials and car assembly. Since 2002, Chinese investment has continued to grow rapidly, putting it among the top five foreign investors in the country.³⁴ The Bank of China, the Industrial and Commercial Bank of China and China's General Administration of Civil Aviation have all set up offices in Kazakhstan, while Kazakhstan has established a visa office and civil aviation office in Urumqi, the capital of Xinjiang.³⁵

Russia also has security interests in Central Asia; Russia has been an active participant in the discussions on security in the SCO

Close relations with the Central Asian republics are valuable to China as sources of energy and a bridge towards expanded international influence in the Middle East and Europe

China's economic engagement in Kazakhstan

Kazakhstan's enormous oil and gas reserves are of great interest to China, and have stimulated major Chinese investments in the Kazakhstani oil and gas industry. Kazakhstan is already exporting oil to China, transporting it by rail to Xinjiang, although the current quantities are small, accounting for less than one per cent of China's imports. New pipeline investments will soon increase this volume significantly, however.³⁶

In 2004, construction began on the 1,000-kilometre pipeline from central Kazakhstan to Xinjiang,³⁷ the first link in the projected 3,000-kilometre pipeline that will eventually link Xinjiang with the Caspian Sea.³⁸ The second link will connect to the Kenkiyak oil field further west and subsequently all the way to the Caspian. The Chinese have already invested \$1.3 billion since 1997 to modernize the Kenkiyak field, in a joint venture with the Kazakhstani state-owned oil and gas company that employs more than 6,000 Kazakhstani workers on site. The billion-dollar investment in the first segment of the pipeline will yield an annual 10 million tons of oil. It will bring oil from the rail terminal at the Atasu station in the central Karaganda region to the Druzhba-Alashankou station on the Kazakhstani-Chinese border. China is providing a concessional loan to finance this initial phase.

Kazakhstan supports the effort for at least two reasons. First, the new pipeline allows Kazakhstan to diversify its export routes away from total dependence on Russian routes. Second, the construction and operation of these pipelines will employ hundreds if not thousands of Kazakhstani workers.³⁹ Nurmukhamet Abdibekov, Deputy Governor of the Aqtobe region, where the field is located, credited the Chinese investments for raising the standard of living for thousands of families. "This project is expanding. New jobs are being created. We are sure that it is very positive that the local citizens have got these opportunities, that they can get these new well-paid jobs to support their families."⁴⁰

More generally, Kazakhstan sees itself as a key transport and communications link between East Asia and Europe. Plans for a new rail link from China through Kazakhstan to Europe are proceeding. At an estimated cost of \$3.5 to \$4 billion, the 3,000-kilometre line will run from China through Kazakhstan and Turkmenistan to Turkey. One of the expected advantages of this line over the existing Russian Trans-Siberian link is that it would be of a single standard international narrow gauge, while the Russian line has the broader Russian gauge, requiring time-consuming wheel changes at the borders.⁴¹

In Uzbekistan, China has been engaged in helping develop the small oil fields in the Fergana Valley,⁴² and Chinese investors have established some manufacturing plants in electronics and agricultural processing. One company, the Harbin Xiandai Group, set up liquefied petroleum gas and water meter factories in Tashkent.⁴³ During the 2004 SCO summit, President Hu and President Karimov signed 10 cooperation documents related to drug traffic prevention, technology and economics, including one that allows Chinese firms to bid on construction projects in Uzbekistan and Uzbek firms to participate in the development of Xinjiang. China agreed to make several loans to the Uzbek Government, and the two state-owned energy firms, Uzbekneftgaz and CNPC, signed a memorandum of cooperation to further attract mutual investment in each country.⁴⁴ In addition, China's Eximbank signed credit agreements worth \$300 million with Uzbekistan in 2004.⁴⁵ For example, China provided a 20-year, \$30 million, interest-free loan for Uzbekistan to buy irrigation equipment and a \$6 million grant for irrigation projects.⁴⁶ Subsequently, economic relations between China and Uzbekistan have further improved, as reflected by President Karimov's visit to Beijing in May 2005, shortly after the violence in Andijan (see Box 8.4). China, along with Russia, strongly backed the Uzbek authorities' handling of these events, in contrast to Western governments and the OSCE, which called for an independent investigation.

With its WTO membership, Kyrgyzstan has become an important gateway for Chinese exporters and buyers in other Central Asian countries, particularly Kazakhstan, Tajikistan and Uzbekistan. It is trying to transform this role into status as the region's permanent de facto trading centre.⁴⁷ China plans a number of investments in the republic, including in the development of Kyrgyz oil fields and the hydroelectric sector.⁴⁸ Other projects are in the works to exploit iron deposits, tungsten and tin,⁴⁹ and to finance a \$1.5 billion highway from Xinjiang to Central Asia that will go through Kyrgyzstan.⁵⁰

Chinese economic engagement in Tajikistan and Turkmenistan remains limited so far. Trade between China and Tajikistan picked up after the Karasu border crossing was opened in 2004, which is facilitating transport between the provincial capitals of Kashgar and Khorog. Tajikistan has gone on record to welcome China's support of regional economic cooperation.⁵¹ In Turkmenistan, China's Huawei Technologies has been engaged in supplying telecommunications equipment and assisting in the development of the Turkmen telecom industry since 2004.⁵² More generally, however, China is mostly interested in long-term energy supplies from Turkmenistan, as reiterated by the Chinese Deputy Prime Minister during his visit to Turkmenistan in July 2005.⁵³

While China's engagement in Central Asia is still in its early stages, the signs of its growing commitment to involvement are evident. The economic ties with Central Asian countries are

Box 8.4***China Daily reports on the Uzbek president's visit to Beijing, 25 May 2005***

The leaders of China and Uzbekistan signed an agreement to establish a 'friendly co-operative partnership' yesterday, signalling a new determination on both sides to further consolidate the traditional friendship. President Hu Jintao and his Uzbekistani counterpart, Islam Karimov, met in Beijing yesterday and witnessed the signing of 14 more agreements that are expected to open ways for more cooperation in trade, customs, high technology and energy. Among the agreements signed was the establishment of a joint venture by China National Petroleum Corp and its Uzbekistani counterpart.

"It is worth a total investment of US\$600 million and is seen as an important step for energy cooperation between the two countries," the *People's Daily* quoted Karimov as saying yesterday. Hu said the friendly cooperative partnership has established a strong political and legal base for the long-term development of Sino-Uzbekistani relations, calling for more bilateral cooperation in the fields of gas, mine, telecommunications and transport. He also promised that China would back Uzbekistan to join the World Trade Organization, encouraging more trade exchanges and investments between the enterprises in both countries.

Talking about the regional situation, Hu said China is willing to try, with other countries in the region and within the framework of (the) Shanghai Cooperation Organization, to fight the three forces of terrorists, separatists and extremists to safeguard peace and stability in the region. The Shanghai Cooperation Organization—whose members also include Russia, Kazakhstan, Tajikistan and Kyrgyzstan—is an international organization founded in June 2001. Karimov's fourth visit to China after assuming the presidency comes after thousands of armed protesters plunged the city of Andijan into chaos last Friday, releasing prisoners and clashing with security forces. On Tuesday, one day before the visit, Chinese Foreign Ministry Spokesman Kong Quan said China firmly supports Uzbekistan's moves to crack down on the three forces and to maintain domestic and regional stability.

Describing China as a 'reliable friend and friendly neighbour', Karimov said the establishment of a friendly cooperative partnership marks bilateral relations moving towards a new high. Karimov is optimistic about the bilateral trade cooperation, saying that there is still much room for further cooperation in many fields and that he would like to see more cultural and educational exchanges. The president said Uzbekistan shares the same stance as China on maintaining regional peace and safety.

Source: China Daily 2005.

likely to expand rapidly, providing mutual gains. Other benefits from close cooperation may also come from the political and security domains, especially in the context of the SCO. As in the case of Russia's engagement in Central Asia, the challenge for China and its Central Asian partners will be to assure that the political pressures by disaffected parts of their populations are channelled into constructive opposition in transparent political processes, rather than into explosive violence met by official repression.

Afghanistan

In recent history, Afghanistan has not been a significant economic or political partner for Central Asia, although, in the absence of formal contact during the Taliban period, some economic interaction was maintained in the form of illegal drug trafficking and unofficial trade in certain agricultural products, carpets and wool from Afghanistan, and light manufactured goods, automobiles and used clothing from Central Asia. Central Asian governments shunned Afghanistan as a source of illegal drugs and financial support for Muslim extremists, including the Islamic Movement of Uzbekistan.

Since the fall of the Taliban in 2002 and the launch of the international effort to reconstruct the Afghan economy and political structure, there has been renewed Central Asian interest in

Afghanistan as a potential partner for trade and collective security. International donors are also cooperating on transport investment programmes that will improve old transit routes and create new ones throughout Afghanistan. This could greatly facilitate trade throughout the region from Iran to Pakistan to Central Asia, provided security and peace are fully established and maintained in Afghanistan. Bridges have been constructed between Afghanistan and Tajikistan, and more are under construction with US assistance, including a bridge across the Panj River; ground-breaking took place in 2005.⁵⁴ The Asian Development Bank has financed a pre-feasibility study on building a pipeline from Turkmenistan to Pakistan through Afghanistan to meet both Pakistani and Indian demand for natural gas. The United Kingdom has funded improvements in a border facility between Afghanistan and Turkmenistan.⁵⁵

Officially recorded trade between Central Asia and Afghanistan rebounded quickly in the early post-Taliban era—one example is between Afghanistan and Uzbekistan. From a 2001 base of close to zero, trade between the two countries in the first seven months of 2002 reached \$36 million, almost all of it exports from Uzbekistan. The principal items sold were fertilizer, petroleum products, metals, construction materials, and electric equipment and generators. Uzbekistan also re-exported 300 tons of humanitarian goods to Afghanistan through the Termez border crossing. Furthermore, for Uzbeki-

While China's engagement in Central Asia is still in its early stages, the signs of its growing commitment to involvement are evident

There has been renewed Central Asian interest in Afghanistan as a potential partner for trade and collective security

There are a variety of economic opportunities in the region linked to Afghanistan's economic development that can be realized only through effective regional cooperation

From Central Asia's perspective, two factors will be of central importance for Afghanistan's future: peace, and control over illegal drug production

stan, Afghanistan's reconstruction opportunities immediately began attracting business people, many of them managers of state-owned firms or joint-stock companies. Almost immediately, Uzbek construction and road-building firms began to compete against, or work in partnership with, European, Turkish and US firms for major donor reconstruction contracts. The volume of trade and reconstruction contracts has grown rapidly since 2002, with Uzbek contractors, in particular, reaping large benefits from this new source of business.⁵⁶

For the future, there are a variety of economic opportunities in the region linked to Afghanistan's economic development that can be realized only through effective regional cooperation. Electricity from Kyrgyzstan and Tajikistan could be sold to Afghanistan and transported across power lines to energy-deficient India and Pakistan. Afghanistan itself is a potential market for oil, wheat, banking and engineering services from Kazakhstan. There have been employment opportunities in Afghanistan's reconstruction period and afterwards. And there is a multitude of legitimate trade opportunities in both goods and services once the necessary infrastructure is completed. Afghanistan's positive embrace of regional cooperation offers hope that some of these opportunities will be realized. The Karzai Government in Afghanistan has been especially keen to expand its economic and political connections with the Central Asian republics. Afghanistan attended the last three summit meetings of the SCO as an observer, and has expressed interest in becoming a full-fledged member. There is support for that position within the organization, particularly if it would mean greater coordination to combat the illegal narcotics trafficking that originates in Afghanistan.⁵⁷

In an effort to facilitate Afghanistan's economic cooperation with all of its Central Asian neighbours, UNDP, together with the World Bank and the Asian Development Bank, sponsored the Conference on Regional Economic Cooperation in Bishkek in 2004. Government and private sector representatives from the five republics, Afghanistan, Iran and Pakistan participated in plenary sessions and small discussions to identify actions on topics such as how to expand trade, how to capitalize on Afghanistan's location as a land bridge between Central Asia and Iran on one side and South Asia on the other, and how to enhance access to Afghanistan's reconstruction effort for firms in all of these other countries. UNDP subsequently developed an implementation plan to follow up on five recommendations coming out of the conference (see Box 8.5). In its May 2005 meeting, the SPECA Regional Advisory Council invited Afghanistan to join its programme.

From Central Asia's perspective, two factors will be of central importance for Afghanistan's future: peace and control over illegal drug production. Without peace, Central Asian countries will not be able to expand trade with their neighbours to the south, nor develop transit routes to the nearest ports. And unless drug production drops dramatically in Afghanistan, illicit drug trafficking with all its corrosive implications will continue to plague Central Asia.

Iran

Iran's approach towards Central Asia combines a pragmatic quest for economically beneficial cooperation with a search for political engagement

Box 8.5

Afghanistan-Central Asian cooperation: a UNDP-sponsored implementation plan

- 1. Conduct round tables on how to do business in Afghanistan** starting in Tashkent in 2005 followed by sessions in Kazakhstan and other countries in the region. The Afghan Minister of Commerce, in cooperation with the Afghan Chamber of Commerce, will present these workshops.
- 2. Initiate and expand cross-border trade and procurement** working through provincial governments, local chambers of commerce, private sector representatives and other groups. Tajikistan will be the first country to implement this recommendation, with Iran, Pakistan, Turkmenistan and Uzbekistan joining in later.
- 3. Organize a procurement fair in Kabul** with a full range of donor agencies in order to educate Afghan and regional businesspeople on the procurement opportunities related to reconstruction.
- 4. Analyse and match Afghanistan's reconstruction demands and procurement needs** with a census of potential suppliers of products, services and expertise from Afghanistan and all neighbouring countries.
- 5. Establish a website** that can broadcast procurement opportunities and lists of suppliers throughout the region.

Source: UNDP 2004a.

as one potential counterweight to difficult political relations with the United States and Europe.⁵⁸ Iran's membership in the ECO is one manifestation of this approach; the ECO's regional cooperation framework—primarily to combat drug trafficking and to promote regional trade—complements Iran's 'good neighbour' policy of backing peace, prosperity and friendly assistance. Iran has also expressed interest in joining the SCO, in part as a means to work more closely with China and Russia in reaction to the stronger strategic engagement by the United States in Iran's neighbourhood.⁵⁹ At the July SCO summit, Iran was granted observer status.

Among the Central Asian countries, Uzbekistan views Iran as a critical access route to world markets, and Tajikistan, partly for cultural reasons (as the Tajik language is part of the Iranian language group), has entered into a variety of cooperative economic ventures.⁶⁰ Turkmenistan also has significant economic ties with Iran, especially in the energy sector.⁶¹ Box 8.6 summarizes some examples of Iran's engagement in Central Asia—these represent only a small number of the ongoing bi- and multilateral agreements that Iran is initiating. Particularly in the longer term, open borders and close economic cooperation could provide important potential

benefits from mutual trade, transit and investment for both sides in this evolving partnership.

Other regional players: Turkey, India and Pakistan

Turkey, India and Pakistan each tend to operate on a bilateral basis with respect to economic assistance, but also encourage regional approaches. As ECO members, Turkey and Pakistan support regional cooperation with and within Central Asia. They welcomed, for example, the results of the 2004 ECO summit in Dushanbe, which highlighted the importance of the Trans-Asian Railway main line connecting Almaty to Istanbul, and the need to strengthen the Drug Control Coordination Unit at the ECO Secretariat.⁷⁰ However, neither country has the resources to provide ECO with the level of funding and support needed to realize its goals. India and Pakistan joined the SCO as observers in 2005. Turkey's focus on combating religious extremism and drug trafficking is handled through the ECO and bilateral military assistance.

A large part of Turkey's interest in Central Asia centres on energy. It has signed an agreement with Iran and Turkmenistan to purchase Turkmen

Close economic cooperation between Iran and Central Asia provide important potential benefits of mutual trade, transit and investment for both sides

Turkey, India and Pakistan each tend to operate on a bilateral basis, but also encourage regional approaches

Box 8.6

Iran's economic engagement in Central Asia

In a visit to Tajikistan in 2004, the Iranian President pledged to cover half of the \$500 million cost of a hydroelectric plant on the Basksh River and promised another \$700 million in investments over the next five years. He also promoted the idea of a road link between the two countries via Herat in Afghanistan as a way to stimulate more trade.⁶² In late 2004, Afghanistan, Iran and Uzbekistan announced the inauguration of road, rail and air links among the three countries. They will jointly build a north-south road from Uzbekistan through Afghanistan to facilitate the transit of goods from Central Asia to the Persian Gulf and the Sea of Oman, with Iran providing \$2 billion to finance the effort.⁶³ The head of Uzbek railway services met with Iran's deputy head of the state railway company to discuss facilitating border crossings and reducing transportation costs.⁶⁴

During a visit to Uzbekistan in early 2005 led by Iran's First Vice-President, three transportation agreements were signed that will expand and ease the transport of Uzbek industrial and agricultural products through Iran. A trilateral agreement among Afghanistan, Iran and Uzbekistan was also signed to permit trans-shipment through Afghanistan. This will allow the construction of a 2,400-kilometre interstate road from Termez in Uzbekistan to Iran's Gulf Coast. Finally, the frequency of passenger flights between Tehran and Tashkent was to be increased beyond the existing one to two flights per week.⁶⁵ Iran also offered Uzbekistan a \$66 million credit to support Iranian investment in Uzbekistan's private sector. The funds are to be used for projects that are at least 50 per cent owned by Iran and that can be completed within a 10-month period.⁶⁶

With Kazakhstan, Iran has entered into oil swap deals to develop new markets for Caspian production. KazMuniaGaz, the Kazakhstani national oil and gas company, announced in 2004 that it would build two oil terminals in Iran with a total capacity of 150,000 barrels of oil to manage the swaps. No date was specified. Iran has also invested heavily in its Caspian facilities to be able to absorb Kazakhstani, Turkmen and Uzbek oil.

Iran initiated swap deals with Kazakhstan and Turkmenistan in the mid 1990s, followed shortly thereafter by a deal with Uzbekistan. Swap capacity has been around 50,000 barrels per day through existing pipelines, but a new pipeline being built with Chinese financing will allow the swap capacity to increase to 200,000 barrels per day by mid- to late 2005. Much of the oil being swapped will be shipped to Asian markets, where it can be sold at a higher price than in Europe, perhaps by as much as \$3.50 per barrel. Both sides gain from this arrangement: Iran avoids the costly transport of oil to its northern provinces, and the Central Asian republics can more cheaply export oil.⁶⁷ In addition, Iran satisfies its political objective of increasing its energy cooperation with the region and expanding the flow of Central Asian oil through Iranian pipelines as a counterweight to the Baku-Ceyhan route favoured by the United States.⁶⁸

In 2004, talks were held between the Kyrgyz Ambassador to Iran and the Deputy Foreign Minister of Iran for Economic Affairs to discuss priorities for expanding bilateral Iranian-Kyrgyz economic cooperation within the framework of the ECO. A key agenda item was the use of Iran's €50 million grant to Kyrgyzstan and the ground-breaking for Iran's state bank in Bishkek.⁶⁹

gas through a swap arrangement involving the Iran-Turkmen gas pipeline, Turkmenistan's only gas pipeline that does not transit Russia. More generally, Turkey, with its growing energy needs and ambitions as an energy transit country, has a great interest in accessing energy supplies from Central Asia and the Caucasus, while Central Asian countries have an interest in diversifying their energy transport routes outside Russia.⁷¹

Turkish firms have had numerous private construction contracts and investments especially in the retail and hotel business in Central Asia, and an extensive network of air and telecommunications links is in place between Turkey and the region. Moreover, Turkey has common linguistic and cultural ties to Central Asia and has been active in the education sector, offering over 10,000 scholarships to Central Asian students to study in Turkish schools and universities. The Turkish Ministry of Education and Turkish entrepreneurs have opened schools and universities throughout Central Asia, while the Turkish International Cooperation Agency provides technical assistance and training for Central Asian businesses and diplomats.

India's principal interest in Central Asia also relates to energy. Among Indian investments in the region's energy companies are a 15 per cent holding in Kazakhstan's Alibekmola oil fields and a 10 per cent holding in that country's Kurmangazi fields. India has been exploring significant investments in Uzbekistan, as well as in several hydropower projects in Kyrgyzstan and Tajikistan. Fearful of the potential security issues associated with pipelines through Afghanistan or Pakistan, India has supported consideration of a controversial 1,400-kilometre, \$2 billion 'energy highway' that would run from Russia through Central Asia to the Indian-controlled portion of Kashmir.⁷² India has

also intensified its relationship with Central Asia in sectors in which its expertise can contribute to Central Asia's development, including oil and gas, and technology. There was a major regional trade show on energy-related equipment in Delhi in 2005 that was billed as "India and Central Asia 2005." Through this two-track system—one at a business-to-business level and the other at a government-to-government level (see Box 8.7)—India has succeeded in enhancing its diplomatic and economic status in the region.

Pakistan's interests in Central Asia are not dissimilar to India's. Within ECO, Pakistan has called for joint financing of regional energy projects and transport infrastructure, as well as lower tariffs and a variety of agreements for cooperation in engineering, tourism, technology, business requirements, etc. The prospect of establishing a regional electricity grid that could meet its energy requirements is of great interest. Pakistan has modern capacity in all of these areas, and is anxious to send Central Asian exports through its ports on the Indian Ocean. It has urged Tajikistan to upgrade its consulate in Islamabad to an embassy, encouraged a Pakistani bank to open an office in Dushanbe, and rescheduled payments from its \$13 million loan to Kyrgyzstan. While Pakistan's principal relationships remain bilateral, it is entirely supportive of regional cooperation in the priority areas being addressed by the SCO.⁷³

In sum, for now the engagement of these three countries in Central Asia is of limited significance, but for the longer term—especially if Afghanistan's security situation settles down; if there is a resolution of the India-Pakistan conflict; and if Iran's tensions with Europe and the United States subside, permitting ready transit to Turkey—Central Asian countries individually and as a group

Box 8.7

India's engagement in Central Asia

A visit by Kazakhstani President Nazarbayev to India in 2002 marked an important step forward in the two countries' bilateral relationship. President Nazarbayev encouraged Indian technology and pharmaceutical companies to explore investment opportunities in Kazakhstan, and encouraged Kazakhstani firms to import Indian expertise and technology. The fact that India was prepared to invest in sectors other than energy was not lost on the Kazakhstani President, although he also welcomed Indian expertise and investment capital in the development of the Caspian Sea oil and gas reserves.⁷³

In 2003, India's then Foreign Minister Jaswant Singh hosted a major conference between India and the Central Asian states in Tashkent, and India's then Prime Minister Atal Bihari Vajpayee held a summit with Tajik President Rakhmanov in Dushanbe. India announced a \$40 million aid package to link the two countries by road and to refurbish an airfield at Ayni outside of Dushanbe.⁷⁴ India has also committed \$84 million to reconnect the Afghan city of Herat with the Iranian border. Uzbekistan has already connected its southern border with Herat; when the Herat-Iran link is completed, Uzbekistan will be able to ship goods, by road, all the way to the Persian Gulf.⁷⁵

India has carried out military exercises with both Tajikistan and Uzbekistan under a counter-terrorism agreement. In addition, it has purchased six Ilyushin mid-air refuelling planes from Kazakhstan for the Indian Air Force, and has pledged financial support for a Kazakhstani Navy to be established in the Caspian Sea.

will find many opportunities for engaging much more intensively with the rapidly growing markets of India, Pakistan and Turkey.

Central Asia's partnerships with the major industrialized countries

The European Union (including the German and UK bilateral programmes), Japan, Korea, Switzerland and the United States have provided significant support to the Central Asian republics since they became independent. Most of this has been in the form of official foreign assistance flows. In this section, we will summarize their foreign aid programmes and other partnership engagements in support of the region's human development and human security goals. It is impossible to present all donor programmes exhaustively. We have therefore chosen a few examples in each major area of support—economic competitiveness, natural resource management, regional threats, social development and good governance—by focusing on those with regional coverage or impact. These demonstrate not only the breadth of external donor engagement in the region, but also the multiplicity and complexity of donor programmes. This complexity brings with it big challenges in terms of coordination and cooperation among donors and countries, and ensuring that the assistance is well placed and effective.

Aside from commitments to human development and human security, international partners have broader strategic and security interests governing their engagement in the region, just like Central Asia's immediate neighbours do. This is particularly the case for the United States after the terror attacks on 11 September 2001, and given its engagement along with the international coalition in the war on the Taliban Government of Afghanistan and the subsequent reconstruction efforts. As a result, the United States has become much more directly involved in Central Asia through its military presence on airbases in Kyrgyzstan and Uzbekistan, and through agreements with the other countries.

While the US military presence in the immediate aftermath of 11 September was widely accepted in Central Asia and neighbouring countries, not least because it helped reduce dramatically the terrorist threats emanating from Afghanistan, over time it has resulted in some tensions.⁷⁷ It is important that these do not deflect the Central Asian countries, their neighbours, and the United States and the coalition assisting Afghanistan from pursuing a shared approach to maintaining

regional political stability and security, and assuring progress in human development and human security.

Enhancing economic competitiveness

All of the bilateral partners from the major industrial countries operate technical assistance and grant programmes directed towards improving the business climate and strengthening the financial sector, with the objective of supporting the market-based growth of the private sector. Some partners have focused on the legal and institutional framework of the business sector, while others have provided various types of financial assistance or financed major transport and other infrastructure investments necessary for expanded trade. Even the United States, which generally refrains from funding transportation infrastructure, has cooperated with the EU and Japan on regional infrastructure investments. One example is the bridge over the Panj River from Afghanistan to Tajikistan, which will greatly benefit Tajik traders as north-south trade is reopened. The United States is funding the bridge construction, Japan is financing road construction from the bridge site to national highways, and the EU is paying to build the ports of entry and for the customs infrastructure.⁷⁸

German assistance programme priorities are to promote economic reform and a stronger market economy, with particular emphasis on improved public administration. For example, in Kyrgyzstan, German assistance has been supporting market-oriented economic reform, the implementation of the National Poverty Reduction Strategy, and vocational training and financial programmes to assist small and medium enterprises. A similar initiative is being carried out in Tajikistan, although there the German emphasis is on poverty reduction.⁷⁹ For example, Germany collaborates with the Aga Khan Agency for Micro Finance in supporting a microfinance bank that provides financial assistance to micro- and small businesses.⁸⁰

The Swiss assistance programme aids small business development in Kyrgyzstan by providing training, technical assistance on sound business practices, and small loans along with training and technical assistance. It backs small businesses in fighting corruption and bureaucratic interference.⁸¹ Switzerland is also helping Kyrgyz farmers learn how to grow organic cotton for markets in Europe.⁸² In Uzbekistan, the Swiss are working with small business owners and seeking ways to improve the business climate for these firms.⁸³ In Tajikistan, Switzerland will target its future assistance towards improving the business

Central Asian countries will find many opportunities for engaging much more intensively with the rapidly growing markets of India, Pakistan and Turkey

Aside from commitments to human development and human security, the bilateral international partners also have broader strategic and security interests governing their engagement in the region

All of the bilateral partners operate programmes directed towards improving the market-based growth of the private sector

From the perspective of many bilateral donors security and law enforcement programmes are particularly important in Central Asia

environment and developing innovative financing instruments for small and medium enterprises. It will continue to support the EBRD on its trade facilitation programme, and in its assistance with the formulation and implementation of a national export strategy.⁸⁴

Working through USAID, the United States funds market reform initiatives that help develop capacities in trade and investment. This includes offering technical assistance to prepare for WTO accession, improve customs, improve the regulatory and lending climate for the business sector, and foster the development of micro-, small and medium enterprises. USAID also sponsors regional conferences and workshops, and provides technical assistance to a wide range of business associations, some of which (for example, the Forum of Entrepreneurs in Kazakhstan) advocate reforms to improve the business climate. In a joint effort with the World Bank, USAID supports an initiative to establish a regional association of business groups.⁸⁵

The United Kingdom, through its Department for International Development (DFID), has assisted Kyrgyz experts in providing technical assistance to Kazakhstan for WTO accession, and has promoted regional trade and cooperation through its Kyrgyz programme. Its enterprise development programmes in both Kyrgyzstan and Tajikistan are focused on pro-poor growth, with an emphasis on using evidence-based policies to build assets, create jobs and strengthen key institutions.⁸⁶

The EU has backed projects to improve customs services and facilitate legal cross-border trade. This includes technical assistance to increase revenues while facilitating legal trade and reducing corruption. A variety of projects provide support to modernize local customs services, develop customs legislation, streamline procedures and improve other technical aspects of customs. The EU-financed BOMCA/CADAP programmes are among those intended to improve the effectiveness of border management in the region (see Box 3.9 in Chapter 3). The EU has also implemented a Managers' Training Programme to provide traineeships in EU businesses for a year for managers from Kazakhstan, Kyrgyzstan and Uzbekistan, and has provided technical assistance funding in Kazakhstan, Kyrgyzstan and Tajikistan for institutional, legal and administrative reforms, as well as for the development of infrastructure networks.

Improving natural resource management

Many of USAID's initiatives are geared towards assisting market reform in the agriculture and energy sectors. USAID has supported water

user management development, irrigation modernization and other forms of water resource management training. In Kyrgyzstan, USAID has funded a water users' association project that will assist local groups in carrying out repairs and maintenance programmes, and using limited water resources more efficiently.⁸⁷

DFID is assisting Kazakhstan with using its revenues from oil and gas development in a transparent and productive way through the Extractive Industries Transparency Initiative. It is also providing technical assistance on rural water systems development, hygiene and sanitation in Kyrgyzstan, and helping with land use planning.⁸⁸ The Swiss Agency for Development and Cooperation (SECO) has collaborated with the World Bank to finance sewage and water systems in Bukhara and Samarkand.⁸⁹

The EU is supporting the Interstate Oil and Gas Transport to Europe programme. This is an international cooperation initiative to promote the regional integration of the pipeline systems and facilitate the transport of oil and gas both within the CIS region and towards the export markets of Europe. The programme is also designed to attract private investors and in-country contributions, although it is a catalyst and facilitator, not an investment programme. All five Central Asian countries were among the original signatories to the programme agreement in 1999.

Several of Japan's economic development projects to be undertaken under the new Central Asia + Japan Initiative are directed towards promoting and modernizing the energy and other natural resource sectors. The projects cover geological prospecting, extraction and transportation of natural resources, investigation and extraction of nonferrous metals, and modernization of nonferrous metallurgy.⁹⁰

Preventing regional threats

From the perspective of many bilateral donors from the major industrialized countries, security and law enforcement programmes are particularly important in Central Asia, given its geographic proximity to Afghanistan, and its role as a principal transit route for heroin and other opium products originating in Afghanistan and destined for European markets. The US Government provides support to improve counter-terrorist activities, and technical assistance to enhance the capacity of police to combat money laundering, narcotics smuggling and trafficking in persons. In Kyrgyzstan, the United States has supported the formation of a new Drug Control Agency together with the UNODC.⁹¹ In Tajikistan, the United States is assisting the Tajik Government in strengthening its capacity

to prevent drug trafficking from Afghanistan. The United States and the UNODC have co-funded the new Tajik Drug Control Agency to coordinate all of the country's drug-interdiction efforts and improve border security.

On other fronts, the EU's BOMCA/CADAP programme has an important trafficking control component, while the United Kingdom's anti-narcotics programme in Central Asia is closely linked with its drug-control assistance programme for Afghanistan.⁹²

Assisting with social development

Bilateral donors have a great interest in social development in Central Asia, but understandably have concentrated on supporting national programmes. However, there have also been region-wide or multi-country programmes, which reflect the opportunities that do exist for regional approaches. The EU's Trans-European Mobility Scheme for University Studies programme helps Central Asian countries reform and strengthen their higher education and vocational training capacities. The programme works by fostering partnerships between higher education institutions within the EU and those in partner countries. Both sides determine the priorities for the projects, which can involve curriculum development and modernization; reform of higher education institutions and their management; greater links with the private sector to identify training needs for skills in short supply; and incorporation of citizenship and democracy-related courses into curricula.⁹³

USAID supports education in Tajikistan, the Kyrgyzstan and Uzbekistan, and is looking to extend this assistance to Turkmenistan. Its programme focuses on improving teachers' skills, updating teacher training curricula, increasing parent and community involvement in schools, promoting administrative reforms and modernizing school infrastructure.

The social development aspect of DFID's regional programme is directed towards improving regional cooperation to counter the spread of HIV/AIDS.⁹⁴

Meeting governance challenges

Bilateral assistance also flows towards addressing some of the governance challenges in Central Asia. The United States, for example, has placed a high priority on technical assistance to "strengthen civil society, foster human rights, improve political processes and government institutions, and encourage independent media and public advocacy."⁹⁵ Approximately 22 per cent of USAID's Central Asia budget in 2004 was spent

on democracy and governance programmes of this type.⁹⁶ In Uzbekistan, for instance, democracy projects include training for legal professionals, development of law school curricula, grants to human rights defenders, support to a judicial reform programme and legal assistance centres, and assistance for a human rights NGO resource centre being established in the Fergana Valley. USAID is also trying to promote transparency and help fight corruption through a grant to the Uzbek Agency for Communications and Information for technical assistance geared towards an e-government plan and taxation pilot project.

Some of the programmes offered by bilateral partners focus specifically on supporting regional cooperation in Central Asia

Support for regional cooperation

Some of the technical assistance and grant programmes offered by bilateral partners from the major industrial countries focus specifically on supporting regional cooperation in Central Asia.

A regional component has been part of the EU Tacis programme since May 1993, when it launched the TRACECA to develop a transport corridor from Europe to Central Asia (see Box 3.6 in Chapter 3).⁹⁷ TRACECA has involved regular collaboration with the EBRD, the World Bank and the Asian Development Bank. Other issues pursued by the EU on a regional level are energy, the environment, drug trafficking, and anti-terrorism and anti-organized crime. Some parts of the EU programme, including technical assistance in developing intellectual property protections and assistance for WTO membership, are regionally designed, but implemented nationally. Only direct poverty alleviation, humanitarian and Fergana Valley initiatives are handled through national pilot programmes.⁹⁸ The EU also engages in policy dialogue with the Central Asian republics to encourage greater economic cooperation.⁹⁹

The German foreign assistance programme adopted a regional cooperation objective in its 2001 Strategy Paper.¹⁰⁰ Approximately €15 to €18 million of the €50 million that the Federal Ministry for Economic Cooperation and Development has provided Central Asia annually since 2001 has been for regional projects.¹⁰¹ This has supported a variety of activities: technical assistance on legal reform in all five republics, technical assistance on desertification with pilot projects in all five countries and a project coordinator in Almaty, and a regional programme of food security for Afghanistan and Tajikistan under the EU humanitarian assistance umbrella.¹⁰²

Since the United Kingdom has been concentrating most of its technical assistance and grants on poverty reduction in Kyrgyzstan and Tajikistan, it has actively promoted regional cooperation only

All of the multilateral donors that work in Asia share common goals: to promote economic and social development within a well-functioning market economy, alleviate poverty, and create stable, well-governed societies

in the multi-donor regional HIV/AIDS programme (see Box 6.4 in Chapter 6). The Swiss assistance programme promotes dialogue and network building, particularly in water sector projects. Japan's adoption of a new regional approach in 2004 with the announcement of the Central Asia + Japan Initiative will complement other bilateral and multilateral donor efforts.

The United States actively promotes regional economic security through USAID and other initiatives. In 2004, it signed a Trade and Investment Framework Agreement with the Central Asian republics to promote and increase trade and investment opportunities between them and the United States. The agreement established a US-Central Asia trade council that is intended to become a forum to facilitate the efforts of Kazakhstan, Tajikistan and Uzbekistan to join the WTO.¹⁰³

Multilateral donor contributions to human development and human security

All of the multilateral donors that work in Asia operate active assistance programmes in Central Asia. The World Bank, the Asian Development Bank, the EBRD, the IMF and UNDP are the principal donor organizations. Smaller, more narrowly targeted groups (including various UN agencies and the Islamic Development Bank) and NGOs (including the Eurasia Foundation, the Open Society Institute and the Aga Khan Development Network) have also provided financial and technical resources to Central Asia since the early 1990s. All of these organizations share common goals: to promote economic and social development within a well-functioning market economy, alleviate poverty, and create stable, well-governed societies that can be productive members of the international community. Some of the programmes are more oriented towards humanitarian and social goals, and emphasize poverty reduction and democratic reforms (those of UNDP and the UN, for example). Others are geared more towards fostering a stable economic environment within which development can take place (such as those of the international financial institutions). All of these organizations are committed, as well, to furthering closer regional cooperation.

Enhancing economic competitiveness

In the trade arena, the Asian Development Bank has financed the Regional Trade Facilitation and Customs Cooperation Programme to help modernize customs systems. This complements

the Customs Modernization Project in Kyrgyzstan and Tajikistan that has facilitated trade between those two countries. The Japan Special Fund, which frequently collaborates with the bank, has also provided each country with a technical assistance grant for this project.¹⁰⁴ The bank is preparing a Regional Tourism Development Project, and a variety of technical assistance and analytical studies to promote regional trade.¹⁰⁵

The Islamic Development Bank has supported the Asian Development Bank's Trade Cooperation and Promotion Programme in Central Asia, which tries to match trade opportunities among companies in member countries and enhance countries' trade capacity.¹⁰⁶ In cooperation with the Asian Development Bank and other partners, UNDP's Silk Road initiative, with five participating countries (China, Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan) supports activities to improve the policy and legal environment for trade and transit in the Silk Road area, and to increase private sector participation in trade and transit promotion and facilitation. The programme also promotes tourism development in the region.

For regional transport and transit, the long-term goal of many donors is to integrate the region with Asia and Europe through lower transport costs and easier trade arrangements. This includes customs improvements, key investments in transport infrastructure and WTO-consistent trade policies. The major donors involved in transport, the World Bank and the Asian Development Bank, work principally through their bilateral programmes but within a regional framework. One example is a series of trade and transport facilitation audits, which the World Bank has conducted for Central Asian countries. A similar audit is now planned for Siberia—to identify which barriers prevent Central Asian traders from expanding their exports to this part of Russia—and for Afghanistan.

The Asian Development Bank, which has a lead donor role for transport infrastructure, is engaged in a variety of road development projects to ease the transport of goods and people throughout the region. Most of these projects are expected to have regional benefits by improving cross-border transport links within the region and beyond. One project will grant a loan and technical assistance to Tajikistan to rehabilitate the Dushanbe-Kyrgyz border road corridor. This road provides the only substantial link between the Rasht Valley and Dushanbe, and will greatly improve the international corridor to Kyrgyzstan and China. The project will also address the problem of road maintenance by increasing financing for maintenance of national and rural roads. The OPEC Fund is co-financing this project.¹⁰⁷ Another example of a regional road initiative financed by

For regional transport and transit, the goal of many donors is to integrate the region with Asia and Europe through lower transport costs and easier trade arrangements

the Asian Development Bank is the Almaty-Bishkek Regional Road Rehabilitation Project, which has not only facilitated road transit between the two cities, but also serves as an example of how policy conditionalities can encourage greater cooperation.¹⁰⁸

Donors have also taken a region-wide approach to supporting microfinance systems. The World Bank has prepared a regional study to recommend ways to achieve a sustainable microfinance sector. An advisory group of the key donors has been formed to try and ensure common approaches and goals among the programmes in the region. The World Bank's sister organization, the International Finance Corporation, is supporting the development of a common legal framework for microfinance in Central Asia, while the EBRD has participated in funding the technical assistance for this effort.¹⁰⁹ In connection with this initiative, the Consultative Group to Assist the Poor is establishing a Microfinance Centre for Central Asia in Almaty. This would build upon the experience of the larger regional microfinance initiative and the Central Asia Microfinance Alliance sponsored by USAID.¹¹⁰

Improving natural resource management

A key long-term goal for donors is to help create a stable and sustainable system of water management and water sharing in Central Asia. In support of this goal, SPECA established a working group on energy and water in 1998 that prepared a diagnostic strategy for water and energy development in the region, accompanied by a list of specific investment projects that donors should consider in designing their own assistance strategies.¹¹¹

The World Bank has also long supported initiatives to foster bi- and trilateral cooperation, and country-specific reforms and investments to improve energy and water management and use. In 2004, the bank prepared an analytical paper to examine the impact of various water-energy trade arrangements. Additionally, as part of its regional cooperation initiative, the World Bank plans to support the second phase of the Aral Sea Basin Programme. The bank has also financed a number of country-specific projects related to water supply, irrigation and electricity.

The Asian Development Bank has provided technical assistance and project finance to promote effective water management policies that complement sustainable natural resource management strategies. The EBRD has supported municipal water management projects, including

through a loan to Tashkent to improve the water distribution system, and reform the payment and bill-collection systems.¹¹²

In the energy sector, the international financial institutions have assisted several regional and national projects. For example, the Asian Development Bank's Regional Power Transmission Modernization Project is attempting to improve power transmission and trading in the region. A similar goal has been assigned to the Regional Gas Transmission Improvement Project, which is trying to remove barriers to a regional network and encourage trading in gas. The bank is also backing a feasibility study for the possible construction of a gas pipeline from Turkmenistan through Afghanistan to Pakistan.

In the environmental area, UNEP took a lead role in regional environmental management in Central Asia early on. Since 2000, UNEP has been assisting governments in preparing regional environmental action plans with specific policy reforms, and programmes for environmental protection and management.¹¹³ The World Bank is helping to foster cooperation on trans-boundary ecosystem management on the Western Tien Shan among Kazakhstan, Kyrgyzstan and Uzbekistan. Key elements include joint information sharing and the development of a common approach to conserving these ecosystems. The project also draws on grant financing from the Global Environmental Facility. Since 2000, the Asian Development Bank has financed regional technical assistance projects to design a regional environmental action plan for Central Asia, as well as a plan to combat desertification.¹¹⁴

Multilateral support in other areas

Multilateral institutions also support national development and poverty reduction programmes, on issues such as meeting natural and man-made threats, social development and good governance. Most of these projects focus on national interventions, with only limited attention given to region-wide programming. However, donors are increasingly building links between their national and regional programmes, and emphasizing the interdependence of national policies and reforms, and regional cooperation. This is reflected, for example, in UNDP's strategy for Central Asia 2002-2005.

A multi-donor project was approved in early 2004 for combating HIV/AIDS in Central Asia. It involves the World Bank; the Global Fund to Fight AIDS, Tuberculosis and Malaria; UNAIDS, the Soros Foundation; DFID and USAID (see Box 6.4 in Chapter 6). UNDP provides complementary

Another goal for donors is to help create a stable and sustainable system of water management and water sharing in Central Asia

Each of the multilateral agencies has adopted an explicit regional strategy for Central Asia with goals that include support for enhanced regional cooperation

assistance for combating HIV/AIDS in individual countries, such as Kyrgyzstan.

The World Bank is preparing a Natural Disaster Mitigation Project to address dam safety and other potential hazards, including mining disasters. SECO is collaborating on improved hydrometeorological management. The EU and UNDP have been partnering on border management initiatives, in part to help address the drug trafficking issue, through the BOMCA/CADAP programmes (see Box 3.9 in Chapter 3). The World Bank Group has initiated work to help countries in the region battle money laundering and terrorism financing, including by drafting effective laws against these crimes—the bank and the UNODC have established a pilot partnership in Kyrgyzstan.¹¹⁵ Through a cross-border community-development project, UNDP supports activities in the Fergana Valley of Kyrgyzstan and Tajikistan to develop the capacities of local and national stakeholders, and provides emergency grants for community conflict-mitigation projects. The programme is implemented with OSCE, Swiss and Danish collaboration.

In response to the rapidly changing environment in Central Asia, where events in one country may ripple into another, as was seen with the impact of the 2005 events in Uzbekistan on Kyrgyzstan, a number of UN agencies (the UN Office for the Coordination of Humanitarian Affairs, UNDP, UNHCR, UNICEF, WHO and the World Food Programme) decided to more systematically work together. They have joined forces on coherent and coordinated situation assessment, training and practical support activities to increase the crisis prevention and risk-preparedness capacities in the Central Asian countries. Among the agencies, this is intended to help instil a culture of dialogue and joint work on common problems and lessons learned, and may also serve as a tool for advocacy on the rational use of shared key resources.

Support for regional cooperation— CAREC

All international partners involved in Central Asia have a shared interest in the region's political stability, economic prosperity and sustained human development

Since CAREC's foundation, the Asian Development Bank has succeeded in creating a solid working partnership with the other multilateral institutions in developing CAREC into an institutional framework. Under it, the countries of Central Asia and the multilateral agencies can work together on key regional issues that require a cooperative approach. In annual ministerial level discussions and biannual senior official meetings, CAREC has taken on a deliberately selective agenda of regional issues, with a focus on regional trade, transport and trade facilitation, and energy and water. By forming working groups and preparing working papers for discussion on these areas, CAREC has facilitated the exchange of analytical work, the member countries' views, and the multilateral agencies' perspectives and plans for assistance. The multilateral agencies now meet regularly to coordinate their assistance programmes in Central Asia, which complements the aid coordination efforts in individual countries.

While representing a major step forward as a forum for regional cooperation, CAREC still misses four important dimensions, aside from its incomplete membership. One gap is an effective linkage between CAREC and the other main regional organizations in Central Asia that function at a summit level, in particular CACO and the SCO. The second shortfall is that regional donor coordination in connection with CAREC so far does not include the bilateral donors. A third issue is that CAREC has not yet focused on some pressing regional human development concerns, including threats from natural disasters. Finally, CAREC could begin to explore how to deal with some important issues that go beyond its immediate membership but with important regional linkages. Among them—perhaps particularly pertinent for regional human development and security—is the challenge posed by the 'rectangle of concern', the poorest and most fragile sub-region in Central Asia and its immediate environs (see Box 8.8).

Conclusions and recommendations

Conclusions

All international partners involved in Central Asia have a shared interest in the region's political stability, economic prosperity and sustained human development. First, regional security is obviously of great importance to China and Russia as immediate neighbours. But it is also critical to US, European, and East and South Asian partners, because of their engagement in Afghanistan, their concerns about the potential global risks of failing

Box 8.8**The ‘rectangle of concern’ and the Aga Khan Development Network**

The Aga Khan Development Network has identified a ‘rectangle of concern’ in and around Central Asia. It defines a sub-region that includes Afghanistan, parts of the Fergana Valley in Uzbekistan, central and eastern Tajikistan, the southern part of Kyrgyzstan, western China and northern Pakistan. This area is home to the poorest, most vulnerable, most isolated people in Central Asia and its neighbourhood. In addition to enduring extreme poverty, communities are divided along ethnic, religious and linguistic lines, and they are physically, economically and politically cut off from their provincial and national mainstream. This combination of poverty and isolation reinforces and is often further reinforced by the prevailing high level of political fragility.

The Aga Khan Development Network has a four-pronged strategy to assist a systematic transformation of this fragile region:

- Expanding regional investment, cooperation and trade for long-term economic development;
- Improving the social and physical infrastructure for immediate improvements in people lives;
- Promoting and strengthening civil society for better nation building; and
- Upgrading education and health facilities for a better human resource base in the region.

Source: Aga Khan Development Network 2005.

or failed states, and their commitment to fighting global poverty and international terrorism. Second, the major neighbours and the international community at large also have an interest in access to the region’s energy resources—oil, gas and electricity. The creation of the necessary energy transport infrastructure, security conditions and financing mechanisms to permit production and transport are major challenges. They represent opportunities for building bilateral relations, and for engagement by regional and multilateral institutions.

Third, the improvement of the regional road, rail and air transport infrastructure is important not only for regional integration within Central Asia, but also for the region to serve as an effective transit corridor for the transcontinental shipment of commodities and people across the increasingly integrated Eurasian continental space. Fourth, Central Asia serves as a major transit corridor for illicit drugs from Afghanistan to their main markets in Western Europe, Russia and China. The control of this transit is of great interest to all of these countries, even as trafficking is difficult to stop along the transit routes as long as control measures at the principal supply and demand hubs remain ineffective. Fifth, Central Asia also has major regional public goods (or bads) of global significance, including its environmental resources (water, biodiversity, etc.) and rapidly spreading communicable diseases, especially HIV/AIDS, TB and malaria. Engagement by Central Asia’s neighbours in these areas is therefore an important priority.

It is therefore not surprising that the principal neighbours of Central Asia and the international donor community have shown increasing interest in supporting regional cooperation and integration, including through the principal regional institutions (CACO, the SCO and CAREC), and through

regional aid and investment programmes. The nature and level of engagement by different partners varies, within and across the Central Asian countries. The neighbouring states have been engaged mostly in terms of assuring mutual access to energy resources and markets, and dealing with shared security threats from terrorism and drugs. The international donors have focused on assisting with a broader agenda of transition reforms, the building of market institutions, and the provision of social and physical infrastructure. The EU and the United States especially have taken a strong interest in regional security initiatives, including the fight against drug trafficking. The recent commitment by China of a \$900 million financial package of support for economic development shows that some of the neighbours may well become increasingly involved as donors.

For the landlocked countries of Central Asia, relations with their neighbours and the international community at large are critical for their human development and human security. Having access to neighbouring and international markets; securing financial and technical support for the transformation to a market economy, and for national and regional development programmes; and being able to work with international partners in charting new directions for regional cooperation and integration are very important ingredients for the long-term prosperity and stability of Central Asia. However, a number of challenges arise to constructive and successful partnerships.

First, there is the challenge of the scale of partners’ engagement. After the events of 11 September 2001 brought an intensified attention to the region, there has been a greater readiness to assist countries that can use financial resources well. It is impossible to say with certainty whether more overall external financing would be helpful for the Central Asia countries; much depends on how

The principal neighbours of Central Asia and the international donor community have shown increasing interest in supporting the principal regional institutions and programmes (CACO, SCO and CAREC)

Continued substantial financial support will be essential, especially for the poorer countries

they strengthen their absorptive capacity. There is clearly a vast need for improved regional transport, water and energy infrastructure, and a pressing imperative to control the region's many threats to human security. In addition, shortfalls are currently expected in the attainment of the MDGs by 2015, especially in the poorer countries.¹¹⁸

Given these considerations, we conclude in this report that continued substantial financial support will be essential, especially for the poorer countries. It should come from both the neighbouring states and from the international community. In particular, if and when Uzbekistan decides to embark on major market-oriented reforms—many of which will be essential for Uzbekistan to open up to its neighbours and integrate itself into the regional and the world economies, and with this permit full cooperation and integration for Central Asia at large—it will need significant assistance to help cushion the economic and social impacts that could arise in the short term for parts of the population.

The second challenge relates to the choice between support for regional initiatives that foster regional cooperation and integration, and nationally focused and implemented programmes. While it is not possible to quantify the distribution of financial support between national and regional programmes given the current state of aid statistics, it does appear that increasing amounts of the bilateral and multilateral financial support in recent years have been channelled into regional donor strategies and programmes. This probably has not gone far enough, as most donor agencies still are dominated by a country-based approach to their work—although it appears that donors are more advanced here than in other regions in taking a regional perspective.¹¹⁹

A third challenge relates to how donors can support countries in improving the quality of governance. As we have seen, poor governance obstructs not only effective national policy-making and implementation, but also effective regional cooperation and integration. While some bilateral donors and multilateral institutions have provided assistance for strengthening good governance, the neighbouring countries have not shown much interest in this issue. It is clear that the international community needs to devote much more of its diplomatic and financial resources to hastening the transition to improved political and economic governance structures. The continuing lack of political accountability, transparency and effective anti-corruption measures undermines long-term stability and regional cooperation and integration. That said, neighbours and donors are not only constrained in their willingness, but also in their ability to influence the national leadership in

The international community needs to devote much more of its diplomatic and financial resources to hastening the transition to improved political and economic governance

Coordination of regional assistance programmes could be organized more systematically in an overall framework of regional cooperation

Central Asian countries. A strong national interest in strengthening and maintaining the relatively new sovereignty against encroachment from old or new external political forces is common to all governments in the region. Only Kyrgyzstan and Tajikistan depend directly on the security and financial support provided by their neighbours and the international community. Kazakhstan, Turkmenistan and Uzbekistan can function relatively independently, so that external leverage over their domestic policies or their regional cooperation is limited.

The fourth challenge relates to the coordination of regional assistance programmes. There are many examples of effective cooperation among individual donors on particular projects and programmes. The multilateral institutions have come together for regular consultations through CAREC. However, much of this cooperation remains ad hoc. There is no mechanism akin to the country-level Consultative Group meetings or efforts by national governments to coordinate donor activity in each country. Such coordination could be organized more systematically at the sectoral or thematic level in an overall framework of regional cooperation using one of the existing regional organizations.

One important element of this would be the compilation of an effective donor database that would track resource commitments and disbursements for all donors in key areas, and according to whether programmes are regional or country focused.¹²⁰ CAREC could be an instrument for coordination, since this forum has already proven the advantages of well-coordinated initiatives among the major multilateral donors. The Asian Development Bank has incorporated the need to show 'tangible results' into CAREC operations as a draw for Central Asian participation, and the CAREC strategy includes programmatic activities that are wholly consistent with the Central Asian countries' own development priorities. These include expanding exports to neighbouring countries; facilitating trade through investments in infrastructure, and customs and border crossing improvements; focusing on the exploitation of energy resources; and addressing regional concerns on the environment, human and drug trafficking, and combating HIV/AIDS and TB.

Currently, consideration is being given to expanding CAREC's membership to include Afghanistan and Russia. This would clearly enhance CAREC's regional coverage and its relevance to major regional cooperation concerns. For the future, consideration could be given to securing Turkmenistan's participation,¹²¹ expanding donor representation to include other principal bilateral

donors, broadening the scope of issues covered by CAREC to include all major regional linkages and concerns covered in this Regional Human Development Report, and allowing CAREC to serve as a donor coordinating framework in support of the other regional organizations (CACO and the SCO).

The final challenge is that of assuring strong and effective regional organizations in Central Asia. These need to be able to develop and support a regional cooperation and integration agenda that makes clear progress on human development and human security. CACO and the SCO have emerged as the principal regional organizations among the countries in Central Asia and their neighbours. While they have advanced in recent years in their ability to address regional issues, there remains a need to clarify and align their principal mandates to avoid duplication and confusion. One option might be for CACO to take on principal responsibility for the economic, social and environmental aspects of regional cooperation, while the SCO could principally deal with security issues, drugs and crime, as well as natural disasters. However, China is not a member of CACO, which could limit its reach. More generally, it would be useful to find ways to systematically associate all major neighbours (Afghanistan, India, Iran, Pakistan and Turkey) with the deliberations of CACO and the SCO, even if not with full membership. Further institutional strengthening and closer cooperation between CACO, the SCO and the international donor community, drawing especially on the support of CAREC, would be an additional agenda. Once CACO and the SCO have clear mandates and are effectively serving the regional cooperation needs of Central Asian countries and their neighbours, it would be appropriate for them to also work with other regional organizations and forums that include some or all of the Central Asian countries, such as the CIS, the ECO, the EEC and SPECA.

Recommendations

Our recommendations respond to the five challenges listed above.

- International partners and neighbours should maintain, and if possible expand, their engagement, including their financial assistance, in supporting the human development and human security of people in Central Asia to help meet the objectives of

the Millennium Declaration and the MDGs, and create the foundations for long-term stability and prosperity in this pivotal region.

- All partners should expand their support for regional cooperation and integration as part of explicit regional strategies to assist the countries of Central Asia, their governments, their private sectors and civil society to promote the improvement of regional social and physical infrastructure, policy reforms that permit better integration and responses to common threats, and regional communications and knowledge networks.
- All partners should assist Central Asian countries in improving their institutions and policies for good governance and reduced corruption, including through increased transparency and accountability of state institutions.
- All partners should work together and with the authorities in Central Asia to improve the coordination of their assistance programmes. One way to do this would be to strengthen the role of CAREC as a coordination mechanism in support of the key regional organizations, CACO and the SCO.
- The members of CACO and the SCO should consider clarifying, streamlining and in certain areas expanding the currently overlapping mandates of these two institutions. They should also consider strengthening the institutional infrastructure, and perhaps align their memberships and countries in observer status to assure that all relevant regional players are represented in these two important regional organizations.

The final challenge is that of assuring strong and effective regional organizations in Central Asia

The long-term development needs of Central Asia are very substantial, complex and difficult, and cover a wide range of issues. National interests, concerns within countries and the priorities of international partners all diverge at points. Patience, diplomatic creativity, investment in building mutual trust, increased attention and resources from donors, clarity in partnership values and effective research to demonstrate the benefits of cooperation are needed. Particular attention will have to focus on demonstrating the importance of rapid progress towards good governance in the Central Asian countries, which would include not only the fight against corruption, the establishment of an investor-friendly business climate and the building of an effective civil service, but also the most basic elements of democratic institutions—transparency, accountability and respect for human rights.

Chapter 9

Overall conclusions and recommendations

The largest measured aggregate economic gains come from the reduction in trade costs, and the largest losses from civil war

Findings and implications

In this report, we have tried to pull together evidence on how people in Central Asia are affected by the lack of regional cooperation and integration, on the benefits of cooperation, on what is already being done to promote cooperation, and on the lessons learned. Where possible, we have tried to quantify the impacts, both in terms of the economic losses and the gains, and in terms of the numbers of people affected. For many areas, it is analytically difficult or impossible to make quantitative estimates of gains and losses and of the number of people affected. What is more, we have found that little analytical work has been done for Central Asia to come up with such estimates. This would be a fertile area for future research.

In some areas, however, we did make or find quantitative estimates. The most important of these—because they provide an aggregate quantitative perspective on costs and benefits and the number of people affected—are summarized in Table 9.1. Many of the benefits (or costs avoided) from regional cooperation do not accrue overnight, but will take time to make themselves felt, not least because any initiative to improve cooperation will take time to implement comprehensively. Therefore, the benefits shown in Table 9.1 should be interpreted as accruing over a period of perhaps five to 10 years and beyond. While these numbers reflect rough estimates and should not be taken as more than orders of

magnitude, they still provide some important insights.

These start with the recognition of the large numbers of people affected by some of the regional challenges, threats and risks. In some instances, the people at risk are spread over large parts of the region (such as for a Lake Sarez dam break or in terms of drug use). Under other circumstances, the potential for serious human impact is limited to fewer people in specific locations (earthquakes or violence) and population groups (human trafficking). Some cases involve rapidly growing threats both among certain populations and across the region (such as from HIV/AIDS).

In terms of gains from cooperation or losses from non-cooperation, the largest measured aggregate economic gains come from the reduction in trade costs, and the largest losses from civil war. Benefits from migrants' remittances can be very large for some countries. Important gains can also be reaped (or costs prevented) from improvements in water use policy and control of flooding, and from negotiating better cotton prices in international trade forums. The economic costs of some of the risks the region faces are high, including for HIV/AIDS treatment, from lost productivity related to TB, and from natural disasters. On all of these issues, regional cooperation can help limit costs and increase benefits. This also holds true for many dimensions of regional cooperation that are not captured in Table 9.1, including the benefits that

The quantitative dimensions of regional human development and security challenges

Table 9.1

Number of people affected or at risk	Costs of non-cooperation	Benefits of cooperation	Scale of economic gains/losses that would be increased/reduced by cooperation
Total labour migrants (including daily labour and shuttle trade): 600,000 – 1.5 million for Tajikistan 500,000 – 1.25 million for Kyrgyzstan 600,000 – 1.82 million for Uzbekistan	Costs of agricultural output loss from poor water management: \$1.75 billion per annum (3.6% of GDP) Conflict, violence and war: 30% to 50% of GDP lost for major civil war	Gains from 50% reduction in trade costs: 55% of GDP per annum in Kyrgyzstan 20% of GDP per annum in Kazakhstan Gains from cotton price increase as result of negotiated reduction in subsidies: 6% of GDP per annum in Tajikistan 3% of GDP per annum in Turkmenistan 3% of GDP per annum in Uzbekistan	Remittances: Up to 20% of GDP in Tajikistan Productivity loss from TB: 0.5% to 0.8% of GDP in Central Asia Costs of HIV/AIDS prevention and treatment: \$1 billion (2% of GDP) for 2004–2007 in Central Asia Major natural disasters: 5% to 10% of GDP lost for typical small, poor country—up to 70% of GDP could be lost for Tajikistan
HIV/AIDS cases: 90,000 in Central Asia 0.1% to 0.2% prevalence rate			
Intravenous drug users: 500,000 in Central Asia			
People/women trafficked: 10,000 in Central Asia			
Earthquakes in major cities: Potentially 45,000 to 75,000 deaths per city, hundreds of thousands displaced			
Break in Lake Sarez Dam: Up to 6 million people threatened by flooding			

Note: For explanations and sources, see Chapters 3–7.

stem from creating a better regional investment climate, developing the region's energy resources, better managing regional environmental assets and risks, or cooperating in education and knowledge sharing.

Not all risks, costs and benefits are evenly spread across countries. Some countries are more affected by natural disaster risks; others by the potential for violence and civil war. In terms of cooperation, small (and in this case, poor) countries generally tend to benefit more than large countries, especially when the benefits are calculated in relation to their GDP. This helps explain why Kyrgyzstan and Tajikistan are especially interested in regional cooperation and integration, while the larger countries tend to focus more on issues of national and regional security.

To hazard a guess at how much higher the regional GDP could be after 10 years of comprehensive regional cooperation and integration, as compared with the status quo of limited efforts, we conclude that GDP could be between 50 per cent and 100 per cent higher. In the smaller countries, it would likely be at the higher end of the range, in the larger countries at the lower end. These are likely to be conservative numbers—by considering major risks averted (such as civil wars and major losses from natural disasters), or the development of a highly dynamic regional economy that is fully integrated with its neighbours and the world economy, the cumulative and compounded gains from cooperation could be even greater. In other words, for the small and poor countries, average income with regional cooperation could be more than double that without cooperation.

The benefits from regional cooperation are likely to be distributed in a way that on average helps the poor more than the better off. We demonstrated this specifically in Chapter 3 for the distribution of benefits from the reduction of trade costs. There is little doubt that better agricultural productivity and reduced flooding would also on balance help the rural populations, which include many of the region's poorer people. And since border communities tend to be poorer than the rest of the country, and more open border regimes are of particular benefit to border regions, more open borders will be pro-poor in their impact. In contrast, the costs of non-cooperation, for example from a lack of regional natural disaster preparedness or from war and violence, tend to fall most heavily on poorer people.

But while regional cooperation and integration will help reduce poverty, this by itself is not likely to translate into political commitment for the domestic reforms needed for regional integration or into strong regional cooperation. The leading

political and economic interests in Central Asia are more likely to align themselves with the better-off elites, and those who control the flow of legal and illegal rents that currently are so pervasive in Central Asia. The political push for change, open borders and regional cooperation will likely have to come either from the top leadership, or from the enlightened self-interest of the elites as they recognize that in the longer term, they will also benefit substantially from a more competitive, dynamic and rapidly growing regional economy, one based on integration and cooperation. The drive for change could also come from those who feel most oppressed by closed borders and corrupt officials—the people in the border communities, who, according to surveys, are the most negatively affected, and most prone to turn to radical and potentially violent responses.

There are of course a number of areas where regional cooperation is not so much a matter of the distribution of internal gains and losses within countries, but involves benefits for everyone—as is the case for natural disaster preparedness. These are clearly win-win situations and ought to be quickly pursued as first steps towards strengthening regional cooperation. At other times, the distribution challenge is more between countries than within countries—as is the case for the regional allocation of water. Effective cooperation here is much more difficult since it requires a readiness to compromise, to agree in a mutually binding way on a compromise outcome, and to accept arbitration procedures that are seen as fair, impartial and binding by all parties. Building mutual trust across borders for this kind of compromise and for putting in place the required commitment mechanisms is not an easy task, but it can be helped by an existing pattern of cooperation in those areas where there are no tradeoffs or tensions among countries.

A special area for cooperation is national and regional security—impetus on this issue has been gathering recently in Central Asia. From the perspective of building links and developing trust, this is a good thing. In some ways, it is comparable to the situation in Western Europe after World War II, when the perceived common external threat from the Soviet Union helped get Western European countries to work together not only in the security area but also in the economic and social fields. But there is a risk with the current joint concerns about regional and national security in Central Asia. In the wake of the 'colour revolutions' in Georgia and Ukraine, and the forceful removal of the Kyrgyz government by protestors in March 2005, followed by the violent events in Uzbekistan in May 2005, Central Asian governments have perceived their countries'

For the small and poor countries, average income with regional cooperation could be more than double that without cooperation, especially for the poor

But this by itself is not likely to translate into political commitment for the domestic reforms needed for regional integration or into strong regional cooperation

A special area for cooperation is national and regional security, but such collaboration may not help to build the kind of transparent, accountable and honest government structures

stability and their own survival threatened by the growth of civil society, by opposition movements, and by radical and terrorist forces from inside and outside their borders. This has led governments, mutually supportive of each other and backed by China and Russia, to clamp down on these perceived and real political threats. While this may help maintain short-term stability, it will not help to build the kind of transparent, accountable and honest government structures that are essential in the longer term for a stable, peaceful, integrated and cooperative region.

What does this indicate as the most likely trajectory of Central Asia in terms of cooperation and regional integration over the coming years? The main options that we can envisage are laid out in Table 9.2, which distinguishes five scenarios according to three major characteristics of cooperation and integration: openness of borders, quality of regional institutions, and scope—breadth and intensity—of cooperation. The five scenarios include a *pessimistic* scenario, where the region takes a step back in all three dimensions with very little if any cooperation; a *status quo* scenario, which perpetuates the current relatively low-key approaches; a *cluster* scenario, where some countries in the region cooperate and integrate, but others more or less isolate themselves from their neighbours; a scenario of *proactive cooperation*, with many more open borders, stronger regional institutions, and a broad-gauged scope of cooperation that is also intensive in some areas; and a *deep integration* scenario, where

borders are fully open for trade, capital and labour, there are strong regional institutions, and the scope of cooperation is broad and deep across the board (approaching that of the European Union, for example).

We do not regard the pessimistic scenario as likely for Central Asia in the foreseeable future. While some countries, in particular Turkmenistan, can afford to follow this approach for some time to come, due to their energy resources and their access to markets outside Central Asia, the costs of this isolationist scenario for the region would be severe in terms of economic stagnation, poverty, and political instability and conflict. All indications are that the Central Asian countries, with the possible exception of Turkmenistan, do not see isolationism as a desirable scenario. The *status quo* option is more likely, but it too has high costs from risks and forgone benefits, which appear to be appreciated at least by some of the countries in the region.

This leads to two possible alternative scenarios in the foreseeable future: the cluster and proactive cooperation scenarios. Under the former, some of the countries would cooperate and integrate more with each other and the rest of the world. This would most likely involve Kazakhstan, Kyrgyzstan and Tajikistan, if we extrapolate from the current trends in virtually all important areas—trade, transport and transit, water and energy, border management and social sectors. In contrast, Uzbekistan and especially Turkmenistan remain for now on a more isolationist path. As a

Table 9.2

Scenario	Basic characteristics			Probability and time horizon
	Borders	Regional institutions	Scope of cooperation	
Pessimistic	Largely closed	Very weak	Very narrow, superficial	Unlikely
Status quo	Open, but high transaction costs	Weak/ineffective/multiple and competing	Across a wide range, but mostly superficial	Possible, indefinite
Cluster integration	Open borders between some countries in the region and relatively closed borders between other countries	Weak formal institutions, but effective multilateral and bilateral agreements for cooperation and integration among the cooperating countries	Across a wide range and relatively intensive in some areas, for the countries that cooperate	Most likely, over 3 to 5 years
Proactive cooperation	Open and low transaction costs	Strengthened regional institutions with efficient informal regulation of regional links	Across a wide range, and relatively intensive in at least some areas	Possible, over 3 to 10 years
Deep integration	Very open	Strong formal institutions	Broad and deep cooperation	Unlikely, maybe in 20 to 30 years

consequence, these two countries may be left behind by the other three in terms of economic growth and human development. This could lead to more economic, social and political instability, but over some years it could also—because of the demonstrated success of the integration process for the other countries in the region—convince the lagging countries to join their neighbours, thus spurring momentum for a region-wide proactive cooperation scenario. It is also possible, but less likely, that the region will bypass the cluster scenario, especially if Uzbekistan were to decide that it wants to participate fully and early in proactive regional cooperation.

The deep integration scenario is not likely to be a realistic objective for some time, although it could be a goal for 20 to 30 years into the future. But rather than setting such ambitious goals now, it is more important to try and advance as quickly as possible towards the proactive cooperation scenario in the pragmatic and practical ways highlighted in the preceding chapters of this report. In the next and final section, we will briefly summarize the main cross-cutting recommendations that could help Central Asia move in this direction.

Recommendations

Recommendation 1: Focus on regional cooperation in Central Asia with the overarching goal of creating 'borders with a human face'.

Borders are here to stay in Central Asia. Even in Western Europe, it has taken decades to eliminate them. Although many borders in the world are administered in ways that create costs, hardships and humiliation for the people who need to cross them, much can be done to create 'borders with a human face'. In Central Asia, these could reduce the economic and human costs of the new frontiers, while also meeting valid national and regional security and drug control objectives. 'Borders with a human face' should be the goal of all policies that affect the way borders are managed and enforced. They should be the mission of all those posted at the borders, who should be rewarded according to how well they meet this goal. The human cost of raising additional barriers should always be fully counted, and the means of administering them should be judged according to how they affect people.

The time is now right for moving ahead on this issue, since the initial period of nation-building in Central Asia has passed. Many people and leaders alike recognize cooperation as a key element of

long-term stability and prosperity. Among the neighbours and international partners of Central Asia, there is now also growing external support for regional cooperation and integration, and for regional institutions. With the economic dynamism of the surrounding countries, especially China and Russia, and with the opening up of Afghanistan, the opportunities for economic integration with the rest of the world are clearly much enhanced. But to realize these fully, and to do so for the benefit of the people of Central Asia, cooperation to create borders with a human face is the single most important priority.

The people in the fragile border regions would especially benefit from such a policy, since they suffer most from badly administered borders. Helping these communities to work with each other to ease the frictions and obstacles of the borders, to minimize the drag on economic activity, and to facilitate access to land, water and energy, to health and education services, to friends and family and business partners—these should be the explicit goals of local, national and regional authorities, and their international partners.

Recommendation 2: Promote regional economic cooperation, especially in trade and transit, water and energy management, and natural disaster preparedness.

The quantitative evidence that we have been able to collect shows that these are the areas where regional cooperation creates the greatest and most widespread benefits in terms of raising national incomes and reducing poverty, especially for the smaller and poorer countries.

Recommendation 3: Push ahead with regional cooperation in other areas as far as possible, including environmental protection, migration, education, health, anti-drug trafficking and regional security.

Ideally, progress in regional cooperation would be made across the whole range of issues covered in this report. But realistically, this may not be possible, either because the capacity to negotiate and implement change is too limited in particular areas, or because the political obstacles and vested interests make it difficult to move forward, even when the leadership is in principle committed to doing so. While some avenues of cooperation and integration will

Helping the border communities work with each other to ease the frictions and obstacles of the borders should be the explicit goals of local, national and regional authorities, and their international partners

Cooperation successfully achieved in some areas can add momentum to others

likely be blocked at any given time, others are likely to be open or are open for some of the countries. These should be vigorously pursued. Cooperation successfully achieved in some areas can add momentum to others by demonstrating the benefits of cooperation and establishing interpersonal and inter-institutional networks and trust across borders.

Recommendation 4: Promote domestic policy and good governance reforms as an essential complement to regional cooperation in achieving the goals of human development and human security, with regional benchmarking against the MDGs.

National MDG and poverty reduction strategies should explicitly incorporate an assessment of the regional dimensions

A bad domestic investment climate and inadequate financial sector, poor use of natural resources at the national level, and an inefficient and corrupt public administration will automatically undermine regional cooperation and integration efforts. At the same time, regional cooperation will reinforce domestic reforms by increasing their benefits and offering best practice examples and benchmarks for progress. Region-wide benchmarking of policies and progress, exchange of lessons from policy design and implementation, and sharing of best practices across borders can contribute to more effective policy-making and national implementation. Measuring progress towards the MDGs and sharing lessons about how to achieve progress is one way to do this. National MDG and poverty reduction strategies should explicitly incorporate an assessment of and directions for the regional dimensions of national policies, plans and programmes.

Recommendation 5: For maximum benefit to the people in Central Asia, all countries should participate in regional cooperation and national reforms. However, if some countries do not participate, the others should push ahead and cooperate with each other.

Generally, the more countries in a region cooperate to reap the benefits from regional public goods, the greater are the benefits to the people in the region as a whole. And the more neighbours that opt out of a cooperative arrangement, the more the benefits are reduced for all. As with all public goods, to some extent ‘free-riding’ without cooperating is possible—for example, by being pulled along by the economic dynamism of a successful region.

But more generally, a country that isolates itself from its neighbours risks being left behind, as the rest of the region builds cooperative regional institutions, networks and infrastructure around the non-cooperative country. Some elements of this phenomenon are already noticeable in Central Asia, especially as Kazakhstan, Kyrgyzstan and Tajikistan have cooperated more closely with each other in trade, transport, transit, water and energy, while Turkmenistan in particular, and Uzbekistan to some extent, have pursued policies of isolation and self-sufficiency.

Recommendation 6: Encourage all actors (government, business, academia, civil society and individual people) to travel, work and network across borders.

Regional cooperation is not only for governments. Integration and its benefits arise principally from the cooperation of business, academia, civil society and people from all walks of life. Modern knowledge-based societies depend critically on the open flow of information through the many networks created by these actors. A government’s role is to facilitate these non-governmental contacts, while protecting vital national interests, such as security, health and the environment, and preventing cross-border crimes, such as illicit trafficking of drugs and people, money laundering or terrorist activities. As with domestic law enforcement, there can be tensions between creating ‘borders with a human face’ and protecting borders. However, the presumption should always be that more contacts, exchanges and networking are better than fewer. Any essential restrictions should be limited in coverage and time, and carefully assessed in terms of the costs they generate, while alternatives should be explored.

Recommendation 7: Streamline and strengthen key regional institutions, and establish clear and effective mandates for them to support regional cooperation across the large range of relevant cross-border issues.

Regional organizations and initiatives have an important role to play in assuring that the steps identified under the first six recommendations above are actually implemented. In recent years, three regional institutions and forums—CACO, the SCO and CAREC—have gained in stature, capacity and effectiveness. This is encouraging and provides the basis for further strengthening

Regional cooperation is not only for governments. Integration and its benefits arise principally from the cooperation of business, academia, civil society and people from all walks of life

of these institutions. Among the steps that could be taken are the following:

- Clarify and align the principal mandates of CACO and the SCO to avoid duplication and confusion in roles. CACO could take on principal responsibility for the economic, social and environmental aspects of regional cooperation; the SCO could principally deal with security issues, drugs and crime, and natural disasters.
- Broaden the membership of CACO so that it is more closely aligned with that of the SCO, in particular by including China.
- Consider ways of associating other key neighbours (Afghanistan, India, Iran, Pakistan and Turkey) with the deliberations of CACO and the SCO.
- Give the organizations effective secretariats, and the mandate and capacity to arbitrate conflicts as well as monitor and provide incentives for implementation of agreements.
- Draw on CAREC as a donor coordination support mechanism to ensure that the support of bilateral and international donors is aligned with the work of CACO and the SCO.

Other regional organizations (for example, the EEC and ECO) and programmes (such as SPECA) could continue to function with their different memberships and separate mandates. It would be important, however, to ensure that these organizations do not duplicate or interfere with the functioning of the principal organizations selected by Central Asian countries and their neighbours. Economizing on the limited time and administrative capacity of the countries and their leaders should also be an explicit goal.

These are ambitious institutional objectives, perhaps realistically better seen as goals for the medium to longer term. In the short term it is essential, however, that the existing regional institutions are not used principally as instruments for maintaining political control over domestic and regional oppositional forces, but are employed pragmatically and effectively to support regional cooperation in key areas, such as facilitating trade and transport, combating communicable diseases, developing disaster preparedness measures, and establishing anti-drug trafficking programmes that combine steps for development and control.

Recommendation 8: Central Asia's neighbours and the international community should do more to support regional cooperation and integration in a mutually supportive and coordinated

manner. A high level UN Special Envoy and Representative of the UN Secretary-General for Central Asia should be appointed with the mandate to follow up on the key recommendations of this report in high level dialogue with the national authorities, regional institutions and the broader international community.

The countries of Central Asia, their neighbours and the international community should devote increased attention and resources, together with private partners and civil society, to promote key regional infrastructure, policy reforms, and the development of regional communications and knowledge networks. The long-term development needs of Central Asia are very substantial, complex and difficult, and cover a large range of important areas. National interests, interests within countries, and the priorities of Central Asia's international partners diverge. For most partners, the leverage to influence uncooperative neighbours or partners is limited. This calls for patience, diplomatic creativity, investment in building mutual trust, clarity in partnership values, and also increased attention and resources from donors.

Improved coordination of external assistance—for example, by giving CAREC a responsibility to act also as a regional forum for all donors—would also help assure more effective international partnerships. Among the key areas of international support should be assistance for effective research and for the collection of better statistics to more clearly define the problems that the region faces, and to demonstrate the benefits of cooperation. In particular, the international community needs to focus on demonstrating the importance of rapid progress towards good governance in the Central Asian countries. This would include not only the fight against corruption, the establishment of an investor-friendly business climate and the building up of an effective civil service, but also democratic institutions, transparency, accountability and respect for human rights.

A UN Special Envoy and Representative of the UN Secretary-General could take a lead role on behalf of the international community to promote regional cooperation and integration in Central Asia through high level dialogue with all partners in the region. To be effective, the UN Special Envoy would have to enjoy a high level of credibility in the Central Asian countries as well as the respect of the broader international community.

The international community needs to focus on demonstrating the importance of rapid progress towards good governance in the Central Asian countries

A UN Special Envoy and Representative of the UN Secretary-General could take a lead role on behalf of the international community to promote regional cooperation and integration in Central Asia

In conclusion, the tasks for all partners in and of Central Asia are difficult. The risks that the region faces, especially if the countries, their governments and their people cannot work together, are high. As we have tried to document in this report, the opportunities for cooperation are many, and the benefits from joining markets, resources, knowledge and cultures are great. This will not

happen quickly or across the board. But progress in some, even if limited areas can build trust and confidence that cooperation is possible and beneficial also in others. The outside world can help in this process, and it should. Central Asia is too pivotal a place, and the human development and human security of its people too important for them to be left behind.

Notes

Chapter 1

- ¹ In a statement made to a group of Kazakhstani students in Moscow on 11 June 2005, reported by AKI Press.
- ² Central Asia is defined here to cover five countries that were part of the Soviet Union prior to its break up and that now belong to the CIS: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan. About 56 million people live in this region, which covers 4 million square kilometers and is nearly a third larger than India and over 10 times the size of Germany.
- ³ Linn 2005.
- ⁴ 'Regional public goods' (or 'bads') are goods and services whose regional provision (or prevention) brings greater benefits or lower costs compared with uncoordinated provision (or prevention) by individual countries. See also Birdsall and Rojas-Suarez 2004.
- ⁵ In Soviet times, the Kazakh Soviet Socialist Republic was considered part of the broader Russian regional compact (along with the Belarusian and Ukrainian Soviet Socialist Republics). The four other countries were commonly referred to as Middle Asia (Srednaya Asia in Russian).
- ⁶ The 'rectangle of concern' concept is used by The Aga Khan Development Network. See The Aga Khan Development Network 2005.
- ⁷ This paragraph draws on Pomfret 2001.
- ⁸ See, e.g., Bohr 2003, Spechler 2002, Dabadaev 2004 and Schneider-Deters 2004.
- ⁹ Uzbekistan is doubly landlocked, meaning that it has at a minimum two borders between its territory and access to the sea.
- ¹⁰ See Annex 2 for an explanation of the membership and mandates of the principal regional organizations, such as the CIS.
- ¹¹ See UNDP 2001a, p. 9. The human development approach was defined explicitly as different from earlier conceptual frameworks that varyingly defined economic growth, growth with equity, poverty reduction, basic needs or human resource development as the key development challenges.
- ¹² Commission on Human Security 2003, p. 4.
- ¹³ Annan 2000.
- ¹⁴ Commission on Human Security 2003, Box 1.3, p. 8.
- ¹⁵ As the summary proceedings of this roundtable note: "Threats to human security have interlinkages and consequences in Central Asia, requiring first and foremost a regional approach to human security. Participants [in the Roundtable] agreed that regional cooperation is the main solution for solving both national and common problems, especially since not one government can single handedly provide what it could before, and since international focus may be

on Central Asia today, but will move on eventually."
Quoted from Tadjbakhsh 2002.

¹⁶ See www.un.org/millennium/declaration/ares552e.htm.

¹⁷ UNDP 2006.

¹⁸ UN 2005b, pp. 223-224.

Chapter 2

¹ Central Asia Gateway electronic forum, "What are the prospects of the Central Asian countries' integration?" Summary of e-discussion, posted 18 January 2005, 7:29 pm; www.cagateway.org/forum.php?th=59&lng=1.

² The historical summary presented here draws on a number of published sources, most importantly the following: Allworth 1967, Belenitsky 1968, Elisoff 1998, Hamby 1966, Hobson 2004, Hopkirk 1994, Rashid 1994, Rumer 1989 and Weatherford 2004. As is the case in many other parts of the world, the regional history of Central Asia is subject to many different interpretations and frequently intense debates, depending on the scientific, national and ethnic provenance of the authors concerned. The intention here is not to add to or resolve these debates, but to present the reader who is not familiar with the region with a very brief overview of some of the key historical events and trends.

³ Rashid 1994.

⁴ The discussion in this segment draws substantially on Linn 2004. His research is based *inter alia* on Alexashenko 1993, Campos and Coricelli 2002, EBRD 2003b, Djankov and Freund 2000, Ellman and Kontorovich 1992, Freinkman et al. 2004, Gaidar 2003, Gros 1991, Komarov 1993, Kotkin 2001, Noren and Watson 1992, Sutela 2003, Williamson 1993, Wolf 1993, World Bank 1996, Yasin 1993.

⁵ Freinkman et al. 2004, Metcalf 1997.

⁶ UNDP 2005.

⁷ Sievers 2003.

⁸ UNICEF 2003 and 2004. But it is noteworthy that all countries, except Kazakhstan, experienced an increase in the total working-age population (ages 18-59 years) between 1990 and 2002 due to high population growth rates in the not-so-distant past (see Table 2.4).

⁹ Sievers 2003.

¹⁰ Among the Central Asian countries, Kyrgyzstan received by far the largest amounts of aid from all external sources after independence (see Annex 1).

¹¹ Initial phase reforms include price liberalization, foreign exchange and trade liberalization, and small-scale privatization.

¹² Second phase reforms include large-scale privatization, governance and enterprise

restructuring, competition policy, infrastructure reforms, banking and interest liberalization, and non-bank financial institutions.

- ¹³ In the 2004 World Bank public opinion survey, only 35-40 per cent of respondents in Tajikistan and Uzbekistan reported Russian as their first or fluent second language. In Kazakhstan and Kyrgyzstan, the shares of Russian speakers were much higher at about 90 per cent and 70 per cent respectively. Only 1 per cent of all respondents reported speaking English fluently.
- ¹⁴ The Asian Development Bank, the EBRD, the International Monetary Fund (IMF), UNDP and the World Bank.

Chapter 3

- ¹ This chapter draws on a study on Central Asia regional cooperation in trade, transport and transit conducted by the Asian Development Bank in connection with the Central Asia Regional Human Development Report. The findings of the study will be presented in greater detail in a stand-alone Asian Development Bank report on the subject.
- ² Interviews commissioned by the Asian Development Bank.
- ³ See for, example, Berg and Kruger 2003, Dollar and Kraay 2004, Winters 2004 and Winters et al. 2004 for a survey of the recent empirical literature on the impact of trade and trade liberalization on economic growth and poverty.
- ⁴ See Abache et al. 2004 for a review of the effects of trade liberalization on wages in developing countries and the evidence for Brazil.
- ⁵ Mansfield and Pevehouse 2000 and Rosecrance 1986.
- ⁶ International Crisis Group 2005a provides a detailed review of cotton production and exports in Tajikistan, Turkmenistan and Uzbekistan, and of their impact on human development and human security.
- ⁷ Using panel data and times series/cross-section analysis for a sample of 22 developing countries, Santos-Paulino and Thirlwall 2004 find that trade liberalization stimulated export growth but raised import growth by more, leading to a worsening of the balance of trade and balance of payments.
- ⁸ See Faye et al. 2004 for a detailed discussion of the development challenges facing developing landlocked countries. Limao and Venables 2001 find that a representative landlocked country has transport costs 46 to 55 per cent higher and trade volumes about 60 per cent lower than a representative coastal country.
- ⁹ See, for example, UNESCAP 2004a for a discussion of the relationship between trade and investment.
- ¹⁰ The mirror statistics in Table 3.3 demonstrate the weakness of intra-regional trade data. Bilateral trade reported by the importer is normally 5 to 20 per cent higher than that reported by the exporter because imports include transport and insurance costs, but

the gaps between importer-reported and exporter-reported trade are in some cases much larger than this (e.g., Kazakhstan-Turkmenistan trade), and occasionally the reported exports are larger than the corresponding imports (e.g., Tajikistan's exports to Uzbekistan). Explanations can be found for specific cells in the table. Underreporting of exports from Turkmenistan may be due to the prevalence of cross-border smuggling to neighbours Kazakhstan and Uzbekistan. The under-recording of imports from other countries to Kazakhstan may reflect the corruption of customs officials who could be bribed to turn a blind eye to dutiable imports, or it may indicate that many products reported by Kyrgyzstan, Tajikistan and Uzbekistan as exports to Kazakhstan are in fact trans-shipped to Russia or beyond and hence are, rightly, not recorded as imports by Kazakhstan.

- ¹¹ Babetskii et al. 2003, for example, finds that Kazakhstan, Kyrgyzstan, Turkmenistan and Uzbekistan traded much less from 1997 to 2002 than the EU-15 (the 15 Western European countries that comprised the EU until its expansion in 2004) given their size, GDP at PPP valuation, distance from trading partners and exchange rate volatility. EBRD 2003b compares the actual levels of trade in the transition countries with the levels predicted by the gravity model estimated by Babetskii et al. It finds that the actual levels of trade in Kyrgyzstan and Uzbekistan were considerably lower than the levels one would expect given their above characteristics. Both Babetskii et al. and the bank conclude that the relatively poor quality of institutions, as measured by the World Bank's governance indicators for regulatory quality, rule of law and control of corruption, were a major obstacle to trade in Central Asia. Elborth-Woytek 2003 finds bilateral trade between the CIS countries, including the Central Asian countries, and the EU-15 to be below its potential and explains this by both regional and country-specific factors. Key elements are the slow progress in transition, trade restrictions, geographical features, weaknesses in physical infrastructure, and governance problems in customs and transport services. The comparisons of actual and potential bilateral trade flows among a large group of countries, including Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan, made by the International Trade Centre, suggest that all of the above four countries over-trade with Russia, but under-trade with most developed countries in North America, East Asia and Western Europe as well as with many emerging markets in South and East Asia.

- ¹² The reason commonly stated for this restrictive policy is that it helps protect local business in the formal economy by preventing cheap, low-quality products from countries such as China from being smuggled in and escaping taxes when traded in local markets.
- ¹³ In particular, shuttle traders were prohibited from selling goods imported by other people. Furthermore, registration requirements and procedures for shuttle traders were made more cumbersome. Shuttle traders are now required to register as individual proprietors with local tax

authorities and as participants in foreign economic relations with the Ministry for Foreign Economic Relations, Investments and Trade and with customs authorities. They must open a bank account, have an official permit to conduct export-import operations and retail trade, and obtain a bookkeeping card from local tax authorities. See International Crisis Group (2003b, 2004a and 2005c) for an analysis of the economic, social and political consequences of the restrictions on shuttle trade imposed by the Government of Uzbekistan.

¹⁴ 'Roof' is a slang word for someone (it might be a public servant or security officer or some other influential person) who can protect a business from administrative control. The cost of a 'roof' varies according to the nature of the business; in retail sales it is reported to be at least \$300 per month.

¹⁵ The late 1990s were an exception, when Kazakhstan temporarily introduced a ban and a 200 per cent tariff on certain imports from Kyrgyzstan, the Russian Federation and Uzbekistan in response to a series of external and internal shocks, including the Asian and Russian financial crises, a fall in world prices for oil and metals, and a severe drought.

¹⁶ In Uzbekistan, tariffs, a value-added tax and excise taxes are levied on imports by legal entities only. Imports by individuals are subject to a unified tax on imports, the rate of which is 20 per cent for flour, 40 per cent for other food products and 70 per cent for non-food products. The rate of the unified tax is lower than the combined rate of the tariff, the value-added tax and the excise tax for most food products, but higher than that for most non-food products.

¹⁷ The difference between the rates of these taxes on imported and domestically produced goods constitutes an implicit tariff.

¹⁸ In what appears to be a policy inconsistency, Uzbekistan tries to lower the domestic price for poultry meat by prohibiting its export and simultaneously attempts to raise the price by levying a 50 per cent excise tax on imported poultry meat.

¹⁹ Some Central Asian countries provide implicit subsidies to exports in the form of tax privileges and subsidized credits and energy prices. In Uzbekistan, for example, the rate of the enterprise profit tax is reduced by 30 per cent for companies that export 15 to 20 per cent of their output and by 50 per cent for companies that export more than 30 per cent of their output.

²⁰ These include scrap of non-ferrous metals. Exports to the EU are also exempt from the export tax.

²¹ The surrender requirement is 50 per cent for exports by state-owned enterprises and 10 per cent for joint ventures, whereas private companies as well as exports of cotton fibre are exempt from this requirement. Cash proceeds from exports of natural gas are subject to a 50 per cent tax in addition to a 25 per cent surrender requirement. With the 'black market' premium at about 300 per cent, the surrender requirement on non-cotton, non-gas

exports by state-owned enterprises is equivalent to a 37.5 per cent tax on export revenues.

²² See Annex 2 for an overview of regional organizations more generally.

²³ Often multiple and confusing acronyms and translations are used to designate the regional organizations involving Central Asia.

²⁴ The main caveat to this generalization is that intra-CIS trade tends to be freer than trade with non-CIS countries. This is the case especially for trade among EEC members. There have been exceptions when trade barriers have been imposed at internal CIS borders, but some of these measures have been temporary.

²⁵ The apparent success of the EU as a regional preferential trading bloc is deceptive. The reality of the EU is that regional integration has been driven by the desire for closer political ties, whereas for now the Central Asian countries have no wish to compromise their political autonomy. Moreover, on the economic level, in contrast to Central Asia, the least-cost EU producer's price (aside from agriculture) will generally be little different from the world price, hence the costs of trade diversion are likely to be very limited and outweighed by the gains from regionally open borders.

²⁶ Iran's WTO accession is also on the horizon after a March 2005 announcement by the United States that it would not oppose an application.

²⁷ The estimated subsidies, their impact on world prices and Uzbekistan's supply response are from Baffes 2004. The increases in GDP for Tajikistan and Uzbekistan even without any change in output are based on export volumes and GDP in 2000, reported in Pomfret 2005.

²⁸ A more robust criticism of Kyrgyzstan's accession experience is that the negotiators, whether due to inexperience or by intent, failed to make transitional arrangements or gain exemptions that would have protected Kyrgyz interests. Some learning process is reflected in Kazakhstan's lengthier and more detailed WTO negotiations, and harder stance on some of the voluntary codes. The appropriate negotiating balance must reflect a country's preferences and compliance capabilities; immediate compliance may be problematic and a phasing-in period is desirable.

²⁹ In 2004 there were also proposals for monetary integration. The chairperson of the Kazakhstan central bank proposed a common currency for the EEC and senior Russian political leaders proposed adopting the rouble as a common currency for the UES, both aiming to follow the European Union's adoption of the euro.

³⁰ We do not cover the transport of energy (electricity, oil and gas) in this section. This topic is addressed in Chapter 4.

³¹ See, for example, Jenkins and Pezant 2003, Molnar and Ojala 2003, and World Bank 2005c for an in-depth analysis of the state of transport services in Central Asia.

- ³² World Bank 2005c.
- ³³ Ibid.
- ³⁴ "Frontier guards and customs officials consider people like us as sub-humans. They have just pushed and insulted me. They openly rob us," Guli Opa, a 45-year-old Uzbek woman trying to cross the Kazakhstani-Uzbek border for a funeral, told an Integrated Regional Information Networks (IRIN) correspondent in February 2005. "The Kazakh frontier guards took 2000 Uzbek soums (about \$2) from us for me and my daughter just to cross the border. It is insulting, because they do not have the right to do it, but I was afraid of the consequences. They have the power to stop me crossing the border. What can I do? I have to go to the funeral" (IRIN 2005a). Eldor, a young man from Mangit, Uzbekistan, told a correspondent from Ozod Ovoz that to visit the cemetery situated in the Turkmen territory just four kilometres from his house on the Islamic holiday of Eid Al-Adha in January 2005 he had to travel 160 kilometres, as the closest border post was located 80 kilometres away.
- ³⁵ Exclave or enclave is a piece of the territory of one country within the territory of another country. The piece is an exclave for the country to which it belongs and an enclave for the country within which it is located.
- ³⁶ Asian Development Bank 2003b.
- ³⁷ Used trucks of EURO-3 class, for example, cost at least \$70,000 and new trucks of EURO-5 class cost more than \$100,000. Membership in the national road transport association requires an entry fee of \$8,000 and an annual fee of \$130 to \$2,000. The TIR carnet costs \$100 to \$150 in Kazakhstan, Kyrgyzstan and Uzbekistan.
- ³⁸ Only for shipments by rail and sea from Central Asia to the east coast of China through Bandar Abbas, Iran, is the actual transport cost lower than the 'ideal world' transport cost. The reason is that transport flows from China to the Middle East, most of which go through Bandar Abbas, exceed transport flows in the opposite direction, so transport costs for shipments from Bandar Abbas to China are relatively low.
- ³⁹ Raballand et al. 2005.
- ⁴⁰ According to freight forwarders, only one out of two trucks carrying goods from the EU to Central Asia return with cargo, despite the relatively low costs of shipments from Central Asia to Europe. This is not only due to the relatively small amount of exports from Central Asia to the EU that need to be transported by road, but also because many road transporters refuse to carry less than a truckload of consolidated cargo to avoid excessive and cumbersome border crossing and transit procedures. As a result, a lot of cargo capacity is wasted.
- ⁴¹ See Chapter 7 for a detailed discussion of the quality of institutions in the Central Asian countries.
- ⁴² See World Bank 2005b for a very detailed treatment of the behind-the-border issues of trade integration.
- ⁴³ For example, Baniak et al. 2005, Te Velde and Bezemer 2004, Yeyati et al. 2003 and EBRD 2003a.
- ⁴⁴ From an investment questionnaire by the UN Industrial Development Organization in Kyrgyzstan, 2003.
- ⁴⁵ See, for example, Eichengreen et al. 1996; and Cukrowski et al. 2002.
- ⁴⁶ The average number of procedures needed to register a company in three Central Asian states (Kazakhstan, Kyrgyzstan and Uzbekistan) is about 9.3. On average, registration takes about 28 days.
- ⁴⁷ See, for example, survey information from the International Business Council in Kyrgyzstan in 2003.
- ⁴⁸ World Bank and EBRD 2002.
- ⁴⁹ World Bank 2004i.
- ⁵⁰ Beck et al. 2004, p. 8.
- ⁵¹ World Bank 2000b, p. 207. Another example is the case of the banking crises in the Baltic republics of Estonia, Latvia and Lithuania in the mid-1990s. In the lead-up, the countries shared common systemic weaknesses in their financial sectors, including poor regulation and supervision, poor accounting, excessive taxation, an inadequate legal infrastructure for lending and pervasive corruption with weak banking skills. See Fleming et al. 1997, p. 43. In addition, there were financial spillovers from one country to another, both in terms of interwoven financial systems as well as in terms of impacts on the confidence of the financial institutions in each country.
- ⁵² IMF 2004c, 2004d and 2004e.
- ⁵³ The role of remittances is discussed in Chapter 6.
- ⁵⁴ World Bank 2003a, p.6.
- ⁵⁵ World Bank 2003c.
- ⁵⁶ Bergsman et al. 2000.
- ⁵⁷ World Bank 2002c.
- ⁵⁸ Schneider 2002.
- ⁵⁹ EBRD 2003b.
- ⁶⁰ Jenkins and Kennedy 2000.
- ⁶¹ At this stage, it is simply assumed that improved regional cooperation in trade policy, transport infrastructure and trade facilitation leads to non-discriminatory reductions in tariffs and uniform reductions in domestic distribution margins. Kyrgyzstan's model is being further developed to include commodity-specific external transport costs; to decompose external transport costs and domestic distribution margins into major components; and to assess how specific regional cooperation measures in the areas of trade policy, transport infrastructure and trade facilitation would affect various components of external transport costs and domestic distribution margins, trade taxes and, hence, the economy. Kazakhstan's model is being further developed to assess the effects on the economy of discriminatory regional trade liberalization versus non-discriminatory multilateral liberalization. The results of these exercises will be presented in the forthcoming Asian Development Bank report on Central Asian regional cooperation

in trade, transport and transit, where the structure of the computable general equilibrium models and their underlying assumptions will be described in detail.

- ⁶² Excluding the energy/water barter trade, which is a more or less unavoidable fact of geography, bilateral trade between Kyrgyzstan and Uzbekistan in 2003 was only \$14 million.

Chapter 4

¹ SPECA 2004a contains a detailed and comprehensive description of the major water and energy issues and institutions in Central Asia.

² Figure 4.1 represents a useful reference for the discussion of water resource issues throughout this chapter.

³ World Bank 2005e (figure for Turkmenistan is for 2001).

⁴ World Bank 2003b.

⁵ Dams can also be poorly operated or badly maintained, causing potential harm and even disasters for the host country and its neighbours, and producing 'regional public goods'.

⁶ This discussion of the water-energy nexus draws upon World Bank 2004a and 2004g.

⁷ See for instance LeMarquand 1977, Yetim 2002 and Sadoff et al. 2002.

⁸ We do not explicitly consider Tajikistan, although it is a mid-stream riparian state on the Syr Darya river. It plays only a small role in this river basin (in contrast to its major role in the Amu Darya basin—see Box 4.4). This can be explained principally by the fact that it has a small irrigation water withdrawal rate and its combined reservoir capacity does not enable multi-year regulation on the Syr Darya.

⁹ The World Bank (2004g) has calculated that the incremental cost to Kyrgyzstan of operating the Toktogul reservoir in 'irrigation mode' is \$35 million, yet the total monetary value of downstream transfers under the barter agreements often fell short of that (estimated at \$29 million in 2001).

¹⁰ One of the reasons given by Kyrgyz experts for the need to claim compensation for water is that Kyrgyz farmers lost 21,200 hectares of agricultural land as a result of Toktogul reservoir flooding alone ("UNDP Country Background Study, Kyrgyzstan").

¹¹ World Bank 2004a.

¹² Ibid.

¹³ Abbink et al. 2005.

¹⁴ World Bank 2004g. Kazakhstan has also offered to co-finance the proposed Kambarata hydropower projects in Kyrgyzstan to create more upstream storage and power generating capacity, which would be another way of reconciling the conflicting interests of upstream and downstream riparian states.

¹⁵ International Crisis Group 2002a.

¹⁶ However, generally the investment in re-regulating downstream reservoirs that are under construction in Uzbekistan and under consideration by Kazakhstan tends to be suboptimal, since such reservoirs tend to be more expensive and less efficient than equivalent storage capacity constructed upstream.

¹⁷ World Bank 2004a. Kazakhstan has expressed an interest in funding a portion of the Kambarata I investment, provided it receives a stake in the decision-making for the facilities, an option the Kyrgyz authorities have so far not been willing to consider.

¹⁸ Ibid.

¹⁹ World Bank 2004g. These are conservative estimates that include benefits from increased water availability for cotton production and the import of cheaper electricity, but exclude benefits from other irrigated crops, reduced flooding and postponement of expensive dam construction. In addition, Uzbekistan could benefit from carbon mission trading revenues and possibly from re-exporting Kyrgyz electricity to Afghanistan.

²⁰ This section is based on: International Crisis Group 2002a, McKinney 2003 and World Bank 2004c.

²¹ Based on BBC reports, 14 November 2004, drawing on Kazakhstanskaya Pravda, Almaty, 13 November 2004.

²² World Bank 2003b.

²³ DFID 2003.

²⁴ Dorian 1998.

²⁵ World Bank 2004a.

²⁶ We do not address issues of national policy regarding energy efficiency and renewable energy resources here, since these do not primarily involve challenges for regional cooperation. Better pricing of energy, and especially power, would of course reduce the requirement for hydropower resources and this in turn would help reduce the pressure on regional water resource more generally. For a discussion of these national energy policy issues, see SPECA 2004b.

²⁷ Dorian 1998.

²⁸ BP 2004.

²⁹ Tsalik 2003.

³⁰ On 4 April 2005, China announced "that construction of the first phase of the 920-kilometre Atasu-Asashankou pipeline would be completed by 16 December. The pipeline will transport Kazakh oil for processing to Western China. It is projected to initially pump 10 million tons of crude oil annually, gradually increasing the capacity of the pipeline to 20 million tons annually by the year 2010" (Yermukanov 2005).

³¹ In an attempt to overcome the disadvantages of being landlocked, Kazakhstan, Turkmenistan and Uzbekistan conduct oil swap deals with Iran. Iran uses such oil in its northern refineries, which are far from its own oil resources, located mainly in its southern region. In return, Iran delivers the

- equivalent amount of oil to the designated clients specified by the Central Asian oil exporters through the Iranian Persian Gulf oil terminal of Kharq. Iran offers the cheapest oil export option for Central Asia to the lucrative Asian markets (Peimani 2004a).
- ³² Unless otherwise noted, the information on the electricity sector is based on World Bank 2004a.
- ³³ The power trader role could, for example, involve importing hydropower and exporting thermal power, taking advantage of relative logistics and peak demand times.
- ³⁴ One longer-term option even involved trading Central Asian electricity all the way to Central and Western Europe through the practice of 'wheeling' power from one market to the next (one way to visualize this practice is to see it as using imported electricity from a supplier further to the east and passing locally generated power on further to the west). However, this will require high-quality transmission facilities throughout the region and highly integrated electricity sector markets.
- ³⁵ Turkmenistan has a recent agreement with Iran and Turkey for the export of Turkmen power to Turkey via Iran (J. Linn mission notes, Ashgabad, 2004).
- ³⁶ In the case of hydropower, it is possible to store the water that generates electricity.
- ³⁷ Asian Development Bank 2004b.
- ³⁸ SPECA 2004a.
- ³⁹ Interstate Commission for Water Coordination 2004.
- ⁴⁰ Khamidov (M.N.) 2002.
- ⁴¹ Kamalov 2002, Kuksa et al. 1991.
- ⁴² Bakhiev and Treshkin 2002, Novikova et al. 2001.
- ⁴³ Intergovernmental Commission for Sustainable Development 2001.
- ⁴⁴ Asian Development Bank 2001.
- ⁴⁵ Kipshakbayev and Sokolov 2002.
- ⁴⁶ Chichasov and Shamen 1997.
- ⁴⁷ Cherkasov 2002; Dikih 2001.
- ⁴⁸ SPECA 2004a.
- ⁴⁹ Global International Waters Assessment 2005.
- ⁵⁰ Global International Waters Assessment 2005, Intergovernmental Commission for Sustainable Development 2001, SPECA 2004b.
- ⁵¹ Kipshakbayev and Sokolov 2002.
- ⁵² SPECA 2004b.
- ⁵³ Karakalpakstan is an autonomous republic in Uzbekistan situated south-east and south-west of the Aral Sea. On the east, Karakalpakstan occupies the western half of the Kyzylkum Desert.
- ⁵⁴ Kamalov 2002.
- ⁵⁵ Rubinova 2000 and SPECA 2004a.
- ⁵⁶ UNEP et al. 2004.
- ⁵⁷ A special hot spot in the Aral Sea region is Vozrozhdeniye Island, which used to be a bio-weapons testing site during Soviet days. Due to falling water levels, the island has become increasingly accessible to scavengers, raising fears that leftover traces of biochemical materials could be carried to the mainland with potentially disastrous consequences (Pala 2005).
- ⁵⁸ Interstate Commission for Water Coordination 2005.
- ⁵⁹ Aslov 2003.
- ⁶⁰ Caspian Environmental Programme 2004.
- ⁶¹ Ibid.
- ⁶² UNEP 2002.
- ⁶³ According to the State Oil Company of Azerbaijan, cited by the State Telegraphic Agency of the Republic of Azerbaijan, Azertag, 15 May 2005.
- ⁶⁴ See SPECA 2004a for a detailed assessment of institutional issues.
- ⁶⁵ Kaul et al. 1999, Birdsall 2004.
- ⁶⁶ This section draws upon World Bank 2004a.
- ⁶⁷ This lack of dispute resolution or enforcement mechanisms for agreements in the water sector mirrors the situation in the trade area, as observed in Chapter 3.
- ⁶⁸ All five country case studies commissioned in connection with the Central Asia Regional Human Development Report endorse the Water and Energy Consortium as an instrument for improved regional cooperation.
- ⁶⁹ See, for example, World Bank 2004a.
- ⁷⁰ The integrated water resources management approach is highly relevant for all Central Asian countries, as they have adopted the Johannesburg Directive to establish national plans based on it. See, for example, Dukhovny et al. 2004 for some suggestions how this might be done.
- ⁷¹ Esty et al. 2005.
- ⁷² Cherp and Mnatsakanian 2003.
- ⁷³ Ibid.
- ⁷⁴ European Commission 2001.
- ⁷⁵ See www.envsec.org and UNEP et al. 2004 for details.
- ⁷⁶ UNECE 2004.
- ⁷⁷ See McCauley 2004.
- ⁷⁸ While these costs are strictly speaking the result of national policies, a region-wide approach towards improved water use policies and management would be optimal in terms of assuring maximum region-wide benefits and reducing pressures on the regional natural resource base.

Chapter 5

- ¹ UNECE 2000.
- ² World Bank 2002b.
- ³ International Federation of Red Cross and Red Crescent Societies 2004.
- ⁴ World Bank 2002b.

- ⁵ In addition to specific information cited here, data on the incidence of natural disasters and their impacts in Central Asia are also available at EM-DAT, the international disaster database of the US Office of Foreign Disaster Assistance/Centre for Research on the Epidemiology of Disasters, www.em-dat.net/disasters/Visualisation/profiles/natural-table-emdat.php?country=Tajikistan&Submit=Display+Country+Profile.
- ⁶ World Bank 2004e.
- ⁷ See the EM-DAT database referred to in endnote 5.
- ⁸ UNECE 2000.
- ⁹ "UNDP Country Background Study, Kazakhstan."
- ¹⁰ Red Cross strategy slides, 2005, from World Bank communication.
- ¹¹ The Times of Central Asia 2004b.
- ¹² Ibid.
- ¹³ "UNDP Country Background Study, Kazakhstan."
- ¹⁴ "UNDP Country Background Study, Uzbekistan."
- ¹⁵ Ibid.
- ¹⁶ Ibid.
- ¹⁷ UNDP 1999b.
- ¹⁸ UNDP 2004g.
- ¹⁹ Ibid.
- ²⁰ UNECE 2000.
- ²¹ International Federation of Red Cross and Red Crescent Societies 2001.
- ²² Abdurahim 2005.
- ²³ See www.undp.org/bcpr/disred/english/regions/asia.htm.
- ²⁴ See the official Website for the conference at www.unisdr.org/wcdr/.
- ²⁵ The World Bank, in a recent report on disaster prevention and management in Central Asia and Europe, proposed a four-pronged framework for disaster and hazard risk management that could be applied by Central Asia nationally and regionally. See World Bank 2004e.
- ²⁶ This is documented in a report commissioned by UNDP. See UNDP 2004e.
- ²⁷ UNECE 2000.
- ²⁸ World Bank 2004e.
- ²⁹ Swanström 2003.
- ³⁰ See, for further details, www.pa-chouvy.org/Chouvy_Toxicbase_Trafic_Afghanistan.pdf.
- ³¹ UNODC 2004b.
- ³² "UNDP Country Background Study, Uzbekistan," Lubin et al. 2002.
- ³³ Map by Pierre-Arnaud Chouvy (2002), published with permission of the author.
- ³⁴ Lubin et al. 2002.
- ³⁵ Osmonaliev 2005.
- ³⁶ UNODC 2004b.
- ³⁷ Central Asia-Caucasus Institute Silk Road Studies Program 2004.
- ³⁸ Deledda-Titchner 2002.
- ³⁹ IRIN 2004c.
- ⁴⁰ Ibid.
- ⁴¹ "UNDP Country Background Study, Kyrgyzstan."
- ⁴² Pierre-Arnaud Chouvy 2004a and 2005.
- ⁴³ See UNDP 2004f. Of particular concern has been the long delay by the coalition forces in tackling the drug production problem during 2002 and 2003, followed by a single-minded focus on eradication by aerial spraying. The delays in anti-drug action led to a quick revival of drug production and a reestablishment of the drug networks between growers, war lords and drug mafias; while the narrow focus on eradication was too limited an approach, much resented by the poor poppy growers and political leadership alike.
- ⁴⁴ For details on eradication being counterproductive, see Chouvy 2005.
- ⁴⁵ According to the UNODC, there is no significant opium poppy cultivation taking place in Central Asia yet, although in areas natural and man-planted cannabis is being grown."UNDP Country Background Study, Kazakhstan."
- ⁴⁶ UNODC Central Asia Programme; see www.unodc.org/pdf/central_asia_programme.pdf.
- ⁴⁷ Lubin et al. 2002.
- ⁴⁸ See the World Bank on HIV/AIDS in Tajikistan on the Web at <http://lnweb18.worldbank.org/ECA/ECSHD.nsf/0/814FDCE14FDCAF46585256C83006D9373?OpenDocument>.
- ⁴⁹ Lubin 2003.
- ⁵⁰ Ibid.
- ⁵¹ Clark 2004.
- ⁵² Parshin 2001.
- ⁵³ Kerimi 2000.
- ⁵⁴ Ponce 2002.
- ⁵⁵ UNODC 2004a.
- ⁵⁶ "UNDP Country Background Study, Turkmenistan."
- ⁵⁷ Synergy project of the Government of Uzbekistan and UNODC, "Promoting multisectoral effective response to drug addiction, HIV/AIDS and sexually transmitted diseases in Uzbekistan—reduction of drug use among injection drug users." See the website at www.aids-drugs.uz.
- ⁵⁸ UNAIDS 2004a.
- ⁵⁹ Lubin et al. 2002.
- ⁶⁰ Ibid.
- ⁶¹ Ibid.
- ⁶² Makarenko 2002.
- ⁶³ Cornell 2004 and Carpenter 2005.
- ⁶⁴ Chouvy 2004b.
- ⁶⁵ Osmonaliev 2005.

- ⁶⁶ As mentioned earlier, decriminalization of drug use is not likely to be a serious option for most countries. According to some analysts, it can render the drug situation uncontrollable by attracting dealers and addicts from countries with stricter policies. Legalizing may reduce hidden drug addiction, but it will likely lead to an expansion of the rate of drug abuse (Osmonaliev 2005).
- ⁶⁷ Swanström 2005 and "UNDP Country Background Study, Uzbekistan."
- ⁶⁸ Given weak governance and corruption in many countries, it is important to guard against the risk of official abuse in the implementation of such legislation and in the administration of such units.
- ⁶⁹ Swantzörn 2005.
- ⁷⁰ "UNDP Country Background Study, Tajikistan."
- ⁷¹ Swantzörn 2005.
- ⁷² "UNDP Country Background Study, Kyrgyzstan."
- ⁷³ "UNDP Country Background Study, Turkmenistan."
- ⁷⁴ International Narcotics Control Board 2004.
- ⁷⁵ The popular uprising in Kyrgyzstan in March 2005 was due to general discontent with the conduct of the parliamentary elections, corruption and the general economic hardships of recent years, rather than reflecting the actions of organized extremist or terrorist groups. The regional significance of these events is discussed in greater depth in Chapter 7.
- ⁷⁶ See, for example, Sen 2001 and Stewart 2000.
- ⁷⁷ UN 2005a.
- ⁷⁸ It is noteworthy that the survey showed consistently higher levels of concern about possible violence in Kyrgyzstan than in the other countries. This could be due either to a higher actual level of concern, or a greater readiness among respondents in Kyrgyzstan to admit to their concerns openly, or a combination of these two factors.
- ⁷⁹ "UNDP Country Background Study, Uzbekistan."
- ⁸⁰ See, for example, Collier 2003, and Berdal and Malone 2000.
- ⁸¹ Ibid.
- ⁸² In this connection, it is interesting to note that the trigger of the 13 May violence in Andijan, Uzbekistan, was the jailing of 23 young businessmen belonging to a local Islamic group, Akramiya, according to news reports. They had been unhappy about restrictions on business activities in this border region of Uzbekistan. See <http://news.bbc.co.uk/2/hi/asia-pacific/4549873.stm>, and http://en.wikipedia.org/wiki/May_2005_unrest_in_Uzbekistan.
- ⁸³ "UNDP Country Background Study, Kazakhstan."
- ⁸⁴ "UNDP Country Background Study, Uzbekistan."
- ⁸⁵ This view has become more prevalent in Central Asia after the Rose and Orange revolutions in Georgia and Ukraine respectively, and after the Kyrgyz Government of President Akaev was overthrown.
- ⁸⁶ International Crisis Group 2001.
- ⁸⁷ Steele 2005.
- ⁸⁸ Ibid.
- ⁸⁹ "UNDP Country Background Study, Kyrgyzstan."
- ⁹⁰ For background on the history, membership and mandate of the principal regional organizations see Annex 2.
- ⁹¹ Kimmage 2004.
- ⁹² Ibid.
- ⁹³ The joint declaration also called for a timetable for US-led anti-terror coalition troops to withdraw from the region. During the summit, India, Iran and Pakistan were admitted as SCO observers (Mongolia was accorded observer status during the 2004 summit).
- ⁹⁴ Based on news reports in www.mfa.kz and www.kazakhembus.com.
- ⁹⁵ See the NATO Signatures of Partnership for Peace Framework Document at www.nato.int/pfp/sig-cntr.htm.
- ⁹⁶ NATO has also reached agreements on transit through Tajikistan and Termez in Uzbekistan to support International Security Assistance Forces deployed in Afghanistan, and it is now seeking additional routes through Turkmenistan.
- ⁹⁷ NATO 2005.
- ⁹⁸ The stepped-up bilateral military engagement of the United States in Central Asia since 11 September 2001, appears to have been driven principally by its need for logistical support in the fight against the Taliban Government in Afghanistan and subsequent efforts to stabilize the security situation in that country. In this connection, the United States was placed in an ambivalent position vis-à-vis the national authorities in Central Asia, since on the one hand it pursued a policy of ostensibly supporting democratization and respect for human rights in the region, while at the same time it was also supporting financially and militarily governments that did not meet US standards on human rights and democracy.
- ⁹⁹ A separate area of engagement by NATO military forces has involved the use of air base facilities in Kyrgyzstan and Uzbekistan in connection with the Afghan war. A successful transformation of Afghanistan into a peaceful, stable and prosperous nation would have major benefits for the stability and human and national security of the countries in Central Asia.
- ¹⁰⁰ Tadjbakhsh 2004.
- ¹⁰¹ OSCE 2001.
- ¹⁰² OSCE 2005.
- ¹⁰³ Radio Free Europe/Radio Liberty 2005c.

Chapter 6

- ¹ See Oxford Analytica 2005a. This source also points to the importance of transmigration in the region, especially from Afghanistan, Iran and Pakistan to Western Europe.
- ² There has been a corresponding increase in the titular share of the population. For example, in 1989,

ethnic Kazaks made up less than 40 per cent of the population of Kazakhstan; in 1999, they made up 53.4 per cent. See Heleniak n.d.

³ "UNDP Country Background Study, Kyrgyzstan;" IRIN 2004a.

⁴ Heleniak 2004.

⁵ IRIN 2004a.

⁶ IOM 2002.

⁷ Heleniak n.d.

⁸ The issue of human trafficking is further explored in this chapter's discussion of gender issues.

⁹ IRIN 2004a; Sadovskaya 2004.

¹⁰ Ibid.

¹¹ Heleniak n.d.

¹² ITAR-TASS, 29 April 2004.

¹³ "UNDP Country Background Study, Uzbekistan."

¹⁴ Olimova and Bosc 2003, p. 94.

¹⁵ UNDP Country Background Study, Tajikistan."

¹⁶ Another downside is the possible spread of infectious diseases, in particular HIV/AIDS, when temporary migrants return from high-risk areas, as has been the case with Central Asian migrants working in Russia.

¹⁷ Hill 2004.

¹⁸ Whitlock 2004.

¹⁹ From the World Bank Public Opinion Survey conducted in 2004 among 6,000 respondents in four Central Asian countries.

²⁰ Olimova and Bosc 2003, p. 94.

²¹ Hill 2004.

²² Simplified visa regimes are also important to facilitate international transit and tourism from non-CIS countries. The current procedures for obtaining visas for non-CIS visitors to Central Asia are burdensome, expensive and time consuming. Visitors typically need a letter of invitation from a party in the country, which is then reviewed by the Ministry of Foreign Affairs and, if approved, results in the issuance of a visa support letter that is forwarded to the embassy of the visitor's country; the visitor can then apply for the visa. Typically, the process takes a month or longer.

²³ UNDP 2004c, pp.157-158. According to a WHO estimate, Tajikistan and Kyrgyzstan, respectively, have a private health financing share of 71 per cent and 51 per cent, compared with 40 per cent for Kazakhstan and 26 per cent for Uzbekistan. In Russia and Hungary, the share is 32 per cent and 25 per cent respectively. See WHO on the Web at <http://www3.who.int/whosis/country/compare.cfm?language=en&country=kzg&indicator=strPrvEOHPctOfTotEOH2001>.

²⁴ WHO has found that 80 per cent of pregnant women in Tajikistan suffer from iron-deficiency anaemia.

²⁵ UNICEF 2003, p. 35.

²⁶ According to the WHO classification, infant mortality would be significantly higher. The WHO definition

of live birth is not the same as the Soviet definition, which does not consider a live birth a child born prematurely, of extremely low birth weight, who could not survive a week. UNDP 2003c, p. 11.

²⁷ UNDP 2004c, pp. 169-170:

²⁸ UNICEF 2004.

²⁹ Ibid.

³⁰ Ibid, p. vii.

³¹ DOTS combines five elements: political commitment, microscopy services, a sustainable drug supply, surveillance and monitoring, and use of standard medication regimes with direct observation of treatment. The DOTS strategy is recommended by WHO and has become worldwide the cornerstone for successful treatment and control of a TB epidemic.

³² Godinho et al. 2004.

³³ Ibid, p. xiii.

³⁴ Ibid.

³⁵ World Bank 2004f.

³⁶ Central Asia Issue Brief, on the World Bank Website at <http://web.worldbank.org/wbsite/external/countries/ecaext/extecaregtophaneut/extecaregtophiv aids/0,,contentMDK:20319451~menuPK:616563~pagePK:34004173~piPK:34003707~theSitePK:571172,00.html>.

³⁷ See on the Web at <http://wbln0018.worldbank.org>.

³⁸ In 2003 and during the first quarter of 2004, UNAIDS and WHO worked closely with national governments and research institutions to recalculate current estimates of people living with HIV/AIDS. However, these estimates are constantly being revised as countries improve their surveillance systems and collect more information. See http://www.who.int/GlobalAtlas/PDFFactory/HIV/EFS_PDFs/EFS2004_KZ.pdf.

³⁹ See the Central Asia Issue Brief referenced in endnote 38.

⁴⁰ World Bank 2004f.

⁴¹ Ibid, pp. 22-23.

⁴² See more about human rights abuses fueling the AIDS epidemic in Kazakhstan in Human Rights Watch 2003.

⁴³ UNICEF 2004.

⁴⁴ With an average of three physicians per 1,000 people in 2002, Central Asia had a 50 per cent higher ratio than Poland and was about equal to the ratio in Western European countries. See UNICEF 2004.

⁴⁵ McKee et al. 2002.

⁴⁶ According to the 2004 World Bank Public Opinion Survey, a large majority of respondents is very concerned about corruption. Respondents rated law-enforcement, court, health care and education systems along with government structures as the greatest sources of corruption.

⁴⁷ See more at <http://www.euro.who.int/healthinfo/ctryinfo/ctryinfo>.

⁴⁸ "UNDP Country Background Study, Uzbekistan."

- ⁴⁹ See more in World Bank 2004f.
- ⁵⁰ UNICEF 2004.
- ⁵¹ UNDP 2003a, p. 19.
- ⁵² UNDP 2004d, p. 32
- ⁵³ For instance, in Tajikistan spending on education in the state budget dropped from 22.1 per cent in 1990 to 15 to 16 per cent in 2001. World Bank 2003d, p. 4.
- ⁵⁴ UNDP 2004c, p.174.
- ⁵⁵ "UNDP Country Background Study, Kyrgyzstan"
- ⁵⁶ World Bank 2002a, p. 47.
- ⁵⁷ UNDP Background Country Study, Kyrgyzstan.
- ⁵⁸ Institute for War and Peace Reporting 2004b.
- ⁵⁹ Asian Development Bank 1998, p. 108.
- ⁶⁰ UNICEF 2004.
- ⁶¹ Moore 2004 and the Government of Uzbekistan 2004.
- ⁶² Kazakhstan and Kyrgyzstan encourage student exchanges and recognize each other's diplomas.
- ⁶³ Turkmenistan made the political decision to invalidate all higher education degrees received outside the country since 1993 and to sack state workers holding such degrees. See Higher Education Deteriorating in Turkmenistan, Scholars at Risk at http://scholarsatrisk.nyu.edu/pr04_05.html.
- ⁶⁴ See more at <http://www.ucentralasia.org/>.
- ⁶⁵ The OSCE Academy used to function as a regional and international project. Now it has achieved independent legal status and on 6 August 2004 it was registered at the Ministry of Justice of Kyrgyzstan as a public foundation. As a unique centre for education, research and the development of dialogue in Central Asia, the OSCE Academy will continue to serve in areas such as providing education to young specialists in conflict prevention and resolution and post-conflict rehabilitation.
- ⁶⁶ UNDP Background Country Study, Tajikistan.
- ⁶⁷ For instance, in Kyrgyzstan, out of 2,014 schools, 237 use the Uzbek language, 147 the Russian language and two the Tajik language. In Kazakhstan, 80 schools use the Uzbek language, 14 the Uigur language, three the Tajik language and one Ukrainian. In Tajikistan, five languages are used in day-time secondary education: 73.7 per cent of all students study in the Tajik language, 23 per cent in the Uzbek language, 2.2 per cent in Russian, 0.9 per cent in the Kyrgyz language and 0.2 in the Turkmen language. From the "UNDP Country Background Studies": Kyrgyzstan and Kazakhstan.
- ⁶⁸ "UNDP Country Background Study, Tajikistan."
- ⁶⁹ "UNDP Country Background Study, Kyrgyzstan."
- ⁷⁰ Pleskovic et al. 2002.
- ⁷¹ Ibid.
- ⁷² Moreover, Turkmen leadership barred even international courier firms from working in the country.
- ⁷³ Blua 2003.
- ⁷⁴ Under its Internet Access and Training Program, the International Research and Exchanges Board administers access sites in Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Tajikistan, Turkmenistan, Ukraine and Uzbekistan. See <http://www.iatp.kg/en/about/iatp/>.
- ⁷⁵ See more on the Virtual Silk Highway at <http://www.nato.int/docu/update/2003/01-january/e0117b.htm>.
- ⁷⁶ Open Society Institute 2003, p.39.
- ⁷⁷ For instance, see <http://www.centrasia.org> and <http://www.fergana.ru>.
- ⁷⁸ Shukurov and Tabyshalieva 1997, p. 15.
- ⁷⁹ UNDP 2001b, pp. 80-81.
- ⁸⁰ According to the project's Website, "(T)he purpose of the Silk Road Project is to illuminate the Silk Road's historical contribution to the diffusion of art and culture, identify current voices that best represent this cultural legacy and support new collaborations among artists." See <http://www.silkroadproject.org/about/>.
- ⁸¹ See more on the UNESCO Steppe Route in Central Asia (18 April-17 June 1991) at http://www.unesco.org/culture/silkroads/html_eng/expedition.shtml and at http://portal.unesco.org/culture/en/ev.php-URL_ID=11406&URL_DO=DO_TOPIC&URL_SECTION=201.html.
- ⁸² See more at http://www.unesco.org/culture/asia/html_eng/volumes.htm.
- ⁸³ For a detailed example of how the MDGs could be used for regional benchmarking, see the Chapter 6 section on gender, especially Box 6.7.
- ⁸⁴ We focus in this section on the evidence of the deteriorating position of women in Central Asian societies. There are, however, also important risk factors that apply especially to men, and particularly to young men, including a higher mortality rate, and exposure to violence, crime and drugs, to mention but a few.
- ⁸⁵ Four women elected initially to a new parliament have been excluded by a court decision after the revolution because of vote recounts and falsifications.
- ⁸⁶ Tabyshalieva 2000, p. 56.
- ⁸⁷ UNICEF 2004.
- ⁸⁸ World Bank 2001.
- ⁸⁹ IRIN 2003. For a detailed analysis of human trafficking in Central Asia, see IOM 2005.
- ⁹⁰ UNDP 2003d, p. 21.
- ⁹¹ Washington Profile, <http://www.washprofile.org/arch0604/07.02%20-%20USSR%20slavetrade.html>.
- ⁹² US Department of State 2003.
- ⁹³ See more at http://www.genderstudies.info/english/index_eng.php.
- ⁹⁴ According to official figures, 110 cases against people alleged to be involved in trafficking were

initiated in the first three months of 2004. Only eight cases were opened in all of 2003. An IOM official said, however, that few traffickers have been punished because those involved in the trade have enough money to bribe investigators. He also attributed the low success rate to a lack of legislation criminalizing human trafficking. See <http://www.stopvaw.org/3Jun2004.html>.

⁹⁵ IRIN 2003.

⁹⁶ Supported by IOM, 50 representatives from Central Asian countries and from Ukraine and Russia attended a regional conference on fighting human trafficking in Bishkek in 2003. They proposed to set up a regional intergovernmental council, sign a regional memorandum, establish a database with the purpose of exchanging information, and conduct joint educational and training programmes at the regional level aimed at training skilled personnel in the fight against human trafficking. It is not clear how much follow up has taken place. See Varorud 2003.

⁹⁷ Sadovskaya 2004.

Chapter 7

¹ In fact, the presidential regimes of Central Asia today are both more personalistic and centralized in decision-making procedures than either the post-Stalinist Soviet regime or communist Vietnam and China today.

² See Linn 2004.

³ Suny 1993, Tishkov 1997.

⁴ Allworth 1993.

⁵ Huskey 1995.

⁶ Olcott 1996.

⁷ Massell 1974.

⁸ Roy 2000.

⁹ Ibid.

¹⁰ Roy 2000, Collins 2002.

¹¹ See UN 2001a.

¹² Olcott 1996.

¹³ Tishkov 1997.

¹⁴ UNDP 2004b, UNDP 2003e.

¹⁵ BBC 2004.

¹⁶ See Olcott 1996, Hunter 1996, Aslund et al. 1999.

¹⁷ In 1999, Uzbekistan joined GUUAM, a loose grouping of CIS countries involving Georgia, Ukraine, Uzbekistan, Azerbaijan and Moldova, and supported by the United States. According to the group's official website in 2000, it "was formally founded as a political, economic and strategic alliance designed to strengthen the independence and sovereignty of these former Soviet Union republics" (<http://www.guuam.org/general/browse.html>). In 2002, however, Uzbekistan suspended its participation in GUUAM ostensibly on the grounds that it had not been functional.

¹⁸ International Crisis Group 2002b.

¹⁹ Rashid 2002.

²⁰ International Crisis Group June 2003a.

²¹ Based on interviews with local officials and journalists, Osh, January 2002, and Jalal-Abad, August 2004.

²² Olcott 1996, "UNDP Country Background Study, Kazakhstan."

²³ Collins and Wohlforth 2003, Gleason 2003. At the July 2005 summit, SCO leaders were reported to have emphasized the need for a coordinated approach to security in Central Asia. (See Oxford Analytica 2005b.)

²⁴ Suny 1993.

²⁵ Roy 2000, p. 181.

²⁶ In the 2004 World Bank Public Opinion Survey of 6,000 individuals in Central Asia, 78 per cent of the respondents said that current relations among ethnic groups were very or somewhat good. Only 5 per cent felt that relations among people of different ethnic backgrounds would worsen over the next decade.

²⁷ Another aspect that has probably helped reduce ethnic differences from spilling into open political conflict has been the fact that throughout the region, explicitly nationalist parties are not allowed to register, thus preventing extremist groups from gaining a foothold in parliaments. At the same time, such an approach risks driving ethnic extremism underground.

²⁸ See Chapter 4 in this report.

²⁹ IRIN 2005b, Radio Free Europe/Radio Liberty 2005b.

³⁰ Holmes 1994.

³¹ See the Nations in Transit annual reports at www.freedomhouse.org.

³² "UNDP Country Background Studies:" Kazakhstan, Kyrgyzstan, Tajikistan and Turkmenistan.

³³ Olcott 1996.

³⁴ In his annual speech to the Kazakhstani Parliament on 18 March 2005, President Nazarbayev expressed his support for the regional organizations in Central Asia, and stated: "Our further regional integration will lead to stability, regional progress, and economic, military and political independence. I therefore propose to create a Union of Central Asian States. We share economic interests, cultural heritage, language, religion, and environmental challenges, and face common external threats. We should direct our efforts towards a closer economic integration, a common market and a single currency." Kazakhstan's Echo 2005.

³⁵ Ibid.

³⁶ Olcott 1996, Hunter 1996, Gleason 2001, "UNDP Country Background Study, Turkmenistan."

³⁷ Collins 2004.

³⁸ Roy 2000.

³⁹ Collins 2002 and 2004.

- ⁴⁰ This theory has been articulated most prominently by economist Joel Hellman, and reflected in the publications of the EBRD and the World Bank. See Hellman 1998, Hellman, Jones, Kaufmann and Schankerman 2000.
- ⁴¹ Ibid.
- ⁴² Ibid, Hellman, Jones and Kaufman 2000.
- ⁴³ 'Insider privatization' in Russia in the early 1990s is a classic example of this problem. The new winners of this process proceeded to hem in President Boris Yeltsin. They also limited market reforms and corrupted and de-legitimized the democratization process (McFaul 1995, Hoffman 2004).
- ⁴⁴ Hellman 1998; Hellman, Jones, Kaufmann and Schankerman 2000.
- ⁴⁵ See Chapter 2 in this report. The Wall Street Journal/Heritage Index of Economic Freedom rates Turkmenistan and Uzbekistan among the 10 worst countries in the world in terms of economic freedom. See The Wall Street Journal and Heritage Foundation Index of Economic Freedom, 2003 and 2004, at www.cfh.heritage.org/index/indexoffreedom.cfm.
- ⁴⁶ See, for example, International Crisis Group 2005b.
- ⁴⁷ Kusainov 2003; Junisbai and Junisbai, 2005.
- ⁴⁸ EBRD 2003b.
- ⁴⁹ Economist Intelligence Unit and World Bank estimates.
- ⁵⁰ Shirin Akiner has described the Tajik state as embodying the "semi-institutionalization of power struggles among different individuals and/or interest groups." Akiner, Tajikistan, p. 88, cited in De Martino 2003, p. 158.
- ⁵¹ International Crisis Group 2003a and 2004b.
- ⁵² Hoff and Stiglitz 2002. See also Chapter 3 in this report.
- ⁵³ Pashkun 2003b.
- ⁵⁴ UNDP Central Asia Human Development Report team interviews of members of the Ministry of Trade and Economics of Kyrgyzstan and Tajikistan, August and September 2004.
- ⁵⁵ Another factor explaining the lack of progress with currency and trade liberalization, aside from the opposition of vested interests, was the widespread belief in Uzbekistan's leadership that import-substitution policies to protect domestic producers from foreign competition were a superior economic strategy to the liberal trade regime advocated by international financial institutions.
- ⁵⁶ Said 2000.
- ⁵⁷ According to one report, "influential clan-based groups in power consider the new entrepreneurs competitors and a threat to their interests." See Institute for War and Peace Reporting 2004a.
- ⁵⁸ Aitkhozhin and Buluktaev 2004, pp. 17-18.
- ⁵⁹ On the Democratic Choice of Kazakhstan as the first major post-Soviet opposition, see Junisbai and Junisbai, 2005.
- ⁶⁰ According to an 11 July 2005 OSCE press release, "The 10 July Kyrgyz presidential election marked tangible progress towards meeting OSCE and other international commitments for democratic elections, although the vote count proved to be problematic. Fundamental civil and political rights were generally respected and there was an improved media environment, concluded the International Election Observation Mission in its preliminary findings and conclusions, published today." See www.osce.org/odihr/item_1_15624.html.
- ⁶¹ Media News: Appeal to the President of Kyrgyzstan, Government of Kyrgyzstan, People of Kyrgyzstan and International Community. See www.internews.kg/modules.php?op=modload&name=News&file=article&sid=1608&mode=thread&order=0&thold=0. See also Saidazimova 2005c.
- ⁶² Pashkun 2003a.
- ⁶³ See Saidazimova 2005a and 2005b, Alibekov 2005.
- ⁶⁴ World Bank Public Opinion Survey.
- ⁶⁵ Asian Development Bank, n.d., p. 65.
- ⁶⁶ Ibid, p. 65-66.
- ⁶⁷ See also Chapter 3 in this report.
- ⁶⁸ Ibid. See also World Bank governance indicators, at www.info.worldbank.org/governance.
- ⁶⁹ See Van De Walle 1997, Joseph 1997, Karl 1999, Collins 2004.
- ⁷⁰ Rotberg 2003, Rotberg 2004.
- ⁷¹ See Roy 2000, Collins 2002.
- ⁷² Khamidov (A.) 2002.
- ⁷³ International Crisis Group June 2003a.
- ⁷⁴ See, for example, International Crisis Group 2005b.
- ⁷⁵ See Table 7.4. No comparative data over time are available for Tajikistan and Turkmenistan.

Chapter 8

- ¹ This chapter focuses principally on official relationships—among governments, or among governments and international or regional organizations. Private investment and trade flows are analysed in Chapter 3.
- ² The relatively high and even rising aid levels for Kazakhstan in absolute and even per capita terms are surprising, in view of the country's rapidly rising energy-based wealth.
- ³ Hill 2004.
- ⁴ Tolipov 2004.
- ⁵ Gleason 2004a.
- ⁶ Russia has supplied humanitarian assistance, particularly to Tajikistan. Russia provided 56 tons of humanitarian assistance after landslides and floods displaced over 1,000 Tajiks in late 2004. This included tents, portable generators, medicine, baby food and other foodstuffs that were handed over to the Tajik Ministry for Civil Defense and Emergencies. Reported in Central Asia-Caucasus Analyst 2004.

- ⁷ Otorbaev 2004.
- ⁸ Ibid.
- ⁹ Arman 2004.
- ¹⁰ Johannes Linn interview with Zulfira Akhmedova and Dilshod Akhundjanov at the EBRD office in Uzbekistan, 8 July 2004, and communiqué from Rika Ishii, Office of the Chief Economist of the EBRD in London, 7 December 2004.
- ¹¹ Blagov 2004.
- ¹² Blagov 2005a.
- ¹³ Gleason 2004b.
- ¹⁴ Dorian 2004.
- ¹⁵ Gleason 2004b.
- ¹⁶ Ibid.
- ¹⁷ Ibid.
- ¹⁸ Economist Intelligence Unit 2005.
- ¹⁹ As Fiona Hill has noted: "Russia's biggest contribution to the security of its southern flank in the last decade has not been through its military presence on bases, its troop deployments, or security pacts and arms sales, but through absorbing the surplus (especially male) labour of the Caucasus and Central Asian states, providing markets for their goods, and transferring funds in the form of remittances rather than as foreign aid" (2004).
- ²⁰ Ibid.
- ²¹ On 18 October 2004, Russia signed an agreement with Tajikistan that will allow several hundred thousand Tajik migrants to become legally registered workers with health insurance. British Broadcasting Corporation release of 18 October 2004.
- ²² Hill 2004.
- ²³ Oxford Analytica Report, 18 October 2004.
- ²⁴ Peimani 2004b.
- ²⁵ Daly 2005.
- ²⁶ Russia has handed over opposition leaders who have sought asylum in Russia to the Kyrgyz and Tajik governments, for example. See Blagov 2003. Russia also complied with a request from the Government of Tajikistan to hand over the leader of the opposition Democratic Party of Tajikistan, Mahmudruzi Iskandarov, who was travelling in Moscow in December 2004. See Mahmudov 2004. Russia responded to the violent events in Andijan, Uzbekistan, in May 2005 by blaming them on Islamic fundamentalist terrorists and supporting the Uzbek Government's response. See McDermott 2005.
- ²⁷ Wu and Chen 2004, p. 1,064.
- ²⁸ Oresman 2003, pp. 78-79.
- ²⁹ China is also a strong supporter of the CAREC initiative.
- ³⁰ Adapted from Blaxall 2003, p. 165.
- ³¹ Oresman 2004.
- ³² Ibid.
- ³³ In addition to the trade and energy links mentioned here, there is also the potentially difficult water-resource-sharing issue between China and Kazakhstan mentioned in Chapter 4.
- ³⁴ Wu and Chen 2004, p. 1,074.
- ³⁵ Ibid.
- ³⁶ Ibid.
- ³⁷ The Economist 2004b, pp. 46-47.
- ³⁸ Bransten 2004.
- ³⁹ There has been some friction in the pipeline construction since both sides demand that their workers be employed in the project. Furthermore, Chinese workers are paid up to three times more than Kazakhstani workers. Kuanov 2004.
- ⁴⁰ Lelyveld 2004.
- ⁴¹ Kazakhstan News Bulletin 2004.
- ⁴² Bransten 2004.
- ⁴³ Wu and Chen 2004, p. 1,074.
- ⁴⁴ Oresman 2004.
- ⁴⁵ Uzbekistan Portal of the State Authority, n.d.
- ⁴⁶ Oresman 2004.
- ⁴⁷ Otorbaev 2004.
- ⁴⁸ Oxford Analytica Report, 23 September 2004.
- ⁴⁹ Reported in Asian Development Bank 2005.
- ⁵⁰ Bransten 2004.
- ⁵¹ Uyghur Information Agency 2004.
- ⁵² Oresman 2004.
- ⁵³ Blagov 2005b.
- ⁵⁴ See <http://usinfo.state.gov/usinfo/Archive/2005/Jul/26-239598.html>.
- ⁵⁵ The Times of Central Asia 2004a.
- ⁵⁶ Interview with officials from the Embassy of the Republic of Uzbekistan in the United States, 2003, and conversations with private businesspeople from Uzbekistan.
- ⁵⁷ The July 2005 SCO summit agreed to set up the SCO-Afghanistan Contact Group to support anti-drug efforts, stabilize the socioeconomic situation and become involved in reconstruction programmes in Afghanistan. See Socor 2005.
- ⁵⁸ Smith 2004.
- ⁵⁹ Afrasiabi 2004; Khan 2004, p. 45.
- ⁶⁰ Oliker et al. 2004, p. 262.
- ⁶¹ "UNDP Country Background Study, Turkmenistan."
- ⁶² Khachaturian 2004.
- ⁶³ IRNA 2004.
- ⁶⁴ Ibid.
- ⁶⁵ UzReport.com 2005.
- ⁶⁶ Radio Free Europe/Radio Liberty 2005a, Voice of America 2005.
- ⁶⁷ Peimani 2004a.

- ⁶⁸ Khan 2004, pp. 50-51.
- ⁶⁹ Kyrgyz National News Agency 2004.
- ⁷⁰ Khwaja 2004, p. 9.
- ⁷¹ Khan 2004, p. 57.
- ⁷² Alibekov 2003.
- ⁷³ Jawahar 2002.
- ⁷⁴ Davis and Sweeney 2004, p.72.
- ⁷⁵ Starr 2004, p. 17.
- ⁷⁶ Khwaja 2004.
- ⁷⁷ One manifestation of this potential for tension was when SCO leaders at the end of their July 2005 summit called for the United States to set a timetable of withdrawal from the bases in Central Asia. This was followed by Uzbekistan requesting the withdrawal of the United States from its air base in Uzbekistan. The Uzbek response was most likely linked to US criticism of the Uzbek human rights record.
- ⁷⁸ Davis and Sweeney 2004, pp. 47-48.
- ⁷⁹ Official GTZ website (www.gtz.de).
- ⁸⁰ Johannes Linn interview with Dr. Wolfgang Armbruster, 21 February 2005.
- ⁸¹ See the SECO website, www.swisscoop.kg/index.php?navID=3244&ID=1&userhash=33058255&officelID=40.
- ⁸² See the SECO website, www.swisscoop.kg/index.php?navID=3561&ID=1&userhash=33058255&officelID=40.
- ⁸³ SWISSINFO, see www.swissinfo.org/sen/swissinfo.html?siteSect=2156&sid=4574256&cKey=1072447023000.
- ⁸⁴ Ibid.
- ⁸⁵ Interview with Mary Norris, USAID official responsible for the Economic Growth Programmes, Almaty, Kazakhstan, 4 January 2005.
- ⁸⁶ DFID 2004.
- ⁸⁷ USAID 2004.
- ⁸⁸ DFID 2004.
- ⁸⁹ See endnote 86.
- ⁹⁰ Rizayev 2005, p. 1.
- ⁹¹ US Department of State 2004.
- ⁹² The Economist 2004a.
- ⁹³ Europe Aid Cooperation Office official website, <http://europa.eu.int>.
- ⁹⁴ DFID 2004, pp. 2 and 16.
- ⁹⁵ US Department of State 2004.
- ⁹⁶ Ibid.
- ⁹⁷ See also the Europe Aid Cooperation Office official website, http://europa.eu.int/comm/external_relations/ceeca/tacis/.
- ⁹⁸ Johannes Linn interview with Hugues Mingarelli, Director for Eastern Europe, Caucasus and Central Asia; and Constantinos Vardakis, Mark Raymaekers and Pierre Borgoltz of REFLEX, the part of the European Commission that determines development assistance strategy and priorities, 23-24 February 2005.
- ⁹⁹ Europe Aid Cooperation Office official website, <http://europa.eu.int>.
- ¹⁰⁰ Government of Germany 2001, p. 5.
- ¹⁰¹ Johannes Linn interview with Dr. Armbruster, 21 February 2005.
- ¹⁰² Ibid.
- ¹⁰³ Reuters News 2004.
- ¹⁰⁴ Asian Development Bank 2004a.
- ¹⁰⁵ This includes in particular the Asian Development Bank's companion study to this report (see Chapter 3 in this report), which deals with regional trade, transport and transit in Central Asia.
- ¹⁰⁶ Asian Development Bank 2004c, Appendix A, p. 57.
- ¹⁰⁷ Asian Development Bank 2003a, pp. ii-iii.
- ¹⁰⁸ World Bank 2004b, Annex 3.
- ¹⁰⁹ World Bank 2004d. Much of the International Finance Corporation and EBRD support for micro-finance reform is funded by bilateral donor agencies, including DFID and USAID.
- ¹¹⁰ Communiqué from Martin Holtmann of the World Bank to Johannes Linn on 21 December 2004.
- ¹¹¹ Asian Development Bank 2004c, Appendix 1, p. 58.
- ¹¹² Ibid.
- ¹¹³ Asian Development Bank 2004c, Appendix 1, p. 59.
- ¹¹⁴ Ibid., p. 59.
- ¹¹⁵ World Bank 2004d.
- ¹¹⁶ Asian Development Bank 2004c, p. i.
- ¹¹⁷ Currently, the membership of Russia is under consideration.
- ¹¹⁸ See, for example, UN Coordination Unit in Tajikistan, n.d.
- ¹¹⁹ Birdsall and Rojas-Suarez 2004 conclude that donors generally do not provide enough financial support for the provision of regional public goods worldwide.
- ¹²⁰ Such a donor database for South-East Europe has been jointly organized by the European Union and the World Bank; see www.seerecon.org.
- ¹²¹ Turkmenistan has so far refused to take up an invitation to participate in CAREC.

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Annex 1

Country Data

KAZAKHSTAN	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
People												
Birth rate, crude (per 1,000 people)	19.90	18.60	18.20	16.70	15.90	14.70	14.30	14.20	14.70	14.90	14.60	15.30
Life expectancy at birth, total (years)*	69.6	69.7	67.5	67.5	-	67.6	67.9	64.4	64.6	65.8	66.2	63.2
Literacy rate, adult total (% of people ages 15+)*	97.5	97.5	97.5	99.0	-	99.0	99.0	99.0	98.0	99.4	99.4	99.5
Population, total (millions)*	16.9	17.0	17	16.8	-	16.4	16.3	16.3	16.2	15.5	15.5	14.9
Urban population (% of total)*	58	59	59	60	-	60.4	60.8	56.4	55.8	55.9	55.8	55.9
Environment												
CO ₂ emissions (kilograms per US\$2,000 of GDP)	11.38	10.62	11.17	10.23	8.52	7.74	7.54	6.76	6.63	-	-	-
Electricity production (billions of kilowatt hours)	82.70	77.44	66.40	66.66	59.04	52.00	49.15	47.50	51.64	55.35	58.33	-
Energy imports, net (% of commercial energy use)	-11.73	-19.69	-21.60	-21.60	-39.78	-64.98	-63.75	-81.91	-99.42	-97.21	-106.18	-
Economic												
GDP growth (annual %)	-5.30	-9.20	-12.60	-8.20	0.50	1.70	-1.90	2.70	9.80	13.50	9.80	9.20
GNI per capita, Atlas method (current US\$)	1,470	1,420	1,300	1,260	1,310	1,360	1,350	1,260	1,250	1,350	1,520	1,780
GDP per capita, PPP (current international \$)	4,120	3,840	3,460	3,290	3,400	3,550	3,570	3,780	4,310	5,060	5,650	6,280
GDP (current US\$ billions)	24.9	23.4	21.3	20.4	21.0	22.2	22.1	16.9	18.3	22.2	24.6	29.7
Agriculture, value added (% of GDP)	26.71	17.51	15.45	12.89	12.79	11.96	9.11	10.48	8.69	9.37	8.62	7.84
Exports of goods and services (% of GDP)	74.00	37.90	37.06	38.97	35.27	34.92	30.34	42.46	56.97	46.19	47.18	50.39
Imports of goods and services (% of GDP)	75.33	46.74	47.12	43.55	36.00	37.44	34.86	40.12	48.39	47.11	46.29	44.15
Industry, value added (% of GDP)	44.59	39.96	41.20	32.00	27.38	27.31	31.18	34.93	40.46	38.82	38.59	38.29
Total debt service (% of exports of goods and services)	-	-	-	3.90	4.59	6.18	14.43	19.37	31.72	31.81	34.37	34.52
Total debt service (% of GNI)	0.00	0.04	0.32	1.16	1.55	2.21	4.54	8.33	19.65	15.96	17.41	18.90
Trade (% of GDP)	149.34	84.63	84.18	82.52	71.27	72.36	65.20	82.58	105.36	93.29	93.47	94.54
Aid (% of GNI)	0.05	0.08	0.25	0.32	0.60	0.64	1.02	1.07	1.10	0.71	0.80	0.96
Aid per capita (current US\$)	0.70	1.11	3.27	4.08	7.84	8.92	14.34	11.43	12.56	9.94	12.66	18.04
FDI, net inflows (% of GDP)	0.40	5.43	3.10	4.73	5.41	5.96	5.20	9.41	7.01	12.80	10.49	7.02
FDI, net inflows (balance of payments, current US\$ millions)	-	-	-	964	1,140	1,320	1,140	1,580	1,280	2,860	2,160	2,210

Sources: World Bank 2005e, and *UNDP 1995, 1996, 1997, 1998, 1999a, 2000, 2001a, 2002, 2003b, 2004c and 2005.

KYRGYZSTAN	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
People												
Birth rate, crude (per 1,000 people)	28.60	26.10	24.60	26.00	23.60	22.00	21.90	21.50	19.80	19.80	19.20	19.09
Life expectancy at birth, total (years)*	69.0	69.2	67.8	67.9	-	67.6	68.0	67.4	67.8	68.1	68.4	66.8
Literacy rate, adult total (% of people ages 15+)*	97.0	97.0	97.0	97.0	-	97.0	97.0	97.0	97.0	97.0	97.0	98.7
Population, total (millions)*	4.5	4.6	5	4.5	-	4.6	4.6	4.8	4.9	5.0	5.1	5.1
Urban population (% of total)*	39	39	39	39	-	39.2	39.5	33.6	34.4	34.4	34.0	34.0
Environment												
CO ₂ emissions (kilograms per US\$2,000 of GDP)	6.77	6.05	5.52	4.44	5.19	4.58	4.77	3.60	3.39	-	-	-
Electricity production (billions of kilowatt hours)	11.89	11.27	12.93	12.35	13.76	12.64	11.62	13.16	14.92	13.67	11.92	-
Energy imports, net (% of commercial energy use)	64.11	59.55	47.90	48.76	53.49	52.33	60.52	47.01	40.98	39.46	52.52	-
Economic												
GDP growth (annual %)	-13.89	-15.46	-20.09	-5.42	7.08	9.92	2.12	3.66	5.44	5.33	-0.02	6.67
GNI per capita, Atlas method (current US\$)	510	450	370	350	380	390	350	300	280	280	290	340
GDP per capita, PPP (current international \$)	1,630	1,410	1,150	1,100	1,180	1,300	1,320	1,370	1,460	1,570	1,570	1,690
GDP (current US\$ billions)	2.32	2.03	1.68	1.66	1.83	1.77	1.65	1.25	1.37	1.53	1.61	1.91
Agriculture, value added (% of GDP)	39.05	41.01	40.88	43.90	49.75	44.61	39.53	10.48	36.80	37.29	37.68	38.70
Exports of goods and services (% of GDP)	35.59	33.53	33.76	29.47	30.74	38.29	36.48	42.20	41.85	36.72	39.58	38.03
Imports of goods and services (% of GDP)	47.59	41.18	40.07	42.36	56.56	46.19	58.03	57.00	47.58	37.02	43.34	42.24
Industry, value added (% of GDP)	37.79	32.00	25.45	19.54	18.29	22.81	22.76	26.72	29.20	28.93	23.34	22.94
Total debt service (% of exports of goods and services)	-	0.40	4.39	13.22	13.03	11.35	18.74	20.42	27.38	29.80	24.53	15.98
Total debt service (% of GNI)	0.00	0.07	0.99	3.68	4.15	4.57	7.33	9.38	13.47	12.13	11.19	7.36
Trade (% of GDP)	83.18	74.71	73.83	71.83	87.30	84.48	94.51	99.20	89.43	73.75	82.92	80.27
Aid (% of GNI)	1.03	5.54	10.48	17.52	12.90	14.07	15.29	24.11	16.71	12.98	12.00	10.70
Aid per capita (current US\$)	5.24	24.65	38.31	62.04	49.53	50.71	49.93	58.23	43.70	38.22	37.16	39.12
FDI, net inflows (% of GDP)	0.00	0.49	2.27	5.79	2.58	4.74	6.64	3.56	-0.17	0.33	0.29	2.39
FDI, net inflows (balance of payments, current US\$) millions)	-	-	-	-	-	-	86.61	44.40	-	-	4.67	45.54

Sources: World Bank 2005e, and *UNDP 1995, 1996, 1997, 1998, 1999a, 2000, 2001a, 2002, 2003b, 2004c and 2005.

TAJIKISTAN	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
People												
Birth rate, crude (per 1,000 people)	32.20	33.10	28.20	28.60	22.00	25.00	18.40	17.70	-	-	22.60	22.49
Life expectancy at birth, total (years)*	70.2	70.4	66.8	66.9	-	67.2	67.5	67.4	67.6	68.3	68.6	63.6
Literacy rate, adult total (% of people ages 15+)*	96.7	96.7	96.7	99.0	-	98.9	99.0	99.1	99.2	99.3	99.5	99.5
Population, total (millions)*	5.6	5.8	6	5.8	-	5.9	6.0	6.0	6.1	6.1	6.2	6.4
Urban population (% of total)*	32	32	32	32	-	32.4	32.5	27.5	27.6	27.6	25.0	24.8
Environment												
CO ₂ emissions (kilograms per US\$2,000 of GDP)	11.99	9.45	4.50	5.22	7.01	6.07	5.78	5.56	4.01	-	-	-
Electricity production (billions of kilowatt hours)	16.82	17.74	16.98	14.77	15.00	14.01	14.42	15.80	14.20	14.40	15.24	-
Energy imports, net (% of commercial energy use)	82.91	74.46	53.56	59.65	61.86	59.94	61.05	58.69	56.79	59.83	59.04	-
Economic												
GDP growth (annual %)	-29.00	-16.40	-21.30	-12.40	-16.70	1.70	5.30	3.70	8.30	10.20	9.10	10.20
GNI per capita, Atlas method (current US\$)	340	290	230	200	170	160	170	170	180	170	180	210
GDP per capita, PPP (current international \$)	1,260	1,060	840	740	620	630	660	690	760	850	930	1,040
GDP (current US\$ billions)	1.91	1.65	1.35	1.23	1.05	0.92	1.32	1.09	0.99	1.09	1.23	1.55
Agriculture, industry and trade												
Agriculture, value added (% of GDP)	27.09	23.29	23.96	38.43	38.97	35.40	27.15	10.48	29.44	29.36	29.44	23.40
Exports of goods and services (% of GDP)	-	-	-	-	73.54	84.08	48.92	64.23	81.13	63.37	64.39	60.03
Imports of goods and services (% of GDP)	-	-	-	-	76.95	90.74	57.92	65.71	85.37	75.80	77.78	79.30
Industry, value added (% of GDP)	45.30	46.35	40.76	39.01	27.81	24.33	21.75	23.38	26.05	25.15	24.71	20.25
Total debt service (% of exports of goods and services)	0.00	0.18	0.07	0.00	0.14	6.17	14.23	11.33	7.82	11.51	11.28	9.13
Total debt service (% of GNI)	0.00	0.05	0.03	0.00	0.11	5.43	7.27	7.67	6.74	8.00	8.12	6.05
Trade (% of GDP)	-	-	-	-	150.49	174.82	106.84	129.94	166.50	139.16	142.16	139.34
Aid and development												
Aid (% of GNI)	0.62	1.58	5.02	5.48	10.50	9.77	12.71	11.88	13.35	16.79	14.31	9.85
Aid per capita (current US\$)	2.13	4.61	11.61	11.21	17.44	14.28	26.21	19.89	20.14	27.27	26.88	22.85
FDI and balance of payments												
FDI, net inflows (% of GDP)	0.47	0.55	0.89	0.81	1.71	1.96	1.89	1.93	2.42	0.87	2.92	2.04
FDI, net inflows (balance of payments, current US\$) millions	9	9	12	20	25	30	24	21	24	9	36	20

Sources: World Bank 2005e, and *UNDP 1995, 1996, 1997, 1998, 1999a, 2000, 2001a, 2002, 2003b, 2004c and 2005.

TURKMENISTAN	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
People												
Birth rate, crude (per 1,000 people)	34.00	33.10	32.00	28.10	24.00	21.60	20.80	-	-	-	22.30	22.33
Life expectancy at birth, total (years)*	65.0	65.1	64.7	64.9	-	65.4	65.7	65.9	66.2	66.6	66.9	62.4
Literacy rate, adult total (% of people ages 15+)*	97.7	97.7	97.7	98.0	-	98.0	98.0	98.0	98.0	98.0	98.8	98.8
Population, total (millions)*	3.8	3.9	4	4.1	-	4.2	4.3	4.6	4.7	4.7	4.8	4.7
Urban population (% of total)*	45	45	45	45	-	45.0	45.2	44.7	44.8	45.0	45.1	45.4
Environment												
CO ₂ emissions (kilograms per US\$2,000 of GDP)	8.31	9.10	13.31	14.84	14.41	15.50	13.94	14.17	12.13	-	-	-
Electricity production (billions of kilowatt hours)	13.18	12.64	10.50	9.80	10.10	9.50	9.42	8.86	9.85	10.83	11.20	-
Energy imports, net (% of commercial energy use)	-331.52	-436.17	-143.02	-136.45	-169.69	-62.02	-50.29	-84.49	-217.61	-231.75	-223.05	-
Economic												
GDP growth (annual %)	-5.30	-10.00	-17.30	-7.20	-6.70	-11.30	7.00	16.50	18.60	20.40	19.80	16.90
GNI per capita, Atlas method (current US\$)	820	750	650	590	560	520	550	610	620	710	860	1,120
GDP per capita, PPP (current international \$)	4,210	3,760	3,090	2,860	2,650	2,340	2,490	2,890	3,440	4,170	5,000	5,860
GDP (current US\$ billions)	3.20	2.98	2.56	2.48	2.38	2.45	2.61	2.45	2.85	3.44	4.61	6.20
Agriculture, industry and trade												
Agriculture, value added (% of GDP)	10.61	11.51	34.01	17.18	13.33	21.58	25.98	10.48	24.82	25.22	-	-
Exports of goods and services (% of GDP)	-	57.31	47.41	35.49	74.58	39.01	29.73	35.67	53.72	41.11	-	-
Imports of goods and services (% of GDP)	-	41.53	47.60	35.58	75.41	62.63	64.47	53.05	47.38	41.57	-	-
Industry, value added (% of GDP)	11.89	67.44	46.66	62.62	68.82	48.02	44.13	39.41	45.44	44.36	-	-
Total debt service (% of exports of goods and services)	-	0.38	4.37	4.68	10.13	21.89	31.79	-	-	-	-	-
Total debt service (% of GNI)	-	0.35	3.75	4.17	8.04	10.39	11.78	-	-	-	-	-
Trade (% of GDP)	-	98.84	95.01	71.07	149.99	101.64	94.20	88.72	101.09	82.68	-	-
Aid and development finance												
Aid (% of GNI)	0.27	1.01	0.97	1.12	0.99	0.49	0.91	0.98	1.18	2.15	0.90	0.44
Aid per capita (current US\$)	2.22	7.63	6.25	6.64	5.53	2.80	5.36	5.23	6.79	15.22	8.46	5.59
FDI and balance of payments												
FDI (% of GDP)	0.00	2.65	4.02	9.39	4.54	4.40	2.38	3.63	4.59	4.36	2.17	1.61
FDI (balance of payments, current US\$) millions)	11	79	103	233	108	108	62	125	131	170	276	226

Sources: World Bank 2005e, and *UNDP 1995, 1996, 1997, 1998, 1999a, 2000, 2001a, 2002, 2003b, 2004c and 2005.

UZBEKISTAN	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
People												
Birth rate, crude (per 1,000 people)	33.10	31.50	29.40	29.80	27.30	25.50	23.40	23.10	-	-	20.40	20.19
Life expectancy at birth, total (years)*	69.2	69.4	67.5	67.5	-	67.5	67.8	68.7	69.0	69.3	69.5	66.5
Literacy rate, adult total (% of people ages 15+)*	97.2	97.2	97.2	99.0	-	99.0	88.0	88.5	99.2	99.2	99.3	99.3
Population, total (millions)*	21.4	21.9	22	22.8	-	23.2	23.6	24.5	24.9	25.3	25.7	25.8
Urban population (% of total)*	41	41	41	41	-	41.6	41.8	37.2	36.7	36.7	36.8	36.7
Environment												
CO ₂ emissions (kilograms per US\$2,000 of GDP)	9.13	9.79	9.74	8.70	8.77	8.34	9.25	8.84	8.62	--	--	--
Electricity production (billions of kilowatt hours)	50.91	49.15	47.80	47.45	45.42	46.05	45.90	45.30	46.84	47.93	49.60	--
Energy imports, net (% of commercial energy use)	10.07	9.27	-1.56	-14.77	-11.72	-15.05	-9.81	-9.07	-9.80	-9.83	-7.82	--
Economic												
GDP growth (annual %)	-11.20	-2.30	-5.20	-0.90	1.70	5.20	4.30	4.30	3.80	4.20	4.20	4.40
GNI per capita, Atlas method (current US\$)	600	590	570	580	600	610	620	650	630	560	460	420
GDP per capita, PPP (current international \$)	1,340	1,300	1,240	1,230	1,250	1,310	1,360	1,420	1,490	1,570	1,640	1,720
GDP (current US\$ billions)	12.95	13.10	12.90	13.35	13.95	14.74	14.99	17.08	13.76	11.40	9.69	9.95
Agriculture, value added (% of GDP)	34.83	30.45	37.43	32.29	26.14	32.18	31.31	10.48	34.36	34.01	34.73	35.18
Exports of goods and services (% of GDP)	33.91	33.72	16.78	27.95	27.69	27.04	22.50	18.15	24.59	28.08	30.81	36.74
Imports of goods and services (% of GDP)	43.18	30.53	20.55	28.05	34.18	30.00	22.80	18.41	21.52	27.65	28.09	29.56
Industry, value added (% of GDP)	35.81	34.47	26.43	27.80	30.48	26.11	26.17	24.31	23.13	22.64	21.62	21.68
Total debt service (% of exports of goods and services)	--	--	--	6.43	7.68	12.71	10.29	17.97	25.92	26.78	25.17	21.34
Total debt service (% of GNI)	0.04	0.23	1.07	1.83	2.16	3.49	2.36	3.33	6.51	7.71	7.96	8.27
Trade (% of GDP)	77.09	64.25	37.33	56.00	61.86	57.04	45.29	36.55	46.11	55.72	58.90	66.29
Aid (% of GNI)	0.48	0.48	0.22	0.63	0.63	0.96	1.06	0.92	1.37	1.37	1.98	1.98
Aid per capita (current US\$)	2.88	2.85	1.26	3.68	3.79	5.90	6.58	6.37	7.54	6.14	7.50	7.60
FDI, net inflows (% of GDP)	0.00	0.37	0.57	-0.18	0.65	1.13	0.93	0.71	0.55	0.73	0.67	0.70
FDI, net inflows (balance of payments, current US\$) millions)	9	48	73	-24	90	167	140	121	73	83	65	70

Sources: World Bank 2005e, and *UNDP 1995, 1996, 1997, 1998, 1999a, 2000, 2001a, 2002, 2003b, 2004c and 2005.

ANNEX 2

Selected regional organizations, initiatives and programmes in Central Asia

Overview of Central Asian Membership

	CACO	CAREC	CIS	ECO	EEC	SCO	SES	SPECA
Kazakhstan	X	X	X	X	X	X	X	X
Kyrgyzstan	X	X	X	X	X	X		X
Tajikistan	X	X	X	X	X	X		X
Turkmenistan			X	X		X		X
Uzbekistan	X	X	X	X		X		X

The Central Asian Cooperation Organization (CACO)

Members: Kazakhstan, Kyrgyzstan, Russia, Tajikistan and Uzbekistan

Observers: Afghanistan, Georgia, Turkey and Ukraine

History: Originally formed in 1994 as the Central Asian Economic Union (CAEU) by Kazakhstan, Kyrgyzstan and Uzbekistan, it was expanded in 1998 to include Tajikistan and it was renamed Central Asia Economic Cooperation (CAEC). The intention behind CAEC was to create an integrated economic space and provide a mechanism for encouraging regional projects. In February 2002, CEAU was renamed CACO. Russia joined in 2004. In June 1994, CEAU established the Interstate Central Asian Bank of Cooperation and Development.

Objectives: CACO's purpose is to increase regional cooperation; fight regional crime; create a unified economic space; harmonize customs and border policies; and expand water and environmental cooperation. It "aims to expand cooperation in politics, economics, transport and energy infrastructure, water and energy resources, agriculture, trade, science, technology, environment, culture, tourism, sports, humanitarian issues, and regional safety and stability."

Source: Asian Development Bank 2004c.

The Central Asia Regional Economic Cooperation Initiative (CAREC)

Members: Azerbaijan, China, Kazakhstan, Kyrgyzstan, Mongolia, Tajikistan and Uzbekistan

History: The Asian Development Bank established CAREC in 1997 to support increased economic cooperation among the Central Asian countries. In 2003, CAREC expanded to include the EBRD, the IMF, the Islamic Development Bank, UNDP and the World Bank. CAREC is the primary mechanism for multilateral donor coordination throughout the region.

Objectives: "The overall objective of the CAREC Program is to promote economic growth and raise living standards by encouraging economic cooperation in the Central Asian region. The Program has focused on financing infrastructure projects and improving the policy environment for promoting cross-border activities in the areas of transport (especially road transport), energy (including the water-energy nexus), trade policy and trade facilitation (especially customs cooperation)."

Priorities: The objective in the transport sector is to rehabilitate transport networks to lessen geographic isolation and reduce transport costs. In the energy sector, the goal is to support efficient and rational use of energy and water through cooperation. A trade policy coordinating committee was established with the support of the IMF and is scheduled to present studies during the second part of 2005. The focus of work on trade facilitation is customs modernization and cooperation.

Link: www.adb.org/CAREC/default.asp

The Commonwealth of Independent States (CIS)

Members: Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, the Republic of Moldova, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan

History: Belarus, Russia and Ukraine established the CIS in 1991. By 1993, all of the former Soviet republics except for the Baltic states had joined. In August 2005 Turkmenistan declared its intention to reduce its participation in the CIS to the status of "Associate Member".

Objectives: The Charter of the Commonwealth, adopted on 22 January 1993, stipulates that the CIS is "based on principles of sovereign equality of all its members" and aims at serving for "the further development and strengthening of the relationships of friendship, good neighbourhood, inter-ethnic harmony, trust, mutual understanding and mutually advantageous cooperation among the Member States."

An official Economic Union Treaty was established in 1993 to manage and encourage economic interaction within the member states. "The Treaty was based on the necessity of formation of the common economic space on the principles of free movement of goods, services, workers, capitals; elaboration of concerted money and credit, tax, price, customs and foreign economic policies; rapprochement of the methods of management of economic activities, creation of favorable conditions for development of direct production links."

Several regional organizations were created out of the CIS framework. These appear to have been more successful in their interventions. They include the Russia-Belarus Union State, the Single Economic Space and the Eurasian Economic Community.

The Collective Security Treaty Organization (CSTO): In 1992, Armenia, Kazakhstan, Kyrgyzstan, Russia, Tajikistan and Uzbekistan signed the CIS Collective Security Treaty. Azerbaijan, Belarus and Georgia signed in 1993. All signatories agreed to refuse the use or threat of force. In 1999, Azerbaijan, Georgia and Uzbekistan chose not to renew their commitment to the treaty and officially withdrew. In 2002, the six remaining members reaffirmed their commitment with a new charter and a new name—the Collective Security Treaty Organization.

Links: www.cis.minsk.by/
<http://www.rferl.org/featuresarticle/2005/08/26dab4c9-5ba1-4193-86e7-62fc991f8a6c.html> on Turkmenistan's decision regarding associate member status

The Economic Cooperation Organization (ECO)

Members: Afghanistan, Azerbaijan, Iran, Kazakhstan, Kyrgyzstan, Pakistan, Tajikistan, Turkey, Turkmenistan and Uzbekistan

History: Iran, Pakistan and Turkey created the ECO in 1985 "for the purpose of promoting economic, technical and cultural cooperation among the Member States." In 1992, it was enlarged with the addition of Afghanistan, Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan.

Objectives: These include sustainable economic development of member states, including progressive removal of trade barriers and promotion of intra-regional trade, a greater role of the ECO region in the growth of world trade, and gradual integration of the economies of the Member States with the world economy. Other objectives cover the development of transport and communications infrastructure linking the member states with each other and with the outside world, economic liberalization and privatization, and mobilization and utilization of ECO states' material resources.

Priorities: Programmes fall under trade and investment; transport and telecommunications; energy, minerals and the environment; industry and agriculture; project research; and economic research and statistics.

Link: www.ecosecretariat.org

The Eurasian Economic Community (EEC or EURASEC)

Members: Belarus, Kazakhstan, Kyrgyzstan, Russia and Tajikistan

Observers: The Republic of Moldova and Ukraine

History: Kazakhstan led the way with Belarus and Russia to establish a customs union in 1994. With the addition of Kyrgyzstan in 1996 and Tajikistan in 1999, it was called the Union of Five. In May 2001, it became the EEC.

Objectives: The primary goals are the establishment of a common market for labour and capital, free intra-community trade and trade policy harmonization. The 2004 summit in Almaty declared that an important component is the coordination of WTO accession by the member states. One current EEC activity is to develop an agreement among Iran, Kazakhstan, Russia and Tajikistan to rehabilitate hydroelectric power plants in Tajikistan.

Link: www.eurasec.org/about.ru.html

The Shanghai Cooperation Organization (SCO)

Members: China, Kazakhstan, Kyrgyzstan, Russia, Tajikistan and Uzbekistan

Observers: India, Iran, Mongolia, Pakistan

History: The SCO emerged from the 'Shanghai Five' group created in 1996 by China, Kazakhstan, Kyrgyzstan, Russia and Tajikistan. The SCO was established in June 2001 in Shanghai, China, with the addition of Uzbekistan. Iran and Pakistan both applied for membership in 2005.

Objectives: The SCO's goals are: "to strengthen mutual trust, friendship and good-neighbourliness between the member States; to encourage effective cooperation between them in the political, trade and economic, scientific and technical, cultural, educational, energy, transport, environmental and other spheres; and to undertake joint efforts for the maintenance of peace, security and stability in the region, and the building of a new, democratic, just and rational international political and economic order."

The primary areas of focus for the SCO have been in security and economic cooperation, with security being the primary focus. SCO security cooperation "focuses on the fight against terrorism, separatism and extremism." The SCO's secretariat is based in Beijing while the Regional Anti-Terrorism Structure is based in Tashkent.

Links: www.fmprc.gov.cn/eng/topics/sco/t57970.htm;
<http://missions.itu.int/~kazaks/eng/sco/sco02.htm>

The Single Economic Space (SES)

Members: Belarus, Kazakhstan, Russia and Ukraine

History: Signed in an agreement in Yalta in September 2003, the SES is also called the Common Economic Space or the United Economic Space. Implementation of the agreement remains to be completed, especially in view of Ukraine's uncertain commitment to the SES.

Objectives: The goal is to create a single economic space, preceded initially by a free trade zone and then a customs union, in conformity with WTO rules. Russia also has promoted the idea of a single currency, and advocated decreasing tariff and customs barriers.

Source: *The Russia Journal*, 19 September 2003, "Single economic space agreement signed", <http://www.russiajournal.com/news/cnews-article.shtml?nd=40557>

The Special Programme for the Economies of Central Asia (SPECA)

Members: Afghanistan, Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan

History: SPECA was established in March 1998 by the presidents of Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan. Turkmenistan joined the same year, Azerbaijan in 2002 and Afghanistan is expected to join in 2005. The programme is implemented with the support of UNECE and UNESCAP as well as other partners.

Objectives: The Tashkent Declaration states that the objective of the Programme is to support the Central Asian States in developing their cooperation, creating incentives for economic development and integration into the economies of Europe and Asia.

Priorities: The SPECA Work Plan for 2005-2007 includes nine ongoing and 19 planned projects in the area of transport, water, energy and the environment, trade, statistical capacity building and ICT for development.

Links: www.unece.org

Notes:

Notes:

UNDP is the UN's global development network, advocating for change and connecting countries to knowledge, experience and resources to help people build a better life. We are on the ground in 166 countries, working with them on their own solutions to global and national development challenges. As they develop local capacity, they draw on the people of UNDP and our wide range of partners. World leaders have pledged to achieve the Millennium Development Goals, including the overarching goal of cutting poverty in half by 2015. UNDP's network links and coordinates global and national efforts to reach these Goals.



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