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Challenges for Development Policy

Erik Lundsgaarde

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Africa Toward 2030

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Abbreviations

AAO	Antarctic Oscillation
ACP	African, Caribbean, and Pacific Group
ADB	African Development Bank
AEC	African Economic Community
AERI	African Energy Research and Innovation Network
AGOA	African Growth and Opportunity Act (United States)
AIDS	Acquired Immune Deficiency Syndrome
AMCOST	African Ministers Council on Science and Technology
AMIB	African Mission in Burundi
AMIS	African Mission in Sudan
AMISOM	African Union Mission in Somalia
ANC	African National Congress
APF	African Partnership Forum
APRM	African Peer Review Mechanism
APSA	African Peace and Security Architecture
AR4	IPCC Fourth Assessment Report
ARF	African Renaissance Fund
ASTII	African Science, Technology and Innovation Indicators Initiative
ATAF	African Tax Administration Forum
AU	African Union
CAR	Capability, Accountability, Responsiveness Framework (United Kingdom)
CBD	Convention on Biodiversity
CEMAC	Central African Monetary and Economic Community
CEN-SAD	Community of Sahel-Saharan States
CEWARN	IGAD Conflict Early Warning and Response Mechanism
CGIAR	Consultative Group on International Agricultural Research
CICID	Committee for International Cooperation and Development (France)
CIVICUS	World Alliance for Citizen Participation
CO_2	Carbon Dioxide
COP-15	UNFCCC Conference of the Parties 15 (Copenhagen)
CSIR	Council for Scientific and Industrial Research (South Africa)
DAC	Development Assistance Committee
DFID	Department for International Development (United Kingdom)
DRC	Democratic Republic of the Congo
ECOSOCC	Economic, Social and Cultural Council of the African Union

EAC	East African Community
ECCAS	Economic Community of Central African States
ECOMAG	ECOWAS Ceasefire Monitoring Group
ECOWARN	ECOWAS Early Warning and Early Response Network
ECOWAS	Economic Community of West African States
EEAS	European External Action Service
ENSO	El Nino/La Nina Southern Oscillation
EPA	Economic Partnership Agreement
ETS	Emissions Trading Scheme
EU	European Union
EX-IM	Export-Import Bank (China)
FDI	Foreign Direct Investment
FOCAC	Forum for China-Africa Cooperation (FOCAC)
G-8	Group of Eight
G-20	Group of Twenty
G-77	Group of Seventy Seven
G-90	Group of Ninety
GATT	General Agreement on Tariffs and Trade
GCCA	Global Climate Change Alliance
GCM	Global Circulation Model
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GNI	Gross National Income
GNP	Gross National Product
HDI	Human Development Index
HIPC	Highly-Indebted Poor Countries Initiative
HIV	Human Immunodeficiency Virus
IBSA	India-Brazil-South Africa bloc
ICF	Investment Climate Facility for Africa
ICT	Information and Communication Technology
IKS	Indigenous Knowledge Systems
IMF	International Monetary Fund
IPCC	Intergovernmental Panel on Climate Change
IRMD	Initiative for the Reduction of Multilateral Debts
ITCZ	Inter-tropical Convergence Zone
LDCs	Least Developed Countries
MDGs	Millennium Development Goals
MP	Member of Parliament
NADAF	New Agenda for Development in Africa
NAMA	Nationally Appropriate Mitigation Action
NAPA	National Adaptation Programme of Action
NEPAD	New Partnership for Africa's Development
NERICA	New Rice for Africa
NGO	Non-Governmental Organisation

NORAD	Norwegian Agency for Development Cooperation
OPDS	Organ for Politics, Defence and Security (SADC)
OAU	Organization of African Unity
ODA	Official Development Assistance
OECD	Organisation for Economic Cooperation and Development
ONGC	Oil and Natural Gas Corporation (India)
PEFA	Public Expenditure and Financial Accountability System
PEPFAR	President's Emergency Plan for AIDS Relief (United States)
PPP	Public-Private Partnership
R&D	Research and Development
REC	Regional Economic Community
RMB	Chinese Renminbi
SACU	South African Customs Union
SADC	Southern African Development Community
SADPA	South African Development Partnership Agency
SAP	Structural Adjustment Programme
SID	Society for International Development
SOI	Southern Oscillation Index
SRES	Special Report on Emissions Scenarios
SSA	Sub-Saharan Africa
S&T	Science and Technology
STI	Science, Technology, and Innovation
TaZaRa	Tanzania-Zambia Railway
TEAM	Techno-Economic Approach for Africa-India Movement
TFR	Total Fertility Rate
UAE	United Arab Emirates
UCDP	Uppsala Conflict Database Programme
UEMOA	West African Economic and Monetary Union
UK	United Kingdom
UMA	Arab Maghreb Union
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNAMID	United Nations-African Union Joint Mission in Darfur
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Program
UNEA	United Nations Energy Africa
UNECA	United Nations Economic Commission for Africa
UNESCO	United Nations Educational, Scientific, and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
UNSIA	United Nations Special Initiative on Africa
UNU	United Nations University
USA	United States of America
USAID	United States Agency for International Development

USD	United States Dollar
USSR	Union of Soviet Socialist Republics
WGI	World Governance Indicators
WHO	World Health Organization
WSSD	World Summit on Sustainable Development
WTO	World Trade Organization
ZAR	South African Rand

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The Global Development Agenda: 2010 and Beyond

Erik Lundsgaarde

The 2015 deadline set for the achievement of the Millennium Development Goals (MDGs) is fast approaching. In the coming years, governments around the world will not only evaluate development progress attributable to the MDGs, a centrepiece of the global development agenda, but will also reflect on how their policy priorities and organisational structures should be configured to address both the unmet challenges of the present day and the challenges of the future. This book is designed to provide policymakers and development researchers with a tool for thinking about how the context within which development policy will respond could change over the long term. Its focus is on exploring the changing African development landscape and the implications of developments in Africa for European development cooperation.

In the past decade, the outcomes of a variety of international conferences have offered a reference point for states and other development actors in their efforts to support economic development and poverty reduction around the globe. At the Millennium Summit in September 2000, world leaders endorsed a list of development priorities emphasising the need for investments in social sectors in particular, providing a goal system to spur renewed interest in global development after a period of neglect. Conferences on development financing in Monterrey in 2002 and in Doha in 2008 sought to provide new impulses for the mobilisation of additional resources for development through public and private channels in developing countries and donor countries alike. Responding to concerns about development aid effectiveness, the Paris Declaration of 2005 and Accra Agenda for Action (2008) have encouraged movement towards better coordinated and more strongly recipient-driven aid interventions.

Recent years have also witnessed efforts to motivate development progress at a regional level. In Africa, the New Partnership for Africa's Development (NEPAD) articulated a common vision among African leaders to tap the continent's latent economic potential, foster peace and social development, and attract the resources necessary to enable Africa to overcome its marginalised position in the global economy. The NEPAD framework proposed a strategy focused around action in several priority sectors, including agriculture and food security, infrastructure, human resources development, science and technology, trade and market access, environment and climate change, governance and capacity development, and gender (NEPAD 2001).

These developments in the formulation of goal systems for development policy at the global level and within Africa have prodded the European Union (EU) to rearticulate its orienting principles and roadmaps for action in the development arena. The European Consensus for Development from 2006 reaffirmed the commitment of the EU to the poverty reduction objectives outlined in the MDGs and the principles for implementation enshrined in the Paris Declaration, and identified areas of action through which the EU would be able to exploit its comparative advantages in implementation (EU 2006). The EU's Strategy for Africa from 2005 provided another response to changes in the international environment, such as the renewal of African commitments to regional integration and uncertainties in the global security context, by proposing a framework for EU action towards Africa as a whole that defined priority areas for European investment on the continent and outlined the necessity of improving the management of development cooperation within the EU system itself (European Commission 2005). A joint Africa–EU Strategy rooted in common interests across the two regions prioritising cooperation in the areas of peace and security, governance and human rights promotion, trade and regional integration, and the achievement of the MDGs followed in 2007 (Council of the European Union 2007).

For political entities, there is a natural time lag in developing strategies to orient action, given the need to develop common understandings of the most important problems to tackle and find agreement on the approaches that might best be able to accommodate the interests of a variety of stakeholders. Ideally, after identifying the most relevant contemporary issues to confront and thinking about the questions that might gain in importance in the future, strategies should provide governments with a framework for action for several years. Reflecting on how background conditions might change in the long term is a useful component of strategy development processes.

In recent years, numerous high-profile events have presented opportunities to open reflection on how to shape the frameworks that will guide action in the global development arena in the future. The September 2010 review of the Millennium Development Goals not only provided governments a chance to identify how they could accelerate progress on these goals towards 2015, but also offered a stimulus for thinking about a post-2015 development reference system, whether it represents an extension of the MDG agenda or a new set of goals (Sumner and Tiwari 2009). The entry into force of the Lisbon Treaty has created a window of opportunity for reflection within the EU, as new organisational arrangements in the field of external relations and changes in leadership have provided an opening to review existing development cooperation frameworks and chart a beyond-2015 policy agenda (European Think-Tanks Group 2010). The third EU–Africa summit at the end of 2010 offered a forum to discuss the future of the joint EU–Africa strategy. On the African side, too, 2010 marked an important year for thinking strategically about the future. The creation of the NEPAD Planning and Coordination Agency as a vehicle for improving linkages between the NEPAD policy agenda and African Union structures signalled the prospect of a renewal of continental integration efforts. Further milestones for reflection on the future of development cooperation include high-level summits on least developed countries (LDCs) and aid effectiveness in 2011, and the Rio+20 summit on sustainable development in 2012.

1.1 The future of development policy: Focal points for strategic reflection

For the EU and its member states, there are three broad areas for strategic reflection in charting a way forward for European development cooperation: (1) the selection of priority fields of action, (2) decisions on how to organise development cooperation systems, and (3) decisions on how to engage in global governance processes.

1.1.1 Identifying priorities

Although specific direction is sometimes lost as a result of the necessity of political compromise, the goals that are outlined in strategic frameworks can be important in guiding the allocation of political and financial resources to address particular problems. There is widespread agreement that the MDG framework has been influential due to its ability to mobilise additional commitments to development cooperation (Bourgignon et al. 2008). While there has been variation within the donor community in terms of how strongly the MDG agenda has shaped aid allocation patterns and with respect to which components of the framework donors have decided to invest in, there has been a discernable shift in donor funding towards social sectors overall in line with the priorities outlined in the MDGs (Thiele et al. 2007). The MDG goal system has faced numerous criticisms, however. For example, Clemens et al. (2004) note that the achievement of the targets requires an unrealistic acceleration of progress in many developing countries, while Easterly (2009) emphasises that the way the goals are formulated makes their fulfilment in Africa especially difficult due to the low initial starting positions of African countries in terms of social and economic development.

Apart from these concerns about how development progress is measured by the indicators developed within the MDG framework, the list of the goals included in the framework has also drawn criticism. As Loewe (2008) indicates, though the MDGs reflect a multidimensional development agenda addressing the expansion of economic and human capabilities related to income improvements and achievements in the areas of health and education, the goal system neglects the expansion of political, socio-cultural, or protective capabilities as desirable development outcomes, and shortchanges issues such as political participation and good governance, social marginalisation and social protection as a result. Other potential deficits in the existing MDG framework include the neglect of productive sectors, insufficient attention to questions of equity and the inadequate consideration of the importance of the global climate challenge and the need for movement toward a low-carbon growth paradigm (Sumner and Melamed 2010).

In addition to facing decisions on how to contribute to reshaping the current global reference system for development, European actors will also need to consider what issues should be listed as priorities in their own strategic frameworks for action. Although the range of issues that can be referenced in some manner in such blueprints for action is wide, trade, security and the environment represent three key thematic clusters around which the EU and its member states will have to determine what questions should be brought into focus in guiding development cooperation in the future. In some cases, reflection on priorities may lead to a recommitment to existing orientations. In others, dated approaches may be abandoned in favour of new directions.

At the EU level, trade has been an important component of the Community's development cooperation profile since its inception. In the past decade, a European approach to integrating trade and development focusing on the extension of non-reciprocal trade preferences to countries in the African, Caribbean, and Pacific (ACP) group has been displaced by a more liberal approach compatible with the rules of the multilateral trading system that has emphasised the creation of regional free trade agreements (Forwood 2001). In the context of negotiating Economic Partnership Agreements (EPAs) with regional groupings within the ACP, the EU has increasingly promoted market building alongside market-opening measures, underlining that basic capacity constraints at the country level and within regions limit the ability of partner countries to benefit from trade liberalisation (Makhan 2009). A continuing challenge will be determining how to balance priorities related to support for economic policy reform efforts in ACP countries and other improvements in local framework conditions along with the promotion of regional integration in order to contribute to increasing investment, economic diversification and an equitable distribution of the benefits of trade-related growth. Identifying how to envisage real commercial partnerships in the presence of major asymmetries in the capacity to trade and scepticism from partners regarding the development friendliness of current European policy approaches is another issue confronting European decision makers.

Peace and security issues have assumed a more prominent place on the global development agenda in the last decade. In part, attention to these issues reflects the linkages that have been identified between conflict and economic development within countries. If war has been demonstrated to have a depressive effect on economic growth, low levels of economic development can also increase the vulnerability of states to internal conflict (Collier 2007). Along with the recognition that security and development are interrelated, or that security is itself an important part of the definition of development, concern about the trans-national consequences of intra-state instability has also contributed to the higher profile of peace and security in development cooperation. Challenges to government control of territories can create an operating space for terrorist groups, drug traffickers, pirates and other actors whose activities may pose a security risk not only within their immediate neighbourhoods but also farther afield. Coping with state fragility, a concept that generally refers to a condition where governments have limited capabilities or limited will to secure their territories and provide basic services to their populations, has become an important priority within the development community as a consequence (European Report on Development 2009). European actors face a variety of decisions on how to orient action toward fragile states, respond to conflict and promote peace. One decision relates to the priority attached to addressing root causes of conflict and investing in conflict prevention within polities or the priority assigned to creating mechanisms for crisis response and stabilisation in the aftermath of conflict such as the EU's recently created Instrument for Stability (Gänzle 2009). Another decision concerns the extent to which European states will support the deployment of military manpower to respond to crises in developing country contexts versus focusing on building regional capacities to confront new security challenges, such as through the strengthening of the African Peace and Security Architecture.

The high profile of peace and security issues on development agendas globally and within Europe has been reinforced as the potentially severe consequences of changing global environmental conditions have moved into the spotlight. Climate change carries the prospect of placing additional stress on already fragile ecosystems and systems of government, due to pressures on freshwater resources and arable land and the potentially destabilising effects of increasing population displacement (German Advisory Body on Global Change 2008). On one level, European actors face decisions concerning the improvement of their internal environmental performance to limit their negative impact on the global environment, whether by controlling carbon emissions or consuming fewer natural resources. On another level, European decision makers must determine how to assist poorer countries in their efforts to manage the consequences of environmental change and to find pathways for supporting long-term development in a manner that does not lead to ecological depletion.

Nearly a quarter of a century has now passed since the Brundtland Commission advanced the concept of sustainable development, reflecting the desire 'to meet the needs and aspirations of the present without compromising the ability to meet those of the future', as a point of orientation for the integration of environmental sensitivity into development efforts (United Nations 1987). Though the concept has retained a high level of visibility on the international agenda in the intervening period, governments have a mixed record in integrating environmental sustainability into development strategies. And while the European Consensus on Development lists sustainable development as a cross-cutting development policy objective, it remains one goal among many outlined in other EU strategy documents (European Commission 2005; EU 2006; Council of the European Union 2007). Identifying whether and how to mainstream environmental protection as a component of economic and political cooperation programmes presents a persistent challenge for European decision makers.

The types of decisions sketched out above provide only a partial list of choices that donor governments will face in determining their future thematic priorities. Along with thematic choices, donors are also presented with fundamental questions about what purposes development cooperation should serve in the future. Development cooperation might be considered as an important vehicle to promote a value system, in which the protection of human rights, respect for gender equality and adherence to principles of economic and political organisation favouring free markets and democracy represent important components. Alternatively it can be conceived as a vehicle for advancing the interests of donor countries, whether by strengthening export markets, promoting political stability or enabling greater contributions from developing countries in global governance. While these two ways of viewing development cooperation overlap, donors will have to determine the weight of basic aims in formulating new development agendas. The transparency of these aims will influence the ease with which the impact of development cooperation can be assessed in the future.

The selection of priorities can be important in orienting action; however the translation of priorities into achievements ultimately requires the design and implementation of effective policy instruments. Discussions on the relevance of specific policy instruments are therefore a natural accompaniment to debates on priorities. One line of discussion to be opened further as part of the reflection process on the future of the global development agenda is the future role of development assistance as an instrument for responding to development challenges. There are many dimensions to the debate on how to rethink development assistance. On a conceptual level, Severino and Ray (2009) argue that because the term Official Development Assistance (ODA), used to measure the development commitments of Organisation for Economic Co-operation and Development (OECD) countries, can cover a variety of expenditures that may not provide new resources for development while it at the same time leaves out a number of resource types that do, the definition of aid itself needs to be reworked. Other contributions to this debate, without calling into question the value of aid as a policy instrument, emphasise the imperative of enhancing the efficiency of how it is delivered, whether by increasing predictability of financing, developing ways of confronting absorption constraints in recipient countries, improving coordination or strengthening evaluation efforts (Birdsall 2008).

The debate on the future of development assistance has special relevance for the future of African development, given comparatively high levels of aid dependence on the continent and the higher profile of Africa on the donor agenda in the last decade. Aid to Africa has been criticised for, among other things, producing limited results, creating systems of accountability that limit the responsiveness of governments to their citizens and being programmatically driven by donor preferences rather than locally determined needs (Calderisi 2006). Even with the advent of the ownership agenda, African governments have shown a mixed ability to assert control over their policy agendas in negotiations with donors (Whitfield 2009), underlining the complicated nature of the notion of development partnership in a situation of basic inequality.

The disputed record of aid is only one reason to reconsider its future. As Hansen et al. (2008) suggest, it is also reasonable to raise the question of whether recent support for increasing aid can be sustained in donor countries, indicating that African stakeholders and donors alike have an interest in thinking about how to move 'beyond aid' and to begin to develop exit strategies in this light. Identifying how aid can serve to leverage other types of resources that can displace aid in the long term will be an important element of this reflection process in the near term, especially given the poor record that European and other donor governments have in actually fulfilling their official development finance pledges. Development assistance has of course always been one of many policy instruments that have an impact on development. Determining the unique contribution that aid can make alongside other policy instruments and where it can provide the most effective contribution to development are other elements in the background in thinking about the future of aid.

1.1.2 The organisation of development cooperation

The decisions that European governments will make concerning development cooperation priorities and the place of aid as an instrument for promoting these priorities have implications for the organisation of development cooperation systems at the European level and within EU member states. As the nature of EU engagement with developing countries has become more multifaceted, policy fields apart from development assistance have grown more important in determining the overall development impact of EU policies. In order to strengthen the commitment to development goals across these policy areas and the consistency of EU external action, the EU has in recent years worked to develop a more robust framework for policy coherence for development, with the aim of fostering a 'whole of the Union' approach to development cooperation. One organisational element of the implementation of the framework has been increasing reliance on inter-service consultations and inter-service working groups (European Commission 2009).

With the institutional changes ushered in with the entry into force of the Lisbon Treaty, the EU gained another vehicle for promoting greater consistency in the EU's relations with the developing world with the creation of the European External Action Service (EEAS) and the appointment of a High Representative of the Union for Foreign Affairs and Security Policy. This organisational innovation also carries the potential to introduce greater coherence into European development cooperation due to the coordinating role that the office of the High Representative might assume in overseeing the different dimensions of EU foreign relations. The place of development within the new foreign relations set-up at the EU level is not yet fixed, however, and it remains to be determined whether and how existing services with a development mandate might be folded into the External Action Service (Grimm 2009). Here the EU faces a dilemma that many donors share, namely, determining how to reform organisational structures to ensure that foreign affairs and development bureaucracies pursue a unified policy agenda. If foreign affairs bureaucracies have a natural advantage in terms of providing a venue for coordination of external actions, development advocates fear that the short-term, crisis-response orientation of these bureaucracies tends to jeopardise the pursuit of long-term development objectives, providing a justification for limiting the integration of development bureaucracies more completely into a government's foreign policy apparatus. Apart from determining how to address this issue in bringing the EEAS to life, the EU will also have to decide how Commission directorates with development mandates can be brought more closely together.

In addition to these challenges in deciding how to proceed with organisational reform within EU institutions in Brussels, another aspect of preparing the European development cooperation system for the future concerns the definition of the role of the EU in global development relative to its member states. This role definition can move either in the direction of further centralisation, implying a larger role for the EU in managing resources, or in the direction of greater federalisation, where the EU plays an important role in coordinating the development activities of the member states (European Think-Tanks Group 2010). Either alternative would potentially provide a solution to the persistence of unnecessary overlap among European donors and enable efficiency gains in aid implementation. In recognition of shortcomings in coordinated approaches across EU member states, the EU formulated a Code of Conduct on Complementarity and the Division of Labour in Development Policy in 2007. Among other things, the Code of Conduct called on individual EU donors to make efforts to achieve a further geographical concentration in their aid programmes and a stronger sectoral focus within partner countries, which would encourage bilateral actors to work in areas where they have a comparative advantage while attempting to ensure that aid resources are distributed more equitably across the spectrum of partner countries. The implementation of the Code's principles implies a necessity for donors and partner countries to develop strategies for phasing out particular programmes in the future (Grimm et al. 2009).

The challenges that are visible at the EU level related to identifying the place of development bureaucracies within the broader organisational set-up of external relations and finding efficient ways of dividing responsibilities among governmental actors engaged in development cooperation are also relevant at the level of EU member states. Within the EU, there are already a wide range of organisational answers to sorting out the relationships between development policy, foreign policy, security policy, and other policy fields with implications for relations with developing countries, reflecting in part basic differences in the design of political institutions. In Germany and the United Kingdom, for example, independent development ministries have enjoyed a cabinet-level rank, which has been credited with giving poverty reduction a higher political profile within these countries and providing the ministries a strong organisational position to work toward improved policy coherence (OECD 2006a; OECD 2006c). As other sectoral ministries dealing with issues such as education and research, the environment, or migration increase their international engagement and disburse official development assistance of their own, however, the coordination challenge for independent development ministries grows.

In smaller European donor countries that have traditionally been development leaders such as the Netherlands and Denmark, coherence in external action toward developing countries has been fostered by the integration of development and foreign ministries into a unified management structure (OECD 2006b, 2008). Yet even in Denmark, where the small size of the political system eases the maintenance of dialogue across governmental entities, the heightened profile of environmental and migration issues has generated the potential for greater policy inconsistency.

If the administrative coupling of foreign and development ministries provides one solution for adapting organisational structures to enable donor governments to respond more effectively to global challenges, another solution can be found in the strengthening of cross-governmental coordinating structures. An example of this kind of organisational innovation can be found in the French development cooperation system, where an Interministerial Committee for International Cooperation and Development (CICID) was established in 1998 to provide a forum for joint deliberation on the strategic direction of French development assistance, to improve policy coherence and to identify geographical and sectoral priorities. Under the direction of the prime minister, the CICID brings together twelve ministers holding portfolios relevant for development cooperation. The CICID example also highlights the difficulty of adapting organisational set-ups to resolve coordination problems, however, due to the infrequency of its meetings to date and the fact that its secretariat itself faces internal coordination challenges given joint management by the Ministry of Finance and Ministry of Foreign Affairs, heavyweights within the French bilateral aid system (OECD 2004).

In short, at both the EU level and within member states, governments are presented with the task of making their development cooperation systems fit for the future. Given the diversity of institutional legacies in Europe, the form organisational rethinking takes could be very different depending on the polity. Nevertheless, governmental actors are confronted with several common questions. These include identifying what the relative advantage of an independent development ministry compared to a development bureaucracy integrated into the foreign affairs apparatus might be, identifying what the relationship between development ministries and other ministries with development mandates should be, and identifying what mechanisms for coordination could be put in place to foster coherent action vis-à-vis developing countries.

1.1.3 Contributions to global governance

A final broad area for reflection among European governments relates to how they will individually and collectively engage in global governance processes. The formulation of rules for managing inter-state relations and for addressing deficits in the provision of global public goods takes place in a variety of global governance forums. The decision-making structures in some of these forums (the Bretton Woods institutions and the United Nations Security Council in particular) are legacies of a moment in time at which the global distribution of economic and political power looked quite different from what it is today. The legitimacy of these institutions in serving as places where solutions to meet global challenges can be brokered has therefore justifiably been brought into question (Messner and Scholz 2005), and deliberations on which institutions may best be capable of representing the interests of the world's peoples are likely to continue in the years ahead. The United Nations system has often been considered to have special legitimacy in the global governance architecture due to equal representation of states within the General Assembly. However, the ability of the United Nations to resolve global governance problems has also been limited by divergent national interests and institutional shortcomings. The decisions on engagement in global governance arenas that European donors face relate in part to determining what role particular international institutions should play in the future. This includes considering what the place of

UN development programmes should be in the global division of labour in relation to other multilateral development actors (Weinlich 2010).

Even with the advent of the G-20 as a forum for expanding the voice of economically powerful developing countries in high-level summit meetings, the issue of assuring democratic legitimacy in the global governance system remains, as the interests that emerging powers represent are not necessarily in line with the interests of poorer African countries, which have minimal representation through the participation of the head of the African Union in summit meetings. If some countries are underrepresented in these forums, European countries maintain privileges of historical legacies and are thus overrepresented. For Europe, then, challenges in approaching the reform of global governance structures include both finding ways to increase the global democratic legitimacy of institutions while determining how to define the role of the EU as a collective representative for the member states in the context of more inclusive and legitimate global governance systems.

Following the failure at the 2009 Copenhagen Climate Conference to find agreement on a successor framework for the Kyoto climate regime, set to expire in 2012, climate governance remains another arena where European governments face critical questions in developing a strategy for achieving reductions in greenhouse gas emissions and forestalling the negative impacts of climate change globally. As in the global governance system more generally, governance in the climate arena is characterised by a multitude of forums for negotiation and action, which vary in the nature of their inclusiveness. Part of the task for governments in designing a workable global climate framework is to reduce overlaps in different governance systems and to increase the consistency of rules systems. As Biermann et al. (2008) note, the problem of fragmentation in climate governance applies especially to inconsistencies between the world trade regime and the climate regime sheltered under the umbrella of the United Nations. The prospect for fragmentation in climate governance is fostered not only by divergent national interests and variations in the salience of particular policy fields across countries, but also by the multiple goals that a climate regime has to address. On the one hand, a post-2012 climate regime will have to ensure that the world's leading carbon emitters make enforceable commitments to diminish their emissions. On the other hand, the climate regime has to develop effective mechanisms for financing adaptation in the developing countries that have contributed the least to the climate problem, yet will be affected the most by it.

1.2 Purpose of this book

It should be clear from the above discussion that there is no shortage of choices facing European actors in thinking about how to contribute to the creation of a future global development agenda and how to adapt policies and organisational structures to a changing global context. This book does not presume to provide detailed answers to all of the questions about desirable priorities, organisational structures and approaches to global governance that have been outlined in the preceding sections. It does aspire to inform deliberations on the future of European development cooperation by offering speculations on how the environment that development policy is designed to respond to could change in the decades ahead. The word speculation is used deliberately. While the chapters that follow contain grounded analyses of key forces that will shape the future development landscape, the goal of the book is not to predict the future, but rather to provide points of orientation in imagining what the future might bring.

The future of global development will be shaped by a long list of actors across world regions. The focus of this analysis is on charting possible change in the African development context. This focus is partly justified by the heavy weight that development cooperation with Africa occupies in the aid portfolios of the EU and its member states. Between 2000 and 2008, EU members of the Development Assistance Committee (DAC) disbursed an average of 44 per cent of their development assistance contributions annually to African countries, while the share of European Community aid directed to the continent averaged 42 per cent in the same period (OECD 2010).

The Africa focus of this volume is also justified due to the complex of development challenges currently facing Africa that distinguish the continent from other world regions. While the African continent contains a mixture of low and middle income countries, it possesses the world's largest concentration of least developed countries and failed and fragile states. In comparison to other world regions, Africa (especially Africa south of the Sahara) is considered to be the place where the Millennium Development Goals will be the most difficult to achieve, though other parts of the world such as South Asia face significant challenges of their own in this respect (McGillivray 2008). As Chapter 5 in this volume underlines, the continent is also expected to be disproportionately affected by the problem of global climate change. Because the classical development cooperation mandates of accelerating economic growth and reducing poverty remain especially relevant in the African context, reflecting on how Africa's future could unfold is of central importance in considering how the priorities and organisational structures of European development cooperation may need to adapt to a transforming world.

If 2010 was an important year for measuring progress on existing commitments to development and opening discussions on the way forward for the global development agenda, it was also an important symbolic year for looking back, taking stock and looking forward on the African continent itself. In 2010, seventeen African countries celebrated a half century of independence. As they reached this milestone, numerous members of this cohort appeared in news headlines painting portraits of internal conflict (Nigeria), reversals in democratic progress (Niger) or even complete state failure (Somalia), with relatively politically stable states showing signs of economic dynamism (Benin, Mali) serving as less visible batch mates. The year 2010 also marked a quarter century since the end of the Ethiopian famine of 1983–85, which conveyed images of poverty-stricken Africans in need of external assistance to a global audience, using a lens for viewing the continent that was hardly new (Nugent 2004). Twenty years have passed since the end of the Cold War, which brought hope that the end of geopolitical competition between opposing ideological blocs would open the way to a more peaceful and democratic future for the African continent. Nearly ten years have passed since the NEPAD process reinvigorated a continental vision for economic and political development.

The 2010 football World Cup offered a moment to showcase an image of the African continent that contrasted with its common representations in the global media, one where economic progress and celebration rather than political crisis and misery were put on display. Even within relatively prosperous South Africa, though, many different narratives can be crafted about the state of development today and what lies ahead. As many of the contributions to this volume highlight, just as there are important variations within countries, prevailing conditions across African countries are also diverse due to a number of sometimes interrelated forces, whether linked to geography, climate, political legacies, the structure of economies or other factors. While acknowledging this diversity, and the value of research focusing on the analysis of change at the country level, this book maps possible futures for the continent as a whole.

In its Africa Strategy from 2005, the EU acknowledged the utility of developing a framework for action treating Africa as one entity due to the renewal of continental integration efforts. Although barriers to regional and continental integration remain large, African countries have at least agreed to a common agenda, and this agenda is shared by states north and south of the Sahara. Even though these regions are often treated separately in studies of development due to differences in levels of economic development and of geography, they are also politically interdependent as a result of shared borders and common trans-boundary challenges, such as the growth of illicit economies and rising terrorist activity. The important role that North African countries have assumed in financing continental organisations and engaging in diplomatic action to address challenges in neighbouring states to the South also highlight the value in avoiding drawing an analytical line through the Sahara desert in discussing Africa's future. That 2011 represented a decisive year for the future of Sudan, previously the continent's largest country and a state straddling the North-South dividing line, further underlines the relevance of adopting a 'whole of continent' approach.

1.3 Overview of the Book

The approach to exploring the future of the African continent adopted in this volume takes cues from the literature on future-oriented research methods and from the scenario analysis tradition in particular. Chapter 2 provides a general introduction to the goals that scenario approaches are intended to address and outlines the main steps in the scenario development process. This chapter also provides an overview of how elements of the scenario tradition have informed the goals of this exercise and structured the research process.

An important prerequisite for the discussion of possible futures is to provide an account of the common starting point for alternative development trajectories. Chapter 3 sets the stage for the exploration of Africa's future by offering a descriptive overview of contemporary development trends in Africa. The chapter highlights many different elements of the development landscape including key features of the economic, political and environmental contexts. In this treatment, indicators suggesting both the potential for positive change and the persistence of significant development challenges are presented, underscoring that alternative storylines on African development exist when the time horizon is restricted in the present day.

The overview of current development trends in Africa is followed by six studies of core drivers of change that have been identified as especially important determinants of how the future could unfold on the African continent. These chapters provide both an indication of how individual drivers are shaping the development landscape in the present and an analysis of their potential future influence. The first of these studies, written by Patrice Vimard and Raïmi Fassassi (Chapter 4), presents an exploration of the dynamics of demographic change. While the analysis suggests that population growth may be either a boon or a burden for African societies, the general demographic picture that is outlined underlines that African populations, and especially those south of the Sahara, will represent a growing share of the world's population in the decades ahead, offering another basic justification for the international community to increase its awareness of challenges facing Africa.

The climate challenge has risen in importance on the global agenda in recent years. Although African countries have contributed minimally to the greenhouse gas emissions responsible for the changing climate, the continent is expected to be disproportionately affected by global warming, not only for reasons of geography but also due to pre-existing vulnerabilities related to levels of socio-economic development and deficits in governance that limit the adaptation capacity of African states. The contribution by Grist and Ifejika Speranza (Chapter 5) highlights the potential impacts of climate change and emphasises that missing clarity about the political choices at both international and national levels that will determine the financing available to counter the effects of climate change add a layer of uncertainty about how severe these impacts may be. In the context of rapid population growth and continuing environmental constraints, technological innovation represents one possible means of overcoming these hurdles to achieve development gains. Yet as Maharajh et al. (Chapter 6) note in exploring the impact of systemic technological innovation on African development, finding technologies to respond to development challenges and stimulate economic dynamism requires more than simply financing technology transfer. Rather, the authors emphasise the importance of directing attention to the development of endogenous innovation systems that can contribute to the production of knowledge and the conception of locally-appropriate technologies.

Across these chapters on drivers of change, politics often crops up as an important source of uncertainty about the future, whether due to fundamental questions about what resource allocation priorities might be adopted by African governments and external donors or due to doubts about how development processes will be managed. The chapter on the future of political transformation in Africa written by Meyer (Chapter 7) discusses several elements of political dynamics within Africa that could have an especially important bearing on the emergence of more effective governance on the continent. These include patterns of political mobilisation in political parties and parliaments that could encourage interest articulation bridging ethnic divisions and processes of distributing authority between central governments and more localised institutions that would push for a reconciliation of potentially competing structures of authority and national integration. As Meyer emphasises, stimulus for governance reform can come both from within African states and from external actors, with regional and continental organisations holding special promise in this regard.

The chapters on emerging development partners written by Grimm and He (Chapter 8) and on Africa in global governance processes written by Le Pere and Ikome (Chapter 9) further underline that Africa's future will not only be determined by internal political dynamics but also by how the broader international community engages with countries on the continent, a question related at a basic level to what actors are involved, what interests they pursue and how they interact with other actors. One general trend in the global political economy in the last two decades has been a shift in economic and political power towards major emerging economies, and the increasingly visible role that China and India have assumed as providers of development assistance is an extension of this shift. Even though the development cooperation programmes of these emerging powers have historically been most substantial within their regional neighbourhoods, their engagement in Africa has attracted special attention due to the perceived challenge that their expanded investment poses for the community of OECD donors and the goals and norms they promote in the context of their own development cooperation programmes. As Grimm and He suggest, the new actor constellation in African development cooperation may open opportunities to improve development practice on both sides, and the role that African governments assume in moulding the diversifying donor landscape to the benefit of their populations represents a critical force determining the extent to which these opportunities will be realised. The development cooperation frameworks that European actors and emerging powers have formulated to orient their engagement in Africa form part of a multilayered system of global governance. In discussing elements of this system, the contribution from Le Pere and Ikome in Chapter 9 draws attention to the shared responsibility of the governments of wealthier states and African countries in working toward more coherent global governance frameworks that will enable development progress by mobilising resources from public and private actors through trade and development finance.

In their treatments of the potential long-term influence of individual drivers of change, the contributing authors signal the difficulty in attempting to separate these themes from one another, and the consideration of a topic as broad as the future of Africa requires attention not only to the particular challenges emanating from these drivers but how they may interact through time. Chapter 10 presents four generalised scenarios for Africa's future that build on the analyses in the preceding chapters. This format allows for a presentation of varied trajectories that highlight key challenges facing African states and draw attention to alternative outcomes that are possible given a consideration of the range of uncertainties associated with the influence of key drivers of change. These storylines offer a basis for reflection on how European development actors in particular might lay a stronger foundation for their future engagement with African continental and regional organisations and African states. The discussion in Chapter 11 concludes with a consideration of the implications of the analysis for European development cooperation, focusing on possible strategic directions for development policy adapted to the challenges of the coming decades.

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2
Studying Development Futures[1]

Erik Lundsgaarde

Painting a portrait of how an entire continent could change two decades into the future is necessarily a speculative exercise. The approach that this book takes in structuring reflection about the future of Africa is informed by the field of future studies and by scenario analysis methods in particular. The selection of this orientation should not be regarded as a critique of the utility of other approaches in examining questions relevant for the future of development policy. Social scientific research, that presents historical narratives or assesses the relative importance of key variables of interest through statistical analysis can draw attention to causes of change and highlight constellations of factors that may lead to future outcomes that tend to resemble those of the past. Common approaches to exploring the future differ from dominant social scientific methods for making sense of the past and present because of their emphasis in outlining the possibility of multiple distinct outcomes and their goal of accounting for a broad range of uncertainties rather than presenting a high level of certainty in their analyses. This chapter provides an introduction to scenario analysis methods and outlines how insights from the scenario tradition guide the analyses presented in the subsequent chapters in this volume.

From a strategy development and policy planning perspective in the global development arena, the triple crises of 2008 related to skyrocketing food and fuel prices and the meltdown in the global financial system highlighted the value of developing tools to anticipate occurrences that might have a disruptive effect on development prospects around the globe. Though these crises did not arise overnight, their arrival brought to light the difficulty that governments and multilateral organisations have in identifying and reacting to signals of pending change. Heightening the capacity of governmental actors to anticipate change can increase their ability to soften the negative impacts of such shifts or to fully exploit the opportunities they may present. There are many possible explanations for limited foresight. To name but a few, organisations may have inadequate mechanisms for collecting and diffusing knowledge internally, a commitment to particular principles or ideologies may lead decision makers to overlook some possible eventualities, or the rapidity of change may simply overwhelm the ability of organisations to digest the implications of changes or develop adequate responses within a short time frame.

The application of scenario analysis methods offers one means of adding to foresight capabilities within an organisation. Scenario analysis is one of the most prominent approaches applied in the broader field of futures research, a field that covers a diverse set of methods, some of which rely on quantitative modelling and trend extrapolation, survey methods, or participatory research methods. A more comprehensive list of futures research methodologies has been catalogued by the UNU Millennium Project, a leading international network of futures researchers (Glenn and Gordon 2003). Scenario analysis itself comes in many varieties. One distinction can be made between quantitative scenario approaches, including the scenarios constructed with systems-dynamics models in the *Limits to Growth* and *International Futures* projects (Meadows et al. 2004; Hughes and Hillibrand 2006), and qualitative scenarios that often assume a narrative form. Among qualitative approaches, a distinction can be made between normative scenarios, which focus on outlining how specific future goals can be achieved, and exploratory scenarios that chart possible developments in an organisation's operating environment (Börjesen et al. 2006). Qualitative exploratory scenarios have proven especially popular in corporate planning contexts, and this approach occupies a prominent place in the scenario analysis literature.

2.1 Scenarios: Origins, Definitions, and Purposes

The modern scenario analysis tradition has its roots in the 1950s, when policy-oriented scholars began to develop disciplined approaches to exploring the future in order to inform long-term policy planning processes. In France, the study of alternative futures emerged at this time to stimulate prospective thinking to illuminate the consequences of policy choices, especially in the economic sphere (Masini 2006). In the United States, the security policy arena provided an incubator for scenario analysis methods, as thinkers sought to strengthen early warning systems and to 'think about the unthinkable' to explore unpleasant possibilities resulting from the destructive potential of nuclear weapons (Bradfield et al. 2005).

Herman Kahn, an American defence intellectual and the founder of the Hudson Institute, was a leading figure in expanding interest in using scenarios to inform public policymaking. In *The Year 2000: a Framework for Speculation on the Next Thirty-Three Years* (Kahn and Wiener 1968), Kahn and his collaborators presented a case for exploring long-range developments, offered basic guidance on the purposes for which scenarios might be used, and outlined their general properties. Key goals of future-oriented policy research listed in the work included stimulating the imagination, identifying and clarifying major issues, examining alternative policy contexts, and improving intellectual communication. A widely referenced definition of scenarios as "hypothetical sequences of events constructed for the purpose of focusing attention on causal processes and decision-points" also appears in the volume (6). Since then, scenarios have also been defined as "internally consistent view[s] of what the future might turn out to be" (Porter 1985: 446) or as "focused descriptions of fundamentally different futures presented in a script-like or narrative fashion" (Schoemaker 1993: 195).

These definitions point to three key properties of scenarios. First, scenarios are fictional. They present pictures of what could happen rather than deterministic predictions of what will happen. For this reason, scenario analysis practitioners are often careful to distinguish the approach from forecasting, which offers projections based on an analysis of consistent patterns of relationships between variables observed in the past (van der Heijden 2005). Second, the definition of scenarios as narratives of the future highlights that scenarios have an explanatory quality. Rather than only providing a description of a future end state, scenarios can explain how phenomena might unfold through time. Similar to advantages that have been identified with the construction of historical narratives in the social sciences, the creation of storylines about the future is considered to provide a tool to outline complex causal relationships and illustrate interaction effects (Aligica 2007). The final key property of scenarios highlighted by the above definition is that they provide *alternative* representations of future occurrences. The development of alternative representations allows for the preparation of working pictures of the future that span a large range of possible outcomes.

Scenario analysis methods have been advanced as a way of addressing several objectives. For scenario analysis proponents, the creation of multiple scenarios depicting a range of outcomes provides an avenue for accounting for the uncertainties in the external operating environments of organisations that can influence the nature of the conditions they may face in the future. The assessment of uncertainty is considered a way to anticipate future discontinuities. Perhaps the most famous anecdotal example of an organisation identifying potential disruptions in its operating environment through the application of scenario techniques is Shell Oil, where planning staff were able to foresee the potential for major disruptions in oil supply through an analysis of the interests of various actors in the global oil market and the preparation of an evolving set of scenarios in the early 1970s (Wack 1985). In relying on scenarios to evaluate potential organisational responses to a range of possibilities or the appropriateness of strategy across different contexts, scenario analysis may in this manner also contribute to risk management.

The objectives of scenario analysis may also be more indirect in terms of shaping the direction of organisational decision making. Rather than producing clear recommendations on how decision makers should reorient their thinking and adapt priorities, scenario development may have a more modest goal of influencing the way that decision makers approach the future and interpret the world around them. Advocates of scenario approaches have suggested that an increasing openness to exploring new ideas can be one result of the use of these techniques. Scenarios may encourage individuals to challenge their assumptions about how the world works and enlarge their consideration of diverse perspectives (Shell International 2003). As Chermack (2004) notes, scenario analysis may be a vehicle for challenging cognitive biases in individual and collective decision making. In a similar vein, he likens scenario building to theory building by emphasising that both can be described as processes of “disciplined imagination,” suggesting that because theories and scenarios as thought experiments offer a means of ordering information, the development of multiple thinking tools can limit rigidity in terms of mental maps that guide decision makers’ thinking (Chermack 2007). The open-ended nature of scenario development processes can provide a further stimulus for creative thinking.

The position that scenario analysis adopts with respect to the acceptance of multiple alternative futures as equally valid frameworks for understanding how the future could unfold has led to the application of scenario techniques to create neutral spaces for dialogue, where individuals with different interests and divergent viewpoints have license to develop competing futures or shared futures in the process of exchanging ideas in a group context. A classical example of the dialogue-promoting purpose of scenarios is the Mont Fleur scenario exercise on the future of South Africa carried out during the transition from the apartheid regime to democratic rule. Involving a relatively small number of participants who worked together to create scenarios in a series of workshops, the informal process resulted in possible visions for the country’s future that presented participants in the national political debate with messages on the potential consequences of different courses of action. The participation of a variety of individuals in the small initiative was regarded as a way of increasing the legitimacy of the messages the scenarios highlighted among a broad range of political actors (Kahane 1998). The example also underlines that scenarios may often be used to feed into reflection processes and contribute to ongoing political dialogue.

The present work adopts insights from the scenario approach to pursue the reflective aims of scenario analysis in particular. It does not aspire to fulfil the more comprehensive list of objectives associated with the use of the term ‘scenario planning’, which implies the use of scenarios within an organisation to test the robustness of strategies against the virtual wind tunnels that scenarios represent and the preparation of recommendations on specific decisions that organisations should take (Ralston and Wilson 2006). That is an objective which must be left to managers within aid agencies, who need to balance the consideration of emerging challenges in the global development landscape with an assessment of the interests and strengths of their organisations and determine how to respond to a changing world given a set of constraints imposed by the political systems in which they are embedded.

2.2 The Process of Scenario Development: Generalised Overview

Within the qualitative exploratory scenario analysis tradition, numerous advocates of the scenario method have produced guides on how to build scenarios, presenting a framework for analysis that can be adapted to exploring the future in general (cf. Schwartz 1996, Fahey and Randall 1998, van der Heijden 2005, Ralston and Wilson 2006). This section highlights the key elements of the scenario building process discussed in these guides.

As in other research processes, the process of scenario development begins with a phase of problem definition. One basic consideration at this stage is identifying why the exploration of long-term change is necessary given the goals that an organisation wants to achieve. In informing organisations' efforts to address short-term goals, scenarios are likely to have limited use (Ralston and Wilson 2006). In the development context, for example, the application of scenario thinking is less relevant for discussions on how to improve chances for the achievement of the Millennium Development Goals by 2015 than it is for discussions on shaping the post-2015 development agenda. The identification of key questions to orient the scenario process at the outset can, for example, take place in the context of brainstorming sessions or exploratory interviews that bring to light the most important decisions facing an organisation (van der Heijden 2005).

Another step in the exploratory process involves the collection of available information about the environment that will be the focus of the analysis. This early stage of the process can include the assessment of current trends (Schoemaker 1993). While trend analysis can be associated with forecasting to the extent that it describes regularities in occurrences through time and hints at the continuation of these tendencies, an examination of recent historical record and general observed patterns provides valuable background information for a scenario development process not only by providing indications of what underlying forces have been relevant in determining past outcomes but also in establishing a common descriptive starting point for alternative scenarios of the future. In presenting their scenarios for the future of East Africa, for example, the Society for International Development has underlined the utility of such background analysis by prefacing scenarios with a 'picture of now' summarising descriptive information about the state of the region and key assumptions that underlie contemporary discussions about its future (SID 2008).

The identification and assessment of key 'drivers of change' represents a core component of the scenario development process. Drivers of change are explanatory variables that are considered to have a strong influence over the course that the future will take. The drivers of change concept can also be found outside of the field of future studies. The United Kingdom's Department for International Development (DFID) has notably advanced the application of a 'drivers of change' framework in recent years to provide background analysis for country-level aid programming. In DFID's case, there is special attention to understanding how agents, institutions, and structural variables such as geography and demography can influence prospects for transformation within recipient countries (DFID 2004). In a similar way, the identification of drivers of change in the scenario tradition seeks to highlight the forces that underlie transformative processes in a given context.

Alongside a subjective assessment of the importance of drivers of change, qualitative scenario building also involves reflection on the main uncertainties related to the forces strongly influencing the future. As suggested above, focusing attention on uncertainties is viewed as a primary mechanism for preparing for a wide range of possible eventualities. An underlying assumption in this approach is that there are many known factors which can have an influence on the direction the future might take, but for some factors, this influence is more predictable and for others more unpredictable. Porter indicates that it can be useful to distinguish important variables affecting the future according to whether they are constant, predetermined, or uncertain (1985). Unchanging variables or predetermined elements which change in predictable ways can then be integrated across scenarios and uncertain elements can serve as a basis for variation among scenarios. In his early methodological work in this area, Kahn sought to distinguish categories of variables along a continuum that reflected differing degrees of stability. At one end, geographical and cultural forces could be considered to be more fixed, while at the other wars or natural disasters could contribute to more volatility (Aligica 2004).

Focusing attention on the two most important and uncertain driving forces is a commonly used tool in constructing qualitative exploratory scenarios. Imagined extremes of the two key uncertainties can be plotted along a vertical and horizontal axis to create a scenario matrix, which provides an accessible visual summary of the main elements that distinguish alternative scenarios from one another. In placing main uncertainties along its axes, a scenario matrix also serves the analytical purpose of informing scenarios that encompass a wide range of variation in outcomes even while they share an underlying logic (van der Heijden 2005). Reliance on a scenario matrix to background scenario development may require collapsing uncertainties into broader categories for purposes of simplification.

The scenario matrix furnishes a basic template to structure narratives of the future. The use of narratives to present scenarios is considered a means of summarising complexity in an accessible manner. From a common starting point, alternative narratives provide an unfolding storyline of events that grow more divergent as time progresses. Even though writing distinct stories of the future is the goal of the exercise, good scenarios will also display commonalities to reflect the more stable forces that have been identified alongside major uncertainties (Ralston and Wilson 2006). One challenge in writing narratives is to balance the need to present readers with relevant questions about the future while limiting the detail about the timing and substance of particular events, which may lead scenarios to be interpreted in too deterministic a manner (Shell International 2003). Narratives of the future can take numerous forms, and often they are written with the retrospective voice of an observer reporting on developments at the end of the time horizon under consideration. Ideally, finished scenarios will present readers with challenges and offer creative ways of interpreting the environment around them.

2.3 Foresight in Africa

Scenario analysis and other methods of futures analysis have by now been applied in a wide variety of settings, including a number of studies that touch on the issue of how the global development landscape is changing, whether in looking at the transformation of the global environment or the transformation of the global economy. This section briefly outlines examples of foresight exercises relevant for African development.

While foresight techniques have been put to use in diverse contexts across the African continent, the availability of information on the outcome of scenario development processes and evaluations of the utility of these exercises has often been limited. There are several possible reasons for this. If the goal of scenario exercises is to encourage dialogue among stakeholders in a given locality rather than to examine strategic options, there may be little incentive for participants to make the results of their scenario development processes broadly available. In other cases, the design of scenario projects around a narrow focal point, of interest in planning for a particular organisation or a local community, may transfer limited lessons in a different environment. Finally, the prominent role that private consultancy firms play in guiding scenario development processes may lower the motivation for transparency in terms of sharing techniques and outputs. To counter the limited diffusion of knowledge about the application of foresight techniques on the African continent in the past, the South African node of the UNU Millennium Project has recently spearheaded an initiative to offer a web-based knowledge platform for fostering greater transparency and collaboration in the use of methods of futures analysis in Africa.[2]

Even with existing deficits in terms of transferring the results of prospective exercises in Africa into the public domain, there are several prominent examples of applications of the methods addressing questions of public interest at national, regional, and continental levels of analysis. In partnership with the United Nations Development Programme, and under the guidance of the African Futures Institute, several African countries launched long-term prospective studies from the early 1990s onward designed to contribute to planning processes on how to achieve development goals.[3] While the institute has pointed to instances where the results from consultative processes have been fed into strategy development at the national level, there are also numerous examples where the institute has reported that either the long-term studies themselves or the dissemination processes have been disrupted by political instability.

South Africa has provided especially fertile ground for the use of foresight techniques. Apart from the notable use of public interest scenarios during the transition to democratic rule mentioned above, the South African government has maintained a place for foresight at a high level of policy planning, featuring a future strategy unit in the Office of the President, making it one of a relatively small number of countries to make such a commitment to foresight (Day et al. 2009). Scenarios continue to be used as a tool for creating dialogue at a national level on the future of the country. The Dinokeng scenario process, which brought together governmental actors, private sector and civil society representatives, and researchers to take stock of achievements since 1994 and to examine political choices facing the country, was completed in 2009 and represents an extension of previous work using qualitative scenarios to examine broad dynamics within the country.[4]

Over the last decade, the Society for International Development (SID) has conducted several qualitative exploratory scenario exercises in East African countries (Institute of Economic Affairs and SID 2000; SID 2003; 2004). These initiatives have had a similar orientation, focusing on the identification of forces influencing the current state of the countries, forces shaping the future, and highlighting challenges and corridors for political action lying ahead. The scenarios they produced were viewed as a way of charting common ground and offering visions for the future in diverse societies. The country-level scenarios also informed a process of scenario development at the regional level, conducted against the backdrop of movement toward economic and political integration in East Africa (SID 2008), signalling the complementary quality that scenario analyses at different levels of analysis may have.

At the continental level, another recent scenario building effort of note is a UNAIDS initiative preparing scenarios on the future of AIDS in Africa with support from scenario planners at Shell International and carried out in partnership with a variety of international development agencies. Consistent with the Shell approach to qualitative scenario building, the scenarios the project produced were informed by a background analysis of the contemporary scale of the AIDS crisis, the assessment of uncertain forces driving change, and an examination of the continuum of outcomes that might be associated with central drivers identified. The exercise was completed following an 18-month process including consultations with more than 150 individuals and supplementary background research (UNAIDS 2005). The participatory orientation of scenario building initiatives in this tradition reflects the assumption that including a diversity of voices within a scenario development process can increase prospects for imaginative thinking, as knowledge collected from a single viewpoint may offer a narrower lens to interpret possible developments (Blasche 2006). As in other qualitative scenario development exercises, the organisers of the process viewed the framing of future challenges as a central goal.

2.4 Limitations of Scenario Methods and Assessment Criteria

Before outlining the manner in which the scenario analysis tradition has guided the organisation of the present study, it is useful to highlight some cautionary notes about using scenarios. For many practitioners of scenario methods, there is an automatic carefulness built into their analyses stemming from the modesty of stated goals of scenario analysis initiatives and the acknowledgement of the fictional quality of the scenarios themselves. Even when the purposes of applying scenario techniques are clearly framed in terms of enlarging perspectives, opening reflection, and identifying future challenges, some scenario users may be tempted to interpret the output as a deterministic representation of the future, which may in turn lead them to misinterpret possibilities, countering the goal of scenario development in expanding flexibility in thought and an ability to adapt to a changing external environment. This underlines the importance of emphasising the limited scope of goals of scenario analysis in disseminating research findings and including an introduction to orienting principles of the method whenever scenarios are presented. The limited objectives that scenario analyses are designed to address also present an argument for continuing to employ a variety of other research methods to complement the knowledge that can be generated through the use of scenarios.

Assessments of the utility of scenario analysis methods have suggested that there is limited evidence of their actual effectiveness. In addition to the literature referenced above, which outlines justifications for using the method, there have been some studies of specific applications that have been deemed successful, however research on the impact of scenarios in contributing to improvements in organisational performance has in general been restricted in scope (European Environmental Agency 2009). Rather than presenting a strong statement on the effectiveness or ineffectiveness of scenario methods, the review of global and European scenario studies relevant to environmental policymaking by Greeuw et al. (2000) lists several weaknesses that scenario analyses have commonly displayed. These include insufficient integration of multiple viewpoints, inadequate differentiation between scenarios, the limited incorporation of discontinuities into storylines, and the presentation of overly vague policy recommendations. The difficulty in giving a verdict on the usefulness of scenario analyses is undoubtedly related to the diversity of the goals of individual exercises, differing levels of analysis across scenario initiatives, and variations in the techniques that are used to create scenarios.

As the shortcomings in scenario analyses identified by Greeuw et al. indicate, scenarios can be evaluated in terms of both how the process leading to their creation is organised and what the qualities of the end product are. If scenarios are likened to theories, it follows that criteria used to evaluate the quality of theories can also inform assessments of scenarios. Kosow and Gaßner (2008) indicate that two key criteria for assessing scenarios are their consistency and plausibility. On the one hand, scenarios should unfold with a logic that is internally consistent: they should not contain contradictory elements. On the other hand they should be plausible. Outlining the steps leading to the distant future is a way of ensuring that leaps in logic are avoided. Building storylines around developments related to core drivers of change should also make scenarios more believable. The scenario construction process itself can be evaluated on the basis of its transparency. In this respect, there is little difference between scenario analysis and other research methods. Obtaining an overview of the steps that have been followed to produce knowledge is a way for external observers to evaluate the validity of the end product.

2.5 Africa towards 2030 Process Overview

Given the limitations that have been identified above with regard to the use of scenarios as standalone research products as well as practical limitations in using scenario analysis to address a broad research question, the material presented in this volume places greater weight on analyses of core drivers of change than on the scenarios for the future presented in Chapter 10. The key elements of the process of scenario construction that are outlined in the literature on qualitative exploratory scenarios are nevertheless used as a guide for this study. An underlying assumption is that scenario approaches offer general lessons about how to adopt a forward-looking orientation and structure thinking about the future in a variety of contexts. The main components of the approach that can inform speculation on the future include caution in accepting that the future will mirror the past, attention to identifying important underlying forces that can strongly influence future developments, and outlining the uncertainties that provide clues on the range of potential outcomes.

An initial stage of the research process included exploratory interviews with development policymakers to identify the important decisions facing aid agencies that a study of long-term change in the external environment might help to inform, and to gather tacit knowledge from practitioners regarding predictable and unpredictable tendencies in the development landscape. These interviews provided the background for the discussion in the introductory chapter of this volume that outlines key issues that European donors will have to come to terms with in the near future, with determinations on the basic orientations of development policy and on the organisation of aid systems given special emphasis. At the same time, these policymakers offered some indications of the kinds of features of the development setting that could be considered more predictable or uncertain. The continuing differentiation of developing countries, the persistence of resource scarcity and potential for increased conflict over natural resources, and demographic change were commonly identified as predictable elements of the development landscape, while the scale and nature of the effects of climate change and the future role of actors such as the United States and Russia were considered more uncertain.

To narrow the focus of the exercise, a one-and-a-half day workshop involving some 20 (primarily European) development researchers was convened early in 2009 to identify and assess drivers of change in the African development landscape. Following discussions of assumptions concerning the state of African development and European development cooperation, workshop participants were divided into small groups to name influential drivers of change and to raise open questions and uncertainties related to these drivers. In exchanging thoughts on the relevance of particular drivers in a group setting, the factors that seem intuitively more important to participants are brought to light and there is an opportunity to explain why these factors could have a determining influence over future developments in the face of possible disagreements with other participants. During this workshop, three small groups working independently produced complementary lists of key drivers. For one group, the role of new actors in diversifying sources of development finance, climate change, demographic forces, the global governance structure and nature of the global financial system, the development of information and alternative energy technologies, and the process of European integration itself were highlighted as drivers. For a second group, climate change, land use, new actors in international development, population growth, and the role of the African diaspora were placed in the spotlight. A third group further underscored the importance of demographic change, while also emphasising that global economic forces and political developments in Africa would be determining forces.

These group discussions provided the basis for a consolidated list of drivers of change, and workshop participants were asked to vote for the most important drivers on the list in order to furnish the overall group assessment.

The six drivers that were prioritised as a result of this voting process were demography, climate change, technological change, new actors in international development, internal political transformation in African states, and global governance, providing an agenda for the continuation of the research process. In examining the prioritised list of drivers, concern was expressed that the selected drivers too strongly related to exogenous influences on African development rather than reflecting the importance of internal dynamics of change within Africa. This orientation may seem logical given that the research project itself has been conceived from the perspective of informing European development cooperation, which comprises a set of external levers for change. At the same time, as many of the chapters in this volume analysing the individual drivers in more depth indicate, understanding how exogenous forces could shape the future development landscape often requires a consideration of how they interact with endogenously determined forces. For example, while climate change may be perceived as an exogenous driver because economies outside of the African continent bear the overwhelming responsibility for greenhouse gas emissions, how climate change affects Africa's future will depend on the adaptive capacities of African governments.

This critique of the list of drivers selected points to potential bias related to the composition of a group involved in future-oriented studies with a participatory component. As suggested above, the divergent personal and disciplinary backgrounds that individuals have can colour their understandings of how the future could unfold. The prospect that such biases can influence interpretations of what factors are important in answering a particular research question is hardly unique to future studies, however. In discussing sources of conflict in West African countries, for example, Hutchful and Aning (2004) argue that popular frameworks used by Western scholars to interpret African conflicts and their causes informed by rational choice theory and statistical analyses have tended to underline the importance of economic variables while underplaying the role of forces such as identity, social exclusion, or local political history in contributing to the emergence of conflict.

In order to incorporate additional lenses on the forces shaping Africa's future into the project, thirty individuals were interviewed in Accra and Addis Ababa in May 2009. Representatives of the donor community as well as researchers with a variety of thematic interests were asked exploratory questions similar to those raised in earlier interviews in Europe and in the context of the workshop on drivers of change. In part, these interviews emphasised themes that had already been brought to light in earlier stages of the research process. The high salience of demographic change was underlined, with interviewees noting the challenges that population growth might pose for natural resource use, food security, and the long-term success of development projects, while highlighting that demographic issues had been neglected by the donor community because of their perceived political sensibility. The relevance of external actors as a force for change on the continent was also underscored. While the influence of a variety of international actors, including the United States, Europe, Latin American, Middle Eastern, and Asian countries were judged to be important, the increasingly prominent role of China on the continent was more consistently mentioned across the interviews. Both the positive elements of Chinese engagement, such as the provision of additional development financing and investment in infrastructure, and negative elements, such as the possible impacts on labour and environmental standards or support for authoritarian regimes, were emphasised in this context.

The dynamics of political change on a national and regional level received more attention in the interviews in Africa than at previous stages of the research process. As Meyer suggests in his contribution to this volume (Chapter 7), relations with aid donors add a layer of complexity to the African political landscape by creating alternative systems of accountability. For European observers, the political relationships embedded in development cooperation partnerships may draw attention away from political processes in African countries themselves. In discussing prospects for political change, interviewees in Africa identified several types of political actors that for their part might contribute to strengthening domestic accountability systems to support governance improvements. Civil society organisations, young people, a returning African diaspora, African parliaments, or enlightened members of the political elite were among the categories of actors listed as potential sources of increased demand for more robust representative political systems within Africa. The quality of leadership and the ability of leaders to articulate a stronger vision for the future were also mentioned as important in understanding the continent's prospects.

Overall, these interviews revealed some shifts in emphasis in thinking about what drivers of change would be most important in determining the shape of Africa's future. While internal political developments featured more prominently in the interviews than in previous discussions, the role of demography, new actors, and climate change had similar prominence, and the issues of technological change and global governance processes received less attention in comparison. Even with these differences in emphasis, the interviews suggested that the main drivers selected for study in the previous workshop were representative of several key dimensions of change. In this study the focus on a relatively small number of main driving forces offers a path to analytical simplification, though it is apparent that many other variables will also have some influence over the future direction taken by African countries and by the continent as a whole.

In line with the emphasis in the scenario analysis tradition placed on an analysis of key drivers of change, the six core chapters in this book present in-depth treatments of how individual drivers could shape the future of the

African development landscape. These chapters were structured around a common set of questions. The authors were first asked to provide a background assessment on the linkage between the driver and development outcomes, and a description of how the driver is currently affecting African development, making note of possible variations among sub-regions or countries on the continent. In order to provide an indication of the different directions of influence that a particular driver might have, authors were also asked to discuss the underlying forces that are important in understanding the driver's future impact and to identify uncertainties that make it difficult to predict the direction of the influence of this driver in the future. The analysis of uncertainties in the chapters provides a basis for generalised pictures of how each driver might influence African development outcomes in the long term. Each chapter therefore presents a range of possible outcomes linked to alternative ways of conceiving the future influence of the individual drivers.

From the chapters, it is clear that there is some variation across the driver studies in terms of what type of information about possible developments relevant to a particular driver is already available. The chapters on demographic change and climate change reference existing projections on medium- and long-term change, while the chapters on new actors in international development and global governance cannot draw on similar types of existing analyses due to the nature of the topics studied. Yet even with the themes where the scientific basis for making judgements about the future seems to be more solid, uncertainties remain. These uncertainties may relate to possible interaction effects with other variables or to still incomplete knowledge about possible impacts at different levels of analysis.

The uncertainties and possible trajectories identified in Chapters 4 through 9 in this volume underpin the construction of the more generalised scenarios for Africa's future that follow in Chapter 10. The scenarios are thus designed to fulfil a synthesis role in the overall analysis, identifying common themes across the studies on key drivers written by researchers with diverse disciplinary vantage points. In taking main messages from the chapters on drivers and aggregating them in generalised narratives of the future, some of the richness in explanation associated with the narrower thematic treatment of Africa's future is lost. However, bringing these messages together is also necessary in order to emphasise the multidimensional quality of change.

Prior to their finalisation, the scenarios were reviewed in two stages. A first stage involved a workshop in Johannesburg in December 2009, where drafts of the scenarios were presented to a small group of researchers. The aim of the workshop was to expose both the general 'picture of the present' offered as a background element for scenario development and the logics of the scenarios themselves to critical review. The researchers evaluated the plausibility of the scenarios presented and outlined a variety of critical questions related to their underlying assumptions. In the process of commenting on the initial scenario outlines, the workshop participants offered their own interpretations about possible futures for the continent, supplying additional input for the development of more complete scenario narratives. A second stage of review involved incorporating written feedback from a limited number of individuals who had previously participated in the project. The scenarios presented in Chapter 10 are designed to be illustrative of possibilities rather than indicative of a definitive trajectory tracing Africa's future. They are intended to provide readers with a picture of alternative outcomes that can be compared with their own assumptions about where the continent is headed.

2.6 Conclusion

This chapter has provided a general introduction to the exploratory scenario analysis tradition and outlined how it has informed the chapters that follow. Advocates of scenario analysis underline that the approach offers a vehicle for stimulating creative thinking about the future, while accepting the limitations in the approach in outlining with certainty what the future will look like. Indeed, in contrast to other approaches, scenario analysis distinguishes itself by placing uncertainty at the centre of analysis, providing its practitioners with the freedom to paint a variety of pictures of alternative outcomes. The focus on exploration rather than prediction is important to emphasise in this context. The chapters that follow are faithful to the spirit of exploration that is inherent in the scenario endeavour. While they are grounded in the analysis of underlying forces for change, they also present open-ended conclusions about the future that readers should view as an invitation for reflection.

Notes

1. The material presented in this chapter draws heavily on the overview of scenario analysis methods appearing in Lundsgaarde (2008).
2. More information about this initiative is available at the platform's web address: http://www.foresightfordevelopment.org
3. A summary of the work of the African Futures Institute can be found at: http://www.africanfutures.org
4. See http://www.dinokengscenarios.co.za/ for more information on the DINOKENG scenarios

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3
Mapping Development Trends in Africa

Erik Lundsgaarde and Marthe Roch

To analyse possible futures of African development, it is necessary to provide a contextual starting point. This chapter presents a descriptive overview of the current state of the African continent as a background to the exploration of its future. Just as it can be useful to discuss possible *futures* of African development, it can also be helpful to outline the continent's current *states*. Numerous narratives about the contemporary state of Africa can be fashioned depending on the region or thematic area where emphasis is placed. The storyline is naturally different if one focuses on Côte d'Ivoire or Ghana, Botswana or Zimbabwe, extractive industries or mobile telephony, or government or the arts. Is Africa mired in instability and weak governance, struggling to confront basic economic and social development challenges, or is Africa a continent making progress in managing external and internal pressures and assuming an increasingly important role in the global political economy? As the spotlight shifts, so too can the answers to these questions.

The availability of multiple narratives in the present reflects the vastness and the diversity of the African continent itself. The African landmass covers 30 million square km, an area approximately 12 times the size of the European Union, featuring 53 states of variable sizes, resource endowments, and economic fortunes.[1] The largest countries in area – Sudan, Algeria, and the Democratic Republic of the Congo – are individually as big as the Euro area, while the smallest (Seychelles or Sao Tome and Principe) are no larger than Luxembourg. Fifteen countries are landlocked and six African states are surrounded entirely by oceans. National populations range in size from 144 million inhabitants in Nigeria to 87,000 in the Seychelles (World Bank 2008). In terms of wealth, there is a large difference between Equatorial Guinea, where the gross national income (GNI) per capita was $14,980 in 2008, and Burundi, where average national income reached just $140 in the same year (World Bank 2009d). A host of geographical, cultural, and political differences could be added to this short list to underline further intra-regional variations.

Acknowledging this diversity is an obligatory starting point for any volume on African development (Moss 2007). At the same time, the exploration of general trends can provide a picture of what sets Africa apart from other regions of the world and orient development cooperation strategies towards the continent as a whole. While the depiction of development trends in this chapter outlines variations across countries and sub-regions where appropriate, its main purpose is to present a broad summary of the backdrop against which Africa's future development will unfold. The chapter focuses on three key dimensions of the contextual setting (the economic setting, the political setting, and the environmental setting), drawing extensively on data compiled by major international organisations.[2]

3.1 The Economic Setting

A first basic building block in assembling a picture of contemporary Africa is the general economic context. This section discusses the nature of economic relations between African states and the rest of the world, the structure of African economies themselves, and basic measures of the status of economic development.

3.1.1 International Trade Patterns

Africa is often justifiably characterised as a continent that is marginalised in the world economy, and its share of overall world trade remains low: in 2008, the continent accounted for just 3.5 per cent of global exports and 2.9 per cent of global imports (WTO 2009). While the 1990s were a period of stagnation in Africa's economic relations with the rest of the world, in recent years, there have been signs of growing commercial dynamism. Between 2000 and 2008, growth in African exports outpaced growth in exports in other world regions except the Middle East, which had a similarly high average growth rate of 18 per cent in this period (WTO 2009).

Rising export values in the last decade were driven especially by growing world demand for commodities, and fuels and mining products continue to account for the lion's share of exports from the continent, representing 70 per cent of exports in 2008 (WTO 2009). Recent trends in foreign direct investment (FDI) have reflected the commodity emphasis in Africa's export portfolio, with states rich in oil and natural gas receiving more attention from international investors, though leading investment destinations such as Egypt and Morocco have also succeeded in attracting a more diversified investment portfolio. The diversification of trade and investment remains a challenge for most African economies (UNCTAD 2008).

African trade and investment relationships have traditionally been concentrated in Europe and the United States, and the EU and the United States still serve as the destination for more than 50 per cent of all African exports (Figure 3.1). However, the importance of the EU as Africa's main

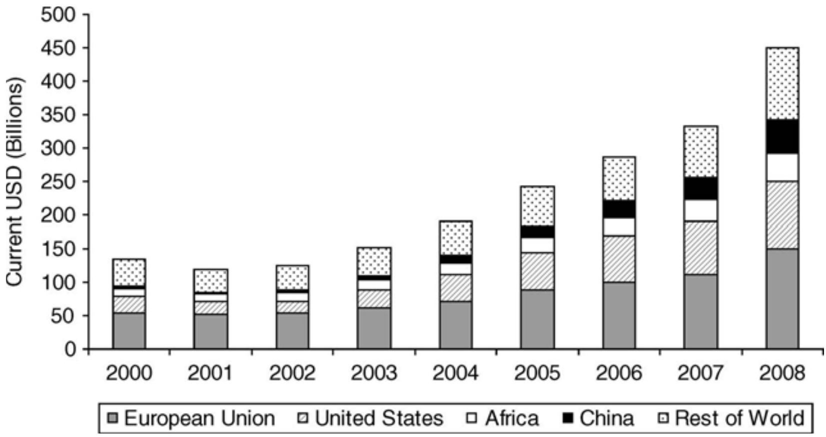

Figure 3.1 African Export Volumes and Major Trading Partners (2000–2008)

Source: IMF (2008). The Direction of Trade Statistics at IMF provides export data in nominal figures in millions of US dollars. So reported export values by national governments are converted at the IMF according to the most current national exchange rates into dollars that are available. But this data does not take inflation of the US dollar into account.

trading partner has decreased since 1990. At the same time, developing Asia has become a more important trading partner. Trade with China in particular has represented a rising share of African trade flows since 2000. In 2008, African countries exported more to China (13 per cent) than to other African countries. China is even more important as a source of imports: it now surpasses the United States in terms of the value of its exports to the continent (IMF 2008).

While the value of intra-African trade has also expanded in recent years, it remains modest in comparison to trade with other world regions. The level of intra-regional trade on the continent is also low in comparison to intra-regional trade within other world regions. For example, while an average of 46 per cent of exports within developing Asia were intra-regional between 2004 and 2006, the figure for Africa in the same period was just 9 per cent (UNCTAD 2009). Within Africa, the main pole for exports is South Africa, accounting for some 25 per cent of intra-African exports, which reflects the important role that emerging powers play in the intra-African trade structure. Obstacles limiting the expansion of intra-regional trade include the small size of most African economies, poor infrastructure, and political factors like corruption, unfavourable economic policies, and political tensions (UNCTAD 2009).

The scale of intra-regional trade is not uniform across the continent. Since the 1990s, more than 15 per cent of the trade in the East African Community

(EAC) has taken place among members of this regional grouping, while the intra-regional trade share has been lowest in the Central African states that are members of the Economic Community of Central African States (ECCAS), where only 2 per cent of trade was intra-regional between 1990 and 2006 (World Bank 2009a). For some African states, however, neighbouring countries provide the most important markets. Swaziland and Djibouti both export more than 80 per cent of total exports to other African countries and more than 60 per cent of Togolese and Malian exports are destined for Africa. At the same time, there are states (including major oil exporters) which send less than 2 per cent of total exports to other African countries and find major trading partners elsewhere. As an example, about 79 per cent of Chadian exports go to the United States, while Asia receives around 76 per cent of Sudanese exports (UNCTAD 2009). Trade within the African continent tends to be more diversified than trade between Africa and the rest of the world, with manufactured goods representing almost one half of intra-African exports. Hence, the expansion of intra-African trade could be especially beneficial in terms of diversifying production in African countries (UNCTAD 2009).

3.1.2 The Scale of Development Assistance

Development assistance represents another important dimension of African states' international economic relations. In 2007, countries on the African continent received close to $39 billion in aid from Organisation for Economic Co-operation and Development (OECD) donor countries out of a total of $104 billion in Official Development Assistance (ODA) disbursed by this group of donors (OECD 2009b). Aid to Africa has had an especially prominent place in the giving profiles of many European donors. About half of aid from EU states within the OECD Development Assistance Committee (DAC) went to sub-Saharan Africa alone in 2007, while for some individual donors this figure is even higher. For example, the Netherlands and the United Kingdom distributed more than 60 per cent of their development assistance to sub-Saharan Africa in 2007, while Belgium sent 74 per cent of its aid in this direction (OECD 2009a). Among DAC donors, Ireland had the strongest Africa focus in its aid profile, with aid to sub-Saharan Africa representing more than 80 per cent of its total. Within the EU, France provided the most development assistance in absolute terms to sub-Saharan Africa in 2007 ($4.2 billion), followed closely by the United Kingdom ($4.1 billion), with Germany providing some $2.8 billion in aid to the continent in the same period. Aid from the United States surpassed $5 billion in 2007 (OECD 2009a). As the chapter by Grimm and He (Chapter 8) in this volume indicates, the rise of emerging powers as aid providers has also been a notable feature of the aid landscape in recent years.

Aid to Africa increased significantly in the past decade (see Figure 3.2). This trend, attributable to debt relief commitments made at the end of the

1990s as well as development financing pledges made by donors at the start of the new millennium, has been driven by aid increases to sub-Saharan African countries especially. While the volume of aid to North African countries has been stable over the past two decades, per capita aid to this region has decreased over time (see Figure 3.3). In line with overall funding increases, and in spite of high population growth, per capita aid to sub-Saharan African countries rose from \$20 per capita in 2000 to almost \$50 per capita in 2006 (World Bank 2009b). In 2007, Tanzania, Ethiopia, Sudan, Nigeria, Cameroon, Mozambique, and Uganda received the largest volumes of aid, while Equatorial Guinea, Libya, and the Seychelles received the least (OECD 2009b). The island states, the Seychelles, Cape Verde, and Sao Tome and Principe, along with Cameroon and Zambia had the highest per capita receipts in 2007, surpassing \$100 per capita. In contrast, larger economies such as Angola, Algeria, Egypt, and Libya received the least amount of aid per capita (roughly \$10 per inhabitant) (World Bank 2009b).

If development assistance is often viewed as a useful vehicle for financing underserved needs and promoting reform, scholars have also noted that aid dependence can serve as a barrier to institutional development because it can provide incentives for leaders to be less responsive to domestic accountability systems and less motivated in mobilising domestic resources for development (Bräutigam and Knack 2004; Moss et al. 2008). Aid dependency is generally measured by ODA volume as a share of GNI or as a share of general government expenditure. In general, aid dependency ratios are higher in sub-Saharan Africa than in other regions of the world, and they increased

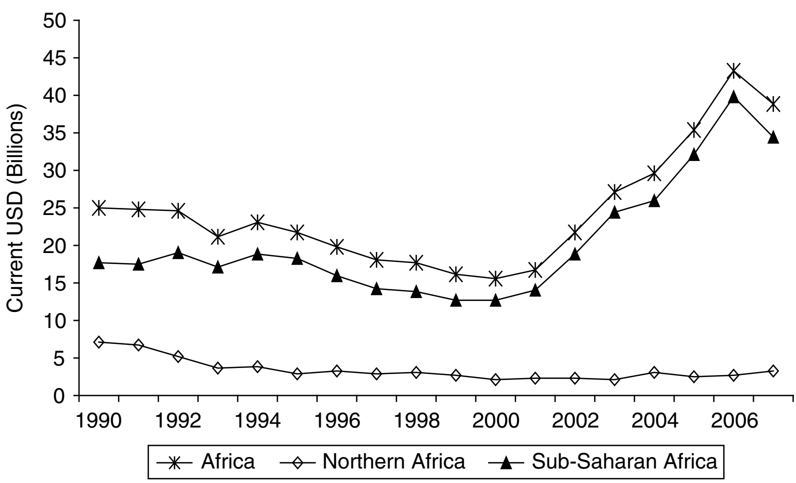

Figure 3.2 Aid to Africa (ODA disbursements from all donors to Africa)
Source: OECD (2009b).

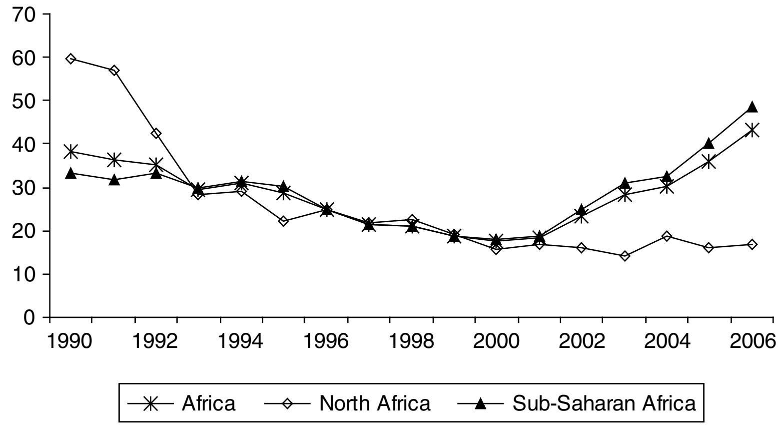

Figure 3.3 Per Capita Aid to Africa (1990–2007)
Source: World Bank (2009b).

in the 1980s (World Bank 2009c).[3] In 2007, weak states like Liberia and Burundi, for whom foreign aid amounted to about 50 per cent of GNI, were the most aid dependent on the continent. In the Republic of Congo, Guinea-Bissau, Mozambique, the Democratic Republic of Congo, and Rwanda, aid receipts also accounted for more than 20 per cent of GNI. Large economies like Algeria, Libya, and South Africa are Africa's least aid dependent countries, with aid representing less than 5 per cent of GNI (World Bank 2008).[4]

3.1.3 Economic Growth, Commodities, and Agriculture

Economic growth rates are a common measure of overall economic performance. In recent years, the growth rates of African economies have exceeded growth rates within the OECD donor community. In spite of a slowdown in the global economy, African GDP grew at an average of 4.8 per cent between 2000 and 2005 and achieved 6 per cent growth in the years since. As a region, Western Africa experienced the highest rate of growth after the new millennium (7.1 per cent between 2000 and 2005), though Eastern and Southern Africa have attained the highest growth rates in the most recent years (AfDB and OECD 2009). Although the recent global financial crisis was expected to have a more limited impact on Africa than on other world regions due Africa's limited integration into the global economy, the region has also witnessed slower growth in the aftermath of the crisis, with effects stemming from a variety of sources including declining trade and development finance flows (AfDB 2009).

Mirroring the trade trends outlined above, economic growth has been driven especially by commodity price increases, an important source of wealth for African economies. African oil production represents about

12 per cent of the world total, while large producers such as Algeria and Mozambique have helped Africa to capture an 18 per cent share of world production of natural gas. With 30 per cent of the world's minerals, 40 per cent of its gold, 60 per cent of its cobalt, and 90 per cent of its platinum, the African continent is an even more important source for a variety of precious minerals (AfDB 2007). If these natural riches have generated income, resource plenty has also been labelled a 'curse', given the observed relationship between resource availability and limited domestic savings, higher inequality, poor human capital development, authoritarian government, and conflict (AfDB 2007). Dropping international demand for commodities contributed to lower growth rates in 2009 (2.8 per cent for the continent as a whole compared to 5.7 per cent in 2008), though International Monetary Fund (IMF) estimates expected a rebound already in 2010 (AfDB and OECD 2009).

Although the sensitivity to changing commodity prices has made many African economies vulnerable to international economic downturns, the dependence of a large share (60 per cent) of Africa's population on domestic food production potentially limits their vulnerability to external shocks (AfDB and OECD 2009). Nevertheless, the recent financial crisis has had a negative effect on food security because it has made it more difficult for food-importing countries to purchase food from abroad. As Ng and Aksoy (2008) have indicated, while it is accurate to portray the majority of sub-Saharan African countries as net food importers, it is also accurate to note that net agricultural exporters are in the majority, indicating that small shifts in emphasis in the cultivation of food crops versus other agricultural products could lead to improvements in food security.

Agriculture plays a pivotal role in the domestic economies of many African states. In sub-Saharan Africa, agricultural production has been estimated to represent around 30 per cent of gross national product (GDP) and some 40 per cent of the value of exports (Zimmermann et al. 2009). The importance of agriculture is even more pronounced in countries such as the Central African Republic, Guinea-Bissau, or Liberia, where the agricultural sector provided more than 50 per cent of GDP in 2005, or Ethiopia, Tanzania, the DRC, and Sierra Leone where the corresponding figures surpassed 40 per cent. While agriculture accounts for more than 20 per cent of economic output in half of the states on the African continent, it generally plays a larger role in the economies of Western and Eastern African countries (where agriculture's share of the economy surpassed 30 per cent in 2005), than in Central Africa (21 per cent on average), or in Southern and Northern African countries, where the agricultural sector represented an average of 15 and 12 per cent of economic output, respectively (World Bank 2008). As a point of contrast, agricultural production represents only about 3 per cent of economic output in the world as a whole (World Bank 2008).

The importance of agriculture in African economies is also evident from available employment figures. Between 2000 and 2006, for example, 80 per cent of Tanzanian and Ethiopian workers were employed in the agricultural sector, while for Madagascar the figure was 78 per cent and more than 60 per cent in Uganda and Burkina Faso. Even in Morocco, where the sector accounts for only 13 per cent of GDP, it accounts for 44 per cent of total employment. In South Africa and Mauritius, however, only 10 per cent of the workforce is engaged in agricultural work (World Bank 2009a). Agriculture also represents an especially important sector for women's employment. In sub-Saharan Africa, 64 per cent of women's employment is in agriculture, contributing to a relatively high level of female representation in the labour force, as 55 per cent of working age women are employed (UN 2009). Many agricultural workers are self-employed farmers working outside of the formal economy.

Important differences exist with respect to male and female participation in the agricultural sector. Where men tend to be engaged in the production of cash crops to a greater degree (maize, cotton, coffee etc.), women tend to play a larger role in the production of food crops (e.g. vegetables) that are used for domestic consumption. As a result, women's agricultural work has a lower income generation potential. Limited access to land title also restricts economic opportunities for women related to agricultural production (Agboli 2007; Hampel-Milagrosa 2008). The persistence of discrimination against women regarding property rights has numerous sources, which may relate to gender bias in customary law or discriminatory legislation. Even in cases where women's land rights have been written into law, the implementation of such provisions remains difficult in rural areas (Cotula et al. 2004).

3.1.4 Social Development Indicators

An overview of social development indicators helps to complete the picture of the state of African economies today. In spite of the overall economic gains that many African states have registered in the course of the last decade, the continent continues to face special challenges in this respect. Half of Africa's population still lives in extreme poverty. Whereas absolute income poverty in North Africa is only a marginal problem, in sub-Saharan Africa the proportion of people living with less than $1.25 a day reached 58 per cent in 1999 and has decreased only slightly since the turn of the millennium, reaching 51 per cent in 2005.[5] Elsewhere in the developing world, the average proportion of people living under the poverty line decreased from 45 to 27 per cent in the same period, due especially to Chinese progress in reducing poverty (UN 2009). Hunger in sub-Saharan Africa has witnessed a slight decline since the 1990s, though the global food crisis in 2008 provoked a small reversal in this downward trend (UN 2009).

Between 2000 and 2007 more than 50 per cent of the population in 21 African countries lived under the poverty line of $1.25 a day and 75 per cent of the population in these countries survived on less than $2 per day. Available estimates suggest that Tanzania, Liberia, and Burundi had the highest share of individuals living in poverty within their borders (more than 80 per cent of the total population), followed closely by Rwanda, Mozambique, and Malawi, where more than 70 per cent lived in poverty. In contrast, less than 3 per cent of the populations of North African states like Morocco or Tunisia live under the poverty line (UN 2009).

The benefits of recent economic growth on the continent have not been distributed evenly. A high rate of income inequality is a particular feature of resource-rich countries and almost all countries in Southern Africa, including the economic engine of South Africa, which has a Gini index of over 50 (UNDP 2009).[6] The persistence of sharp inequalities poses challenges for achieving efficiency in resource allocation and production domestically, and has been identified as an impediment to institutional development related to the expansion of political opportunities (World Bank 2005). Hence, inequality is an important economic and political problem in addition to being a measure of social progress.

In addition to economic factors, levels of human development are also determined by education and health measures. With respect to the education targets put forward as part of the Millennium Development Goals, Africa has performed poorly. While the school enrollment rate has progressed about 15 per cent in recent years, sub-Saharan Africa has the lowest primary schooling ratio worldwide with only 73 enrollees per 100 children of primary education enrollment age in 2007. Northern African countries have performed better in achieving the enrollment target but still have low literacy rates with a proportion under 70 per cent of the youth population (UN 2009). The West African countries of Burkina Faso, Mali, and Niger, where fewer than 30 per cent of young people can read or write, have the lowest literacy rates, while the highest literacy rates are found in the Seychelles, Libya, and Zimbabwe (World Bank 2009b).

Current development trends in the health sector in sub-Saharan African countries paint a relatively dark picture. Average ratios for child mortality and maternal mortality are more than double the ratios in developing countries more broadly and there has been almost no progress in improving this situation since 1990. For example, in 2007 close to one in seven children died before their fifth birthday (UN 2009). Sub-Saharan Africa now accounts for half of all deaths among children under five. With about 265,000 maternal deaths every year, the region also records 50 per cent of all maternal deaths. The dire health care situation in sub-Saharan Africa is compounded by high levels of human immunodeficiency virus (HIV) prevalence. Two-thirds of individuals living with HIV are living in this world region and 59 per cent of these infected individuals are women (UN 2009).

In comparison, health figures for Northern Africa are all above the average of developing countries. Large differences in health care provision between Africa North and south of the Sahara reflect the sharp divide of the continent regarding levels of social development (see also Chapter 4). In 2008, the African average of life expectancy at birth was 54.3 years. However, the North African countries of Algeria, Egypt, Libya, Morocco, and Tunisia, along with Cape Verde and the Seychelles, had life expectancy rates exceeding 70 years, while average life expectancy was less than 40 years in countries with high HIV prevalence rates such as Botswana, Lesotho, Swaziland, Zambia, and Zimbabwe as well as in the Central African Republic (AfDB and OECD 2009).

Taken together, trends in income poverty, education, and health have contributed to a low level of human development in sub-Saharan Africa. Although the average score of the human development index (HDI) increased from 0.42 in 1995 to 0.5 in 2005, Africa south of the Sahara still has the lowest human development level of all world regions, as Figure 3.4 highlights.[7] Across the African continent, only Libya, the Seychelles, and Mauritius were ranked as highly developed in 2007. Half of African states were ranked as having medium levels of human development and 22 states were considered to have low levels of human development. Nearly all of the 24 states ranked in the lowest category are African countries, with Niger, Sierra Leone, and the Central African Republic having the lowest scores. In these states, social development remains a huge challenge, and there have been no significant changes at the bottom of the ranking table since 2000 (World Bank 2009b).

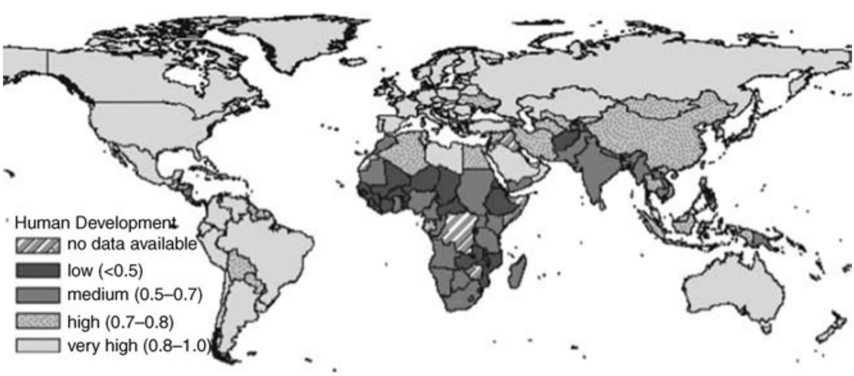

Figure 3.4 Human Development in Africa in International Comparison (2007)
Source of data: UNDP 2009 (own drawing).

3.2 The Political Setting

The following section provides an overview of the political backdrop against which Africa's future will unfurl. This discussion first surveys the landscape of continental and sub-regional institutions with economic and security mandates. It then identifies general tendencies in terms of how African states are organised. Trends in peace and conflict are outlined at the end of this section.

3.2.1 Recent Developments in Continental Governance

The African continent is home to a variety of intergovernmental organisations. At the continental level, all African states with the exception of Morocco are members of the African Union (AU), founded in 2002 as a result of the recasting of the Organization of African Unity (OAU), which had existed since 1963.[8] Built on the idea of pan-Africanism, the OAU was intended to form a political union of all independent states after their decolonisation. Until the 1990s however, there was minimal progress in strengthening regional cooperation and integration through this body. In the context of a broader global revival of regionalism in the 1990s (Bach 2005), the African Economic Community (AEC) was established in 1991 to foster the economic integration of the continent, and at the end of the 1990s, the pan-African idea of forming a political union was also renewed. The reform of the OAU to create a more powerful organisation to support the goal of coordinating and supporting economic and political integration at all levels throughout the continent (the AU) was an extension of these developments.

The renewed objectives of the AU now include improving the framework conditions for peace and security, development, and stability in Africa in addition to the mandate to deepen economic integration within the continent. Democratic governance and respect for human rights have been accepted as important guiding principles. The institutional structure of the AU consists of an African Commission, which is the central body for coordination, an Assembly of national heads of states and government, and an Executive Council, mainly composed of the national ministers of foreign affairs. In 2004 this structure was broadened to include a Pan-African Court of Justice and a Pan-African parliament as well as an Economic, Social, and Cultural Council to provide a mechanism for participation from civil society, but these institutions remain at a formative stage of development. In 2007, the AU had a budget of around $130 million, with about 75 per cent of member state contributions to the total budget being provided by the large states of Egypt, Algeria, Libya, Nigeria, and South Africa (Mehler et al. 2008). Budgetary difficulties related in part to the failure of some member states to pay their dues contribute to capacity constraints within the continental organisations.

In line with the broader move toward enhanced political organisation on the continent, the New Partnership for African Development (NEPAD) was created in 2001 with the aim of promoting economic development in Africa. Later placed under the umbrella of the AU, the NEPAD initiative underlined the importance of the principles of democracy and good governance to spur international confidence in Africa as a means of attracting foreign investment and strengthening cooperation with international partners. One new instrument that has been an outgrowth of the NEPAD process is the African Peer Review Mechanism (APRM), which aims to evaluate governance performance of African countries. In the APRM process, participating states are assessed in four thematic areas: democracy and good political governance, economic governance and management, corporate governance, and socio-economic development. The APRM distinguishes itself from other instruments to improve political structures and governance performance in Africa due to it being an African initiative with the principle of ownership at its core (Grimm and Nawrath 2007). Review country reports of Ghana, Kenya, Mauritius, Rwanda, and South Africa were completed in its early years of existence, and a majority of African states have now signed on to the initiative (Herbert and Gruzd 2008; Gruzd 2009).

The main task of the AU itself is coordinating integration processes within the variety of sub-regional organisations in Africa. A key characteristic of political organisation on the African continent is the existence of a plethora of organisations with overlapping memberships (UNCTAD 2009). The AU has recognised only eight African regional organisations as regional economic communities (RECs).[9] These RECs are important pillars of the AU and its politics, because while the AU defines strategies, the RECs have the task of implementing them on a sub-regional level.

The level of economic integration within the regional organisations recognised by the AU is relatively low. The majority are considered Free Trade Areas in principle, but only the EAC has been integrated into a customs union with a common external tariff for EAC members, while freedom of movement has been achieved only within ECOWAS. In contrast, within the UMA, CEN-SAD and IGAD, concrete integration objectives do not even exist or are often considered to have been ineffective (ECA 2006; ECA 2008; Soest 2008). Smaller regional organisations like the UEMOA in francophone West Africa, the Central African CEMAC, or the Southern African SACU are considered to be more integrated than the RECs. These organisations have made progress in forming customs unions with a common external tariff. The different levels of regional integration across these sub-regions represent an important barrier to the development of a common economic market on the entire African continent.

Alongside its economic mandate, the AU also provides an important focal point for regional security initiatives. With the creation of the AU, the long-accepted principle of non-interference in the domestic affairs of African countries was challenged by Article 4h of the Constitutive Act, which allows interventions in response to "grave circumstances, namely: war crimes, genocide and crimes against humanity" (AU 2002).[10] Nevertheless, inner-African cooperation on crisis management and conflict prevention issues is a relatively recent development. A new African Peace and Security Architecture (APSA) was established in 2004, which includes a Peace and Security Council, a Continental Early Warning System, and the African Standby Force that has a mandate to intervene in the event that mediation and other diplomatic efforts fail. Additionally, the ECOSOCC representing civil society has the task of monitoring and providing advice on security activities within the AU (Klingebiel et al. 2008).

Experiences from sub-regional security initiatives and from ECOWAS and its military instrument ECOMOG (ECOWAS Ceasefire Monitoring Group) have informed the development of the continental security architecture. ECOMOG operated for the first time as a Western African regional task force in the Liberian conflict at the beginning of the 1990s, and was later expanded to Sierra Leone. The ECOMOG mission, in which Nigeria played an especially important role, was the first sub-regional peacekeeping mission on the African continent and was generally considered to be a success. As a result, mechanisms developed in ECOWAS for regional crisis prevention and crisis management have been transplanted to the continental level (Hettmann 2004).

Outside of ECOWAS there has also been a general trend in extending mainly economically oriented mandates to political cooperation, conflict resolution and crisis management within sub-regional organisations. For instance, SADC created its Organ for Politics, Defence and Security (OPDS) in 1996, though the institution was restructured already in 2002 due to functional deficits. Objectives of the SADC security policy range from combating criminality and strengthening common values such as democracy and the respect of human rights to a common foreign and security policy. There is a broad consensus within SADC about regional cooperation in the case of an external threat. Disagreements between SADC members nevertheless persist with respect to interventions in domestic affairs. This problem has been evident in the recent case of the Zimbabwe crisis (Prys 2008; Flemes 2007).

Because the APSA institutions are young, it is difficult to evaluate the achievements of these continental security initiatives to date. Between 2003 and 2009, AU missions took place in Burundi (AMIB), Sudan (AMIS), and Somalia (AMISOM), and the peacekeeping mission in Sudan/Darfur was changed into a hybrid mission of UN and AU troops (UNAMID) in 2007 (Soder 2009). If it is difficult to evaluate the effects of the AU interventions, these initiatives nonetheless point to an emerging division of labour in continental peacekeeping, with AU peacekeeping missions financed by the international community but manned in large measure by African states.

The extent to which APSA could replace UN interventions in crisis prevention, conflict management, and peacekeeping situations in a more significant manner remains an open question.

3.2.2 Trends in Peace and Conflict

The emergence of the new African security architecture has occurred in an environment that can be considered to be more peaceful than in the past. According to the Uppsala Conflict Database Programme (UCDP), the number of African Countries in armed conflict was high in the 1990s, hovering around 15 states (see Figure 3.5).[11] The conflict situation had a peak with 10 wars and 6 more minor armed conflicts in 1998. At this time, Angola, Burundi, the Democratic Republic of Congo, Republic of Congo, Algeria, Eritrea, Ethiopia, Rwanda, Sudan, and Sierra Leone were at war, representing 70 per cent of total wars in the world (10 of 14). At the same time, minor armed conflicts were taking place in Egypt, Guinea-Bissau, Lesotho, Senegal, Chad, and Uganda. After 2000, the continent witnessed a decrease in conflict, with 6 countries in armed conflicts and no countries at war by 2005. In recent years, however, the number of countries in armed conflict has increased again, with 9 countries in armed conflict in 2006 and 10 in 2007. The conflicts in Sudan and Chad and the crisis in Somalia in 2007 were all identified as wars in those years.[12]

The UCDP classification is related to reported deaths in armed conflicts. In 2007, the most battle-related deaths were reported in Somalia with 1393, followed by 632 battle-related deaths in the Democratic Republic of Congo and 468 in Algeria. Countries with the highest average figures of

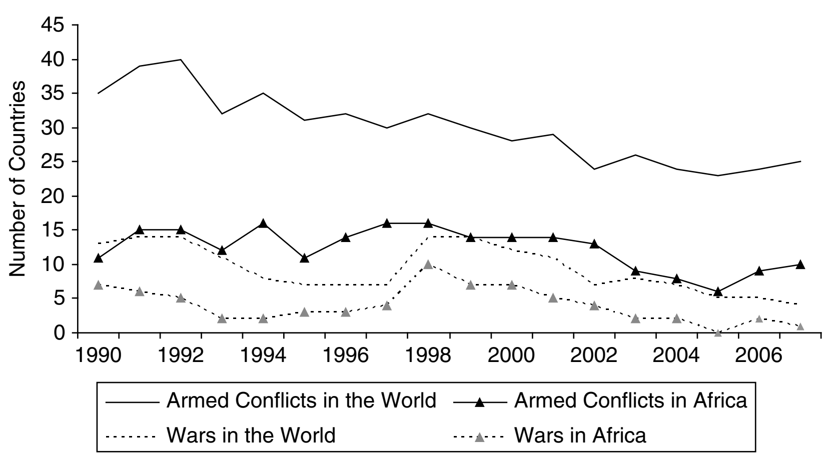

Figure 3.5 Numbers of Armed Conflicts in Africa and the World (1990–2007)
Source: UCDP / PRIO 2009: Uppsala Conflict Dataset.

battle-related deaths in last 5 years (2002–2007) are by far the Sudan with 8978 and Uganda with 4352 deaths. About 2000 battle-related deaths were reported in Burundi, Liberia, Somalia, Algeria, and Chad between 2002 and 2007. The number of battle-related deaths in African conflicts represented about one-quarter of battle-related deaths in all conflicts in the world between 2002 and 2007 (UCDP/PRIO 2009). These figures are indicative of the nature of insecurity facing populations in particular countries.

The human cost of conflict is greater than the number of people killed as a direct result of fighting. Between 1990 and 2005, about half of the world´s battle deaths were recorded in Africa. Yet, in situations of conflict far more people die from disease, starvation, malnutrition, and the breakdown of health services than from the direct effects of combat.[13] Thus, war deaths tend to be much higher. As the African Development Bank has estimated, with more than 5 million lives lost to date, the ongoing conflict in the Democratic Republic of Congo has been the world's most deadly conflict since the Second World War (AfDB 2008). Central Africa (Chad, Sudan, Democratic Republic of Congo) and the Horn of Africa (Somalia, Ethiopia) continue to be the regions on the continent where the majority of armed conflicts occur, though in the 1990s Western Africa was also a conflict hot spot.

In recent years almost all African conflicts have been intra-state rather than inter-state conflicts. An exception was the conflict between Eritrea and Ethiopia, which fought the last inter-state war in Africa in 2000. According to the African Development Bank, recent civil conflicts in Africa have typically involved a relatively small number of lightly armed rebel combatants. Conflicts are further characterised by a reliance on child soldiers and high civilian causalities. Primary commodities provide a source of financing for armed groups, which often acquire weapons from non-state actors (AfDB 2008).

While conflict has in general declined on the continent over time, an increasing trend in one-sided violence against civilians in armed conflicts has been noticeable since the early 1990s, as events in Somalia have for example demonstrated. A variety of armed actors have been responsible for this routine violence, including government forces and non-state actors. As a result, mass displacement caused by conflicts and one-sided violence has also increased. Fatalities from one-sided violence by states have nevertheless been in relative decline in the present decade in comparison to the 1990s (SIPRI 2009).

The overall decline in the number of major armed conflicts in Africa between 1999 and 2008 has been accompanied by a growth in peacekeeping operations on the continent. The number of peacekeeping personnel in Africa quadrupled in this period. Since the new millennium almost one-third of the globe's peacekeeping operations and 42 per cent of all peacekeeping personnel have been deployed in Africa, more than in any other region. Africa was also the region with the highest concentration of large operations, hosting five of the nine missions in 2008 with over 5000 personnel (Soder 2009). In 2008, close to 79,000 personnel were deployed in the 19 ongoing peace operations in Africa. Ten of these operations were conducted under the aegis of the United Nations; the European Union oversaw four operations, and the African Union two operations.[14] With an operation ongoing since 1991, Western Sahara is home to the longest-running peace mission on the continent, followed by the peace operation in the Democratic Republic of Congo, which was initiated in 1999. Providing forces for these missions has nevertheless been problematic. Overall, deployments in Africa fell 21 per cent short of the authorised levels in 2008. About 43 per cent of personnel deployed in Africa came from Africa and another 42 per cent from Asia. African countries that contribute significant numbers of personnel to peace operations worldwide include Nigeria, Rwanda, Ethiopia, Ghana, Egypt, Senegal, and South Africa (Soder 2009).

The general trend in declining conflict has also been evidenced in trends in military expenditures on the continent. In 2008, African military expenditures were estimated to have reached some $20.4 billion, but these expenditures still represent a very small share (less than 2 per cent) of global military expenditures. In general, Northern African countries spend more on their militaries than African countries south of Sahara. Algeria's spending increased by 18 per cent in real terms in 2008 to reach $5.2 billion, the highest in Africa, driven by strong economic growth and a growing insurgency (SIPRI 2009). Though the overall volume of military expenditures has recently increased, the African average of military expenditure as a share of GDP decreased in the late 1990s from 3 to 2.5 per cent and after 2000 to 2 per cent in 2007. As a result, Africa spends a smaller proportion of its GDP on militaries than the world or OECD averages (both are around 2.5 per cent) and the share of Northern African countries is higher than of its neighbours in sub-Saharan Africa. Countries at war, such as Eritrea (which spent more than 30 per cent of GDP on the military between 1998 and 2000) and Liberia (in the 1990s), have nevertheless allocated a much larger share of their resources to defence (World Bank 2008, 2009b).

While African military expenditures are comparatively low, the continent faces a growing challenge related to the distribution of small arms and light weapons. Though imports by African states are small in global comparison, representing 3 per cent of world transfers, supplies of small weapons have played a major role in the armed conflicts in the region in recent years. The availability of weapons contributes to instability and, in some cases, to high rates of violent crime (as in parts of South Africa and Nigeria, Mali, Chad, and Niger). Between 2004 and 2008 major importers included Algeria, Morocco, and Tunisia (Wezeman 2009).

3.2.3 State Fragility and Governance

Even if the overall picture of the African security context is one of declining conflict, many post-conflict countries are at risk of slipping back into conflict due to weak institutional capacity or low governance performance (AfDB 2008; European Report on Development 2009). An important general feature of the current African development landscape is the prevalence of state fragility.[15] Africa is home to the largest concentration of fragile states in the world, and this pattern has been unchanged in the last decade.[16] In 1995, for example, the State Fragility Index reported that 11 of 13 extremely fragile states worldwide were African, with the same figures holding for 2001 (Marshall and Cole 2008). In the last six years more than half of these states were able to modestly improve on measures of state fragility and were registered as highly fragile states in 2007. Angola and Burundi and the Western African states of Nigeria, Guinea, Liberia, and Sierra Leone have been recently characterised as highly fragile, while Somalia, Sudan, Chad, and the Democratic Republic of Congo have been characterised by extreme fragility for more than 12 years (Marshall and Cole 2008).

In contrast to a global trend of decreasing fragility, the mean score of the state fragility index in Africa remains the world's highest, and Africa witnessed the lowest level of net improvements in the 1995–2007 period. In contrast to the general stagnation in fragility ratings for the region, however, some countries (Togo, Angola, Equatorial Guinea, Liberia, Madagascar, and Uganda) became less 'fragile' over the 1995–2007 period. Mali experienced the largest net decrease in fragility in the world in this period (Marshall and Cole 2008).

Although this overview of state fragility on the African continent highlights persistent institutional weaknesses in many African states, the last two decades have been marked by the advance of processes of political transformation contributing to increased openness across the continent (Grimm and Klingebiel 2007). The Polity IV Project has charted a number of changes from autocratic to more pluralistic regimes in Africa since the 1990s.[17] The majority of African states continue to be classified as anocracies, however, meaning that they occupy a middle ground between autocratic and democratic government. Such regimes may be especially vulnerable to destabilising events, such as outbreaks of armed conflict, unexpected changes in leadership, or regime changes. As Figure 3.6 suggests, while the number of anocracies has consistently surpassed the number of autocracies or democracies in the past decade, the number of African democracies has continued to grow. Where only Mauritius, Botswana, Namibia, and Gambia were recorded as institutionalised democracies in 1991, in 2008, 20 African states were classified as such. This progression in democratic government has outweighed regression to authoritarian structures in places like Zimbabwe, Gambia or Congo-Brazzaville (Center for Systemic Peace 2009; Marshall and Cole 2008). In 2008, only Swaziland, Morocco, Libya, and Eritrea were still

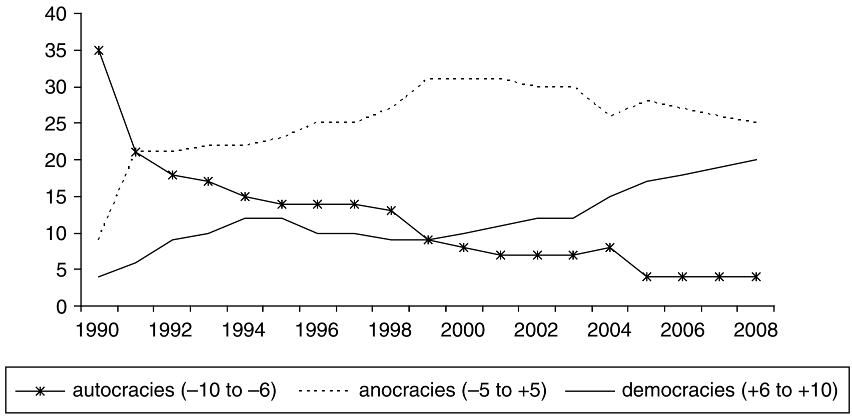

Figure 3.6 Political Regime Trends in Africa (Polity Score of African Countries 1990–2008)

Source: Center for Systemic Peace 2009: Polity IV Project Annual Time-Series 1800–2008.

classified as autocracies. Compared to other regions, however, the average ratings for African democracies are still poor and fall below the average for all developing countries.

The extent to which state structures embody principles of democratic government is only one quality of political organisation and governance. A high level of corruption and neo-patrimonial behaviour that often undermine formal democratic structures as well as the weakness of parliaments, low levels of legal security, the lack of decentralised decision-making structures and general underfunding (limited local tax revenues) have been identified as important sources of inefficiency in governmental institutions (see also the Chapter 7 by Meyer). In many African states, the legitimacy of the governmental system has also been challenged by religious or traditional ruling structures, especially on a local level with respect to land allocations or civil law. This implies that enforcing a monopoly of power remains difficult for many African states. While a complete collapse of state structures as in Somalia or Liberia continues to be the exception, a number of African countries are unable to enforce their power monopoly effectively (Nigeria, Sudan, Democratic Republic of Congo), and even in generally well-functioning countries (Kenya, Mali, Ghana) a state monopoly of power does not exist everywhere (Grimm and Klingebiel 2007).

3.3 The Environmental Setting

The final dimension of the African development landscape this chapter discusses relates to general features of the natural environment in which African populations live and work. As with other aspects of the portrait of Africa's current state discussed above, this section highlights both the constraints and opportunities presented by African geography. Geography can influence development prospects in various ways, with the isolation of key centres of economic activity from major markets and the greater health challenges emerging in tropical climates representing two of the most basic features in the African context (Naudé 2007). Given the diversity of ecosystems and climatic variation within Africa, advantages and barriers to development posed by the natural environment also vary significantly across the continent.

3.3.1 The Land

As noted above, many African economies are characterised by a heavy dependence on the agricultural sector, and the revenues generated from forestry, mining, and tourism further underline the link between land use and economic development. One of the basic features of Africa's geography is that two-thirds of the continent is desert or dry lands. Agricultural production is possible in many dry lands, though nearly three-quarters of these areas have already been degraded to some degree. For a number of African countries, the majority of agricultural lands lie in semi-arid regions. Countries experiencing these conditions include Sahelian states such as Burkina Faso, Mali, and Chad, and the Horn countries of Ethiopia, Eritrea, and Somalia. Subject to frequent and severe droughts, agricultural production in these regions has been hampered by advancing desertification, which has been identified as an important stressor in contributing to political instability and deteriorating social and economic conditions (UNCCD 2009).

Although 43 per cent of the African landmass is qualified as desert, the continent also contains significant forest resources, which cover about 21 per cent of Africa's total land area and represent 17 per cent of the world's total forest cover (AfDB 2007). Due to high rainfall and the geography of the Congo river basin, Central Africa has the second largest contiguous area of tropical rainforests in the world, making the region an important carbon sink (AfDB 2007). Outside of Central Africa, Angola, Sudan, Zambia, and Tanzania also possess substantial forest resources. Deforestation resulting from conversion of forests to farmland, urban development, and export-oriented commercial logging has nevertheless contributed to a degradation of forest ecosystems in recent decades (AfDB 2007; UNEP 2008). In the 2000–2005 period the net annual forest loss of the African continent was about 4 million hectares, or approximately 55 per cent of global deforestation. In absolute terms forest loss has been greatest in countries with more extensive forests, with Sudan, the DRC and Cameroon being examples. The countries with the highest deforestation rates (losing more than 1.5 per cent of their forests annually) have been Tanzania, Nigeria, Mauritania, and Zimbabwe, however (FAO 2008b).

3.3.2 Water Resources

Patterns of freshwater resource abundance are similar to forest cover patterns. Africa contains some ten per cent of the world's renewable freshwater resources. There are over 50 internationally shared river and lake basins on the continent, with the Nile holding the status as the most densely populated river basin, and Lake Chad, the Congo, and Niger River basins representing other important examples (UNEP 2006). In addition, the continent is home to some 40 transboundary aquifers, which provide both potential development opportunities and challenges for inter-state cooperation (Scheumann and Herrfahrt-Pähle 2008). The continent's freshwater resources are concentrated in sub-Saharan Africa, and less than one per cent of water resources are located in Northern African countries. As a sub-region, Central Africa has the most abundant water resources, containing some 44 per cent of the continent's total, followed by Western Africa with 27 per cent of total fresh water resources (UNEP 2006, 2008). Central African countries such as Gabon, the Republic of Congo, Equatorial Guinea, and the Central African Republic, as well as the island states of Cape Verde, Sao Tome and Principe, and the Comoros and the small Western African countries of Sierra Leone, Liberia, and Guinea have the highest freshwater resources per capita, while the Northern African states along with Mauritania and Niger have the lowest per capita figures. Taken as a whole, the average per capita water figures for sub-Saharan Africa fall below the world average due to water scarcity in arid regions of Southern Africa, including the Kalahari desert in Namibia and parts of Botswana and South Africa (World Bank 2008, 2009b).

International reports suggest that water scarcity will continue to be a challenge for many African countries due to increased population growth and changes in the climate and in land use patterns. Estimates suggest that some 300 million Africans already face water scarcity conditions, and the World Bank has estimated that 2025 almost 50 per cent of Africans could be living in areas of water scarcity or water stress, underlining the magnitude of challenges related to the management of water resources (World Bank 2009a). The continent's water resources nevertheless have the potential to contribute to improvements in agricultural productivity, given that the existing use of irrigation is low in international comparison, with just 6 per cent of African cropland being irrigated compared to 18 per cent in the world as a whole (Svendsen et al. 2009).

3.3.3 Agricultural Potential

The expansion of irrigation is one of several factors that could contribute to increases in agricultural productivity and production on the African continent. In comparison to other developing regions, growth in African agriculture has been sluggish in the last decades. While South Asia has more than doubled its cereal yields since the 1960s, for example, yields in sub-Saharan Africa in the same period have remained mostly flat, hovering around one tonne per hectare (UNCTAD 2008). Measured against population size, Africa has a relatively large amount of land available for expanded agricultural production. Along with Latin America, sub-Saharan Africa contains a significant share of global potential to increase the size of cropland under cultivation. It is estimated that in Africa, south of the Sahara, only around 20 per cent of suitable cropland is currently being farmed and the potential for expanding land under cultivation is greatest in Angola, the Democratic Republic of the Congo, and Sudan (FAO 2002).

A variety of factors have contributed to slow improvements in agricultural productivity in Africa in recent decades in spite of the continent's potential in this domain. In addition to the underutilization of irrigation, limited investments in technology, rural infrastructure, and research along with unfavourable economic policies and inequalities in land distribution have been identified as key impediments to improved agricultural efficiency (World Bank 2007; UNCTAD 2008; ECA/AU 2009). The importance of land tenure and land reform issues has recently been underlined as a result of the high profile land concessions that have been granted by African governments to foreign corporations and other states. Land deals have been struck in some 30 African countries, including leases to South African farmers in the Congo and the acquisition of Ethiopian land by the Saudi Arabian government, and have affected an estimated 30 million hectares of farmland (African Business 2009). Angola, Kenya, Madagascar, and Sudan are also among the countries where such land deals have been struck (Ifejika Speranza 2010).

The Saudi land buy in food insecure Ethiopia highlights a paradox in African agriculture. While the continent has some of the world's most fertile lands, as a region it has the largest food deficit in the world. Fifteen of the sixteen countries in the world where more than 35 per cent of the population experience hunger are found on the continent and one-third of sub-Saharan Africa's population are chronically hungry. While the proportion of undernourished people in sub-Saharan Africa decreased in the period 1995–2005, absolute numbers of undernourished individuals increased due to population growth. The FAO estimates that the food crisis of 2007 contributed to the undernourishment of an additional 24 million people. In 2003–2005 more than 60 per cent of the total population in the DRC, Burundi, and Eritrea were undernourished, with the most significant increases occurring in the Democratic Republic of Congo as a result of ongoing conflict, where the number of chronically hungry individuals shot up from 11 to 43 million and the proportion of undernourished rose from 29 to 76 per cent. Given its large population, Ethiopia has also been home to a high absolute number of undernourished people (FAO 2008a).[18]

3.4 Conclusion

The discussion of the contrast between food insecurity and agricultural potential underlines a common theme in this chapter: namely, that while the African continent faces enormous challenges in some areas which lead to unfavourable comparisons to other world regions, there is also great promise with regard to the resources that can contribute to improving the welfare of African populations in the future. The indicators presented in this chapter highlight seeming contradictions in African development trends in recent years. Impressive economic growth rates have coexisted with the persistence of poverty and inequality. Renewed commitments to political organisation at the continental level have bred a set of institutions tasked with promoting integration, peace, and security, though the effective capacity of these institutions to fulfil this mandate continues to be questioned. If a general trend towards more democratic governance has been discernable, many states still possess fragile institutions, indicating that there is potential both for further democratic consolidation or regression in political development.

Contradictions between current conditions and future potential are more evident in some national contexts than in others. While the DRC and Sudan remain conflict hotspots, for example, they also possess agricultural and other natural resources that could provide a basis for improvements in the well-being of their populations in the future. Discussions of the resource curse or paradox of plenty have explained why resource wealth and poor development outcomes are often correlated, underlining the importance of the quality of governance structures in determining how natural advantages might be translated into development gains. Exploring how the different elements of the development context summarised in this chapter might interact in the future remains an important task.

Ultimately, the picture of Africa's present is not reducible to the descriptive overview of trends in the fields taken up in this chapter. To make the picture more complete, the general trends that have been outlined in this chapter will be complemented by the discussion of tendencies in the thematic areas of demography, climate change, technology, and innovation, the emergence of new actors in international development, political development in African states, and the positions of African states vis-à-vis global governance processes in the chapters that follow. Taken together, these chapters provide a broad overview of the core features of the African development landscape today and the forces that will shape its future contours.

Notes

1. The number of 53 states does not include the “non-self governing territory” of Western Sahara or the French overseas territories of Mayotte and Réunion. At the time of writing, the continent is expected to witness the creation of a 54th state, South Sudan, in the summer of 2011 as a result of the January 2011 independence referendum.
2. Even though international organisations and other entities have by now invested considerable resources in collecting data on African development trends, it is important to underline that there are limitations in the accuracy and availability of data in Africa due to the data collection capacity constraints of African governments.
3. In 2007, sub-Saharan Africa had an average ratio of ODA as percentage of GNI of 4.32 per cent. The African average was 3.56 per cent while in Northern African countries aid represented just 0.74 per cent of GNI on average. (OECD 2009b).
4. Aid dependency can also be measured by examining aid as a percentage of government expenditure. In spite of incomplete data on this measure, data since 2000 reveal high dependency in Sierra Leone, Madagascar, and Burkina Faso where aid totalled more than 100 per cent of government expenditures, followed by Uganda, Mali, Central African Republic, and Ethiopia with a ratio of more than 80 per cent. These high dependency rates contrast to low aid dependency in Ghana, South Africa, Algeria, and Mauritius, where aid inflows amount to less than 2 per cent of central government expenditures (World Bank 2008).
5. According to the United Nations, 2.6 per cent of the population in Northern African countries lived on less than $1.25 (PPP) per day in 2005 (UN 2009).
6. The Gini index lies between 0 and 100. A value of 0 represents absolute equality and 100 absolute inequality.
7. The HDI combines income poverty, education, and health indicators and ranks a total of 182 states ranging from 0 to 1 with 0 being lowest level of human development and 1 being the highest.
8. Morocco is not a member of the AU due to the recognition of the Sahrawi Arab Democratic Republic (Western Sahara) by other AU member states.
9. The eight RECs recognised by the AU are the Economic Community of Central African States (ECCAS), the Common Market for Eastern and Southern Africa (COMESA), the Community of Sahel-Saharan States (CEN-SAD), the Economic Community of West African States (ECOWAS), the Inter-Governmental Authority on Development (IGAD), the Southern African Development Community (SADC), the Eastern African Community (EAC) and Arab Maghreb Union (UMA).
10. The Constitutive Act of the African Union was the first international treaty that includes the right of intervention on humanitarian grounds (Schmidt 2005).
11. UCDP measures number of countries in armed conflict and not the number of armed conflicts itself. There could be more than one armed conflict in a country, e.g. two minor armed conflicts in the Democratic Republic of Congo or Ethiopia. Armed conflicts are defined as conflicts with at least 25 battle related deaths in a year and wars are conflicts with more than 1000 battle-related deaths in a year (UCDP and PRIO 2009).
12. Research institutions differ in the counts of wars depending on how ‘war’ is defined. For example, the Heidelberger Conflict Barometer (HIIK) only classified the conflicts in Somalia and Sudan as wars in 2007, while the Arbeitsgemeinschaft Kriegsursachenforschung (AKUF) counted 5 wars in African countries in the same

year (Democratic Republic of Congo, Somalia, Sudan, Chad, and Central African Republic). Whatever the preferred definition of war, total figures of armed/violent conflicts or severe crises including wars are largely consistent across institutions monitoring conflict. In 2007, for example, the UCDP reported 10 armed conflicts, HIIK 9, and AKUF 11. The crises in Somalia, Sudan, DR Congo, Chad, and Ethiopia were registered by all three institutions, the crisis in Algeria, Mali, Niger, Nigeria, and Central African Republic by two institutions, and Angola, Uganda, Kenya, Burundi, and Senegal by only one institution (AKUF 2009; HIIK 2009; UCDP and PRIO 2009).

13. Conflict also leads to income losses, infrastructure destruction, and human and financial capital flight. Conflict spillovers, such as defence spending increases and refugee inflows can also negatively impact neighbouring countries (AfDB 2008).
14. EU-run operations included EUFOR in Chad and the Central African Republic, EUSEC and EUPOL in the DRC, and EU SSR in Guinea-Bissau. The African Union managed a mission to Somalia (AMISOM) and an electoral assistance mission to the Comoros in 2008.
15. There is no internationally accepted definition of fragility. However, the following OECD definition represents some consensus within the policy and donor communities: "States are fragile when state structures lack political will and/or capacity to provide basic functions needed for poverty reduction, development and safeguard the security and human rights of their populations" (Fabra Mata and Ziaja 2009).
16. In 1995, African states represented about two-thirds of states with high or extreme fragility (29 of total 46). In recent years, almost all states listed in these categories were African states (23 of total 26), and 27 of 50 African states were ranked as seriously, highly, or extremely fragile. Exceptions are Mauritius that has never had a problem of fragility and Botswana, Swaziland, Namibia, Morocco, and Tunisia that have had moderate or low levels of fragility since 1995. South Africa, Libya, Senegal, Mali, Gabon, Lesotho, and Egypt have recently improved their state fragility scores (Marshall and Cole 2008).
17. The Polity IV project's "Polity Score" captures the regime authority spectrum on a 21-point scale ranging from –10 (hereditary monarchy) to +10 (consolidated democracy). The Polity scores can also be converted to regime categories using a three-part categorisation of "autocracies" (–10 to –6), "anocracies" (–5 to +5 and the three special values: –66, –77, and –88), and "democracies" (+6 to +10).
18. In the same period, however, several African countries (Ghana, Nigeria, Mali, Malawi, the Republic of Congo, and Mozambique) achieved significant reductions in the proportion of undernourished people due to improvements in their agricultural sectors (FAO 2008a).

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4

Population Change and Sustainable Development in Africa

Patrice Vimard and Raïmi Fassassi

To meet the priority of accelerating socio-economic development while preserving the environment for future generations, there is a need to identify development constraints that Africa has faced until today and the means of contributing to the continent's future development. The population issue is an overriding factor in addressing these questions. This chapter examines the relationships between demographic dynamics, economic growth and social development in Africa and especially the possible linkages between Africa's lagging demographic transition and its slow socio-economic progress. In order to background explorations of the continent's future, the chapter first provides a broad-brush view of current demographic trends in Africa by showing the continent's specificity in global comparison and highlighting the main differentiations among African countries. After placing discussions on population and development policies in the African context, the relationships between demographic growth and development in Africa are analysed by examining the specific case of North Africa and the impact of human capital improvement upon demographic changes. This treatment of the current state of the population–development relationship in Africa enables us to present the different domains where uncertainties prevail and draw up possible medium-term trajectories concerning demographic change and development. The conclusion emphasises the regional dimensions of demo-economic relationships.

4.1 Demographic Dynamics, Development and Population Policy

4.1.1 Overview of Current Demographic Dynamics

Sub-Saharan Africa has the world's least advanced demographic transition.[1] The annual population growth rate in Africa was 2.6 per cent from 1975 to 2009, higher than for other developing regions (Table 4.1). This high population growth stems from a still high birth rate linked to a high fertility rate and from a declining mortality rate, even though there is still a high mortality rate. All of Africa's demographic indicators stand apart from those of other developing regions. Table 4.1 shows the gap between indicators for Africa and developing countries overall. The level differences in indicators are noteworthy between Africa and other regions of the world with the most lagging demographic transition after Africa. The gap in terms of population dynamics between Africa and any other developing region is profound. Africa's population remains marked by the characteristics of a population before the transition: high fertility and high mortality. In contrast, all other developing regions are near the end of their demographic transition with fertility close to replacement level and a life expectancy approaching 70 years.

Africa's demographic dynamics are characterised by a young population, whose median age is 19 years, where 40 per cent are younger than 15 and 60 per cent younger than 25. Given that the population at reproductive age will continue to represent a large share of the population and the inertia of demographic phenomena, population growth will stay high and a young population pyramid will prevail through a large part of this century. According to the United Nations medium-fertility variant population projections, 44 per cent of the population will be under 25 by 2050. Africa's population is projected to double, reaching 2 billion people and accounting for 22 per cent of the world's population by 2050 compared to 15 per cent currently (United Nations 2009).[2]

Table 4.1 Population Growth Indicators in Africa and in Developing Countries

Indicators	Africa	Developing countries	Region with the most lagging demographic transition after Africa
Population growth rate (%), 1975–2009	2.59	1.82	1.73 (Asia)
Birth rate (per 1000 population), 2000–2005	38	24	22 (Latin America and Caribbean)
Mortality rate (per 1000 population), 2000–2005	15	9	8 (Asia)
Mean number of children ever born per woman/Total Fertility Rate, 2005–2010	4.61	2.73	2.44 (Oceania)
Life expectancy at birth (in years), 2005–2010	54.1	65.6	68.9 (Asia)
Median Age (in years), 2009	19.1	25.7	26.4 (Latin America and Caribbean)

Source: United Nations (2005a, 2009).

High population growth together with low economic growth contributes to a negative migration balance in Africa. According to United Nations estimates (2009), Africa's annual net loss of migrants has risen over time from 137,000 in the 1950s to 521,000 between 2000 and 2010. This annual negative balance should remain over 400,000 migrants until 2050. These figures are significant in absolute terms but account for only a small share of the natural population increase in Africa. These emigration flows contribute to an estimated stock of some 6.9 million African migrants in Organisation for Economic Co-operation and Development (OECD) countries, which underestimates the number of emigrants outside of the continent due to migration flows to non-OECD countries and the absence of statistics on illegal migrants.[3] In addition to international migration, internal migration within the continent is significant. According to the United Nations, there were 16.3 million international migrants and 6 million refugees within Africa in 2000, representing some 2.8 per cent of the continent's population.[4]

Africa's population remains predominantly rural (61 per cent in 2007). Although the share of the rural population is in decline and will decline further, Africa is the only continent where rural population is expected to increase until 2050 – from 592 million in 2007 to 736 million in 2025, and 764 million in 2050 (United Nations 2008). Likewise, Africa accounts for 18 per cent of global rural population today and could account for 27 per cent of the world's rural population in 2050. Africa should therefore partly hold the future of global agriculture and food production in its hands.

The corollary of a predominant rural population in Africa is that it is the world's least urbanised continent and will remain so in the future. Since the 1950s Africa's urban population has increased rapidly (the world's fastest urban growth) and will continue to grow. This growth results from natural increases and net migration, the respective contribution depending on the country. Accounting for 39 per cent of the continent's total population in 2007, urban population should represent 47 per cent in 2025 and 62 per cent in 2050. Urban population should nearly double by 2025 and more than triple by 2050 (United Nations 2008).[5]

Given high population growth, the economically active population should double by 2030 and exert high pressure on labour markets, particularly in urban areas. Since current low labour demand does not allow integration of new entrants to the labour market, many countries need labour demand to increase to meet the growth of labour supply both in rural and urban areas (ILO 2003).

This general overview of the demographic dynamics in Africa conceals marked regional disparities. While regions had relatively homogeneous demographic patterns in the mid-twentieth century, they have been subject to growing differences since the 1960s and especially since the 1980s when social policies implemented in North African countries started to have an impact upon population issues. Table A.4.1 displays the main disparities in basic indicators between the African regions. The main contrast concerns North Africa and sub-Saharan Africa. North Africa has started its last stage of demographic transition whereas sub-Saharan Africa is still in the middle of its transition.[6] Noteworthy gaps concern fertility with a difference of two children per woman, a 20-year higher life expectancy and an under-five mortality rate that is three times lower in North Africa. North Africa has had a lower population growth rate since the 1980s. This gap is expected to persist until the middle of the twenty-first century (see Figure A4.1). In addition, the population is clearly younger in sub-Saharan Africa and less urbanised. Labour force participation rates in sub-Saharan Africa are higher mostly due to the high proportion of economically active women (ILO 2003).

Sub-Saharan Africa is not homogeneous either even though the differences within this region are less pronounced than its overall differences with North Africa. In sub-Saharan Africa, Southern Africa differs with a clearly lower annual population growth of 0.7 per cent compared to 2.2–2.6 per cent for the other sub-regions. This results from relatively low fertility while mortality remains high, as high as in the other sub-regions (with a life expectancy close to 46 years). Southern Africa has almost achieved its fertility transition[7] while mortality has increased due to high HIV/AIDS prevalence, which has undermined gains won during a period of marked mortality decline. Southern Africa also differs by a low under-five mortality rate and by a pronounced urbanisation (57.3 per cent of total population). The other sub-regions south of the Sahara are more homogeneous although fertility and mortality are lower in East Africa, suggesting an advanced demographic transition. Labour force participation rates differ as East Africa has the highest activity rate and Southern Africa the lowest. Female activity is again a key factor accounting for such differences. Whereas male labour force participation rates range from 82 to 88 per cent in the sub-regions, female rates vary greatly from 50 per cent for Southern Africa to 72 per cent in East Africa (ILO 2003).

4.1.2 Demography: A Constraint on Development

Successive econometric studies have shown that there is no strong statistical relationship between demographic and economic growth (Easterlin 1967; Kuznets 1967; Blanchet 1991). In a recent study, however, Ndulu (2006) demonstrates that there is a –1.12 per cent gap between the annual gross domestic product (GDP) per capita growth in sub-Saharan Africa and other developing regions during the period 1960–2004, for which –0.86 per cent is explained by demographic factors. In sub-Saharan Africa, population growth has slowed down the rate of economic growth due to the increase of dependency rates since the 1960s until the early 1990s, leading to a lower income growth per capita than per active worker.[8] The evolution of the dependency rate thus provides a major link between population and economic growth and the decline in the dependency ratio is the main channel through which the slackening of population growth results in economic growth.

Conversely, fertility decline in other developing countries entailed a rapid drop in the dependency rate from the 1970s onward. Over the period 1960–2000, this impact has been estimated at a 0.4 per cent drop of annual growth per capita in sub-Saharan Africa (Ndulu and O'Connell 2006). In addition to this mechanical effect, high and stable dependency rates tend to discourage investments in human capital formation (Bloom and Sachs 1998). Various studies have underscored that population growth has a negative direct and indirect impact at a micro-economical level in many areas such as child and household well-being, health, human capital formation, and employment and development of economic opportunities for women and youth (United Nations 1993; Cassen 1994).

Two additional population issues must also be examined here: low density and poor health outcomes. In 1900, sub-Saharan Africa had a very low density and unequally distributed population, having experienced little change in the four centuries between 1500 and 1900. High densities were found in a few isolated regions such as the Ethiopian highlands, the Great Lakes region or the West African forest zone. From the 1920s onward, the development of colonial administrations and communication links as well as the introduction of Western medicine contributed to higher population growth (Herbst 2000; Iliffe 1995). However, the overall density in 1950 remained low, and the population estimate was low at about 168 million. This situation did not enhance the creation of structured and efficient states. Today at the end of a period of population growth remaining at the annual rate of 2.5 per cent or above since 1960 (United Nations 2007), sub-Saharan Africa's population exceeds 700 million and its population densities may promote a better dissemination of technology, a growth of production, trade and land administration. Although the idea that sub-Saharan Africa is underpopulated now appears irrelevant (Guengant 2007), the region continues to be less densely populated than other continents.

Two issues show how complex this phenomenon is across Africa. First, national variations must be underscored – from less than 10 inhabitants per square kilometre (Central African Republic, Gabon, Libya, Mauritania, Western Sahara, Chad) to over 250 inhabitants per square kilometre (Burundi, Comoros, Rwanda). Second, high natural growth in rural areas has led to an over-densification in some regions. High rural densities of 300 inhabitants per square kilometre can be found in coastal areas of Benin and Togo or across the hills of Burundi and Rwanda. Computing densities in sub-Saharan Africa by surface of arable lands rather than by a country's total land area presents a situation of over-population relative to truly usable land (Tabutin and Schoumaker 2004). In terms of adjusted densities, only one country (Botswana) has a population density below 100 inhabitants per square kilometre while most number over 300 inhabitants per square kilometre and nine have a density over 600.[9] Thus, the low overall densities conceal an over-densification of some areas while others, such as deserts and arid or mountainous regions, are less densely populated.

In North Africa, public health has improved considerably as the almost 70-year life expectancy attests, even though there are still parts of the population lagging behind on most measures of health progress. The decrease of mortality followed the improvement of living conditions and the regression of infectious diseases, in particular those affecting children. Conversely, sub-Saharan Africa is the region with the world's highest level of mortality. The sub-continent lags behind most global health achievements, particularly regarding infectious diseases and malaria control, and remains the region most affected by the HIV/AIDS pandemic (Mesle and Vallin 1997; United Nations 2006). Thus 60 per cent of people living with HIV/AIDS live in sub-Saharan Africa. Likewise, sub-Saharan Africa accounts for 90 per cent of the estimated 250 million annual cases of malaria and the 880,000 malaria-related deaths, mainly of children (World Health Organisation 2008). Among the 20 countries with the highest maternal mortality rate, 19 are in sub-Saharan Africa, and the region also has the highest neonatal mortality rate. Although these scourges are particularly worrisome, it is important to note the recent achievements of Africa's health care systems with the support of international development agencies. Onchocercosis, guinea worm and leprosy have almost been eradicated, and there has been important progress in controlling preventable childhood diseases in many African countries due to intensive immunisation policies. Thus poliomyelitis has almost been eradicated and a 50 per cent fall in measles-related deaths has occurred since 1999 (WHO 2006).

HIV/AIDS plays a leading role in the health crisis hitting some sub-Saharan African countries, particularly in Southern Africa. Of the world's 62 countries most affected by the epidemic, 40 are in sub-Saharan Africa. HIV/AIDS has a massive impact on morbidity, mortality and population loss. Life expectancy at birth in the worst-hit countries has dropped, undermining the gains won since the 1950s and 1960s. Thus, in Botswana, life expectancy at birth has fallen from 64 years in 1985–1990 to 47 years in 2000–2005. Likewise, South Africa's life expectancy at birth has also dropped from 61 years in 1990–1995 to 52 years in 2005–2010. HIV/AIDS has also delayed or even erased progress in under-five mortality. In Zimbabwe, a pioneering country in child health, infant mortality has increased from 53 deaths per 1000 live births in 1990–1995 to 69 in 2000–2005 (United Nations 2009).

Beyond demographic effects, it is difficult to precisely assess the impacts of the HIV/AIDS epidemic, particularly regarding family breakdown, increased demand of health services, and decline in demand for labour. The complexity of interactions between demographic behaviours and the income-generating process has been demonstrated in a study assessing the impact of AIDS on household and individual incomes in Côte d'Ivoire (Cogneau and Grimm 2002). The authors show that in the absence of other macroeconomics effects, the HIV/AIDS epidemic is likely to reduce the size of the economy by 6 per cent over 15 years, leaving average income per capita, income inequalities and poverty mostly unchanged.

Admittedly, other phenomena have played a role in the health crisis: emergent and re-emergent infectious diseases, economic and food crises, increased poverty and inequality, civil conflicts or wars between countries, state disorganisation, increased household health care costs and low efficiency in healthcare systems. These factors often interact, though the relationships between them are still poorly understood. Although the health transition in Africa overall started during the twentieth century, the process was interrupted between the 1980s and the early 2000s. A reversal of this transition is occurring more or less permanently for HIV/AIDS-affected countries. As this pandemic seems contained due to prevention programmes and tritherapies, health progress has resumed its positive course in sub-Saharan Africa. Progress has been made again in life expectancy at birth and child survival in some countries (United Nations 2007).

In sum, with a very young and rapidly increasing population, high rates of dependence and an often unfavourable health situation, sub-Saharan Africa faces major constraints on economic growth and social progress. These constraints exert pressure for the efficient integration of demographic policies in development strategies. More advanced in the demographic transition, the populations of North Africa benefit from lower dependency rates and better health, which are assets for development policy success.

4.1.3 International Population Policies: Debate over Priorities

Agreement on population policies has grown since the 1974 Bucharest World Population Conference (Sala-Diakanda 2000). This trend is revealed by the way African governments handle population policies. Several UN reports have shown that the percentage of African countries seeking a reduction of fertility in their country increased from 26 per cent in 1976 to 75 per cent in 2005. Thus, while 48 per cent of governments directly supported family planning activities in 1976, some 86 per cent did so in 2005, with an additional 10 per cent of governments indirectly supporting this policy even though there is a gap between viewpoints and proclaimed policies, and implemented policy measures (Anoh 2009).

Until the 1994 Cairo Conference, family planning was the main focus of population policies. These programmes often had the explicit goal of protecting child and maternal health and to a lesser extent the implicit goal of reducing population growth. These programmes have been gradually implemented by African governments as they supported fertility decline. North African countries and a few Anglophone sub-Saharan countries (Gambia, Ghana, Kenya, Nigeria, and Zimbabwe) were the first countries to embark on this path in the 1960s.

The Cairo Conference represented a shift away from the prevalent neo-Malthusian paradigm towards a perspective affirming a new vision of gender rights. To enable women to exercise their right to decide freely and responsibly all matters of reproduction and sexuality, there was a need to strengthen their capacity for action and negotiation, and implement policies aimed at women's autonomy and empowerment. The principles of the Cairo programme of action advocating 'sexual and reproductive health for all' have been widely accepted by African countries but their incorporation in action programmes has been slow. More than ten years after Cairo, access to contraception and other reproductive health services and to real reproductive rights is still poor for many African populations (Gautier 2006). Implementation of the Cairo programme was hampered by the difficulty in integrating reproductive health services into health systems already facing funding and performance deficits and its limited focus on key priorities such as family planning and maternal and child health (Guengant 2007).

Future progress remains uncertain insofar as the Millennium Development Goals (MDGs) constitute a new development paradigm superseding the programmes targeting women's reproductive rights set at the Cairo and Beijing (1995) conferences. The MDGs have given priority to the fight against poverty in the development policies supported by developed countries. Among the eight MDGs focusing on poverty alleviation by 2015, several of them address Africa's health challenges. In addition, the goals aimed at reducing extreme poverty and hunger, achieving universal primary education and providing gender equality and women's empowerment, as well as the goal on sustainable environment define an agenda to improve the living conditions of African populations.

However, as Guengant and Rafalimanana (2005) have noted, there is a contradiction concerning the poorest countries, particularly in sub-Saharan Africa. Although the MDGs, such as they were adopted in 2000, do not specifically address family planning issues, several of the goals – on education, women's empowerment, infant and maternal mortality – are jeopardised by high population growth and the number of unwanted pregnancies. Therefore, is there not a need to implement most of the Cairo's action programme on birth control and fertility decline to achieve or almost approach the MDGs in sub-Saharan Africa? Conversely, how can the Cairo action programme be implemented in sub-Saharan Africa if most of the resources for development are used to achieve MDGs? Following debates about these issues, in 2008 the fifth objective to 'improve maternal health' was supplemented with an objective 5b to 'reach, from 2015, universal access to reproductive health'.

But nearly one decade was lost on the way and currently most African governments lack resources to implement the population policies they have adopted. International support to implement population policies is weak and has been falling since 1995. The United Nations Population Fund (UNFPA) considers that international assistance for family planning and reproductive health accounts for respectively 5 and 17 per cent of the financial support dedicated for population programmes in 2007 compared with 75 per cent for the fight against HIV/AIDS (UNFPA 2009). The June 2008 MDG Africa Steering Committee assessed that overall public financing should rise to $1 billion dollars per year by 2010 to support access to family planning compared with $10 billion per year to implement efficient health systems and $12 billion per year for HIV/AIDS prevention and treatment – equivalent to more than financial support for family planning and health systems altogether (MDG Africa Steering Group 2008).

Providing HIV/AIDS programmes with the largest share of financial resources has been considered a major mistake in some quarters. For example, Cleland and Sinding (2005) consider that the HIV/AIDS epidemic is not the main threat for development and that high fertility is a more serious hindrance to poverty alleviation in many African countries. Population growth threatens food security, increases dependency on foreign aid, and raises pressure for international migration.

In the last decade, UN institutions did not acknowledge the threat to all the MDGs posed by rapid population growth and sustained high fertility rates in sub-Saharan Africa.[10] Population growth reduction is not identified as a goal in the United Nations MDG plan (United Nations 2005b) or in the recommendations of the MDG Africa Steering Group (MDG Africa Steering Group 2008), even though these reports give priority to better access to reproductive services, including family planning. In contrast, the World Bank and the UNFPA, to a lesser extent, have acknowledged that donors and development agencies have neglected the impacts of high fertility on development (World Bank 2007), and they were instrumental in increasing the attention paid to making access to reproductive health and family planning universal in the MDGs.

4.2 Population and Development in Africa Today

4.2.1 An Exploratory Analysis of the Population–Development Relationship

International development policies on poverty reduction in African countries have set new guidelines with priority given to HIV/AIDS programmes even though countries are experiencing diverse population trends. Falling fertility accompanies reductions in mortality in some countries while in others, the decline in mortality rates – practically universal throughout the continent since the1950s – is not being followed by fertility declines, entailing rapid population growth. Likewise, economic and social upheavals spread at uneven intensity depending on the country. For several of Africa's most vulnerable countries, the deterioration in the world's economic situation in the 1970s and early 1980s marked the beginning of increased economic crisis and widespread poverty. There has been little change in the per capita GDP of many sub-Saharan African countries since the 1960s. Although the average per capita income was two times higher in sub-Saharan Africa than in East Asia about 30 years ago, today it amounts to less than half with $2180 compared to $4937 in purchasing power parity (World Bank 2009).

In this continent-wide exploratory analysis of relationships between population and development at the national level, African countries are classified according to their main characteristics in terms of population, development, and epidemiological environment. This categorisation allows us to draw broad outlines of the countries' economic and social future for the coming decades. There are several causal relationships between economic and social variables, environmental and health contexts, and demographic variables. Most approaches agree that there are close linkages between these different factors even though the direction of causal relationships is a matter of debate. This study explores the convergences and divergences between economic and demographic dynamics in African countries by including various medium-term country characteristics. Study variables are mostly structural and account for the main trends in demography.

On the one hand, African countries have often been classified according to geographical division. UN reports categorise the continent's countries on this basis. Relevant when considering neighbourhood effects, these regional groupings may sometimes conceal significant inter-state differences. On the other hand, the World Bank's grouping of African states by income level provides a classification that reflects few demographic and socio-cultural features. African economies are extroverted and dependent on raw materials and vulnerable to volatilities in the global economy. In the space of a few years, a middle-income country may become a heavily indebted country, as the case of Côte d'Ivoire has recently illustrated. Similarly, a low-income country may join the category of middle-income countries due to significant discoveries and exploitation of natural resources. However, the lack of any changes to structures related to the economy and demographic foundations makes them unready for such a change. The case of Equatorial Guinea is illustrative in this regard.

The section below reports the outcome of a principal components analysis (PCA) conducted by the authors used to group countries according to their demographic and economic situation. This automatic mathematical procedure allows us to classify countries based on the proximities of data values. PCA was supplemented with research on the countries' cultural and geographical characteristics – important dimensions for demographic choices.

We selected a set of 114 demographic, socio-economic, and health variables accounting for fertility, mortality, migration, education, health, economic activity and production over a period of time.[11] Gender inequality is acknowledged by examining some variables by sex.

The most significant features of African demography related to the economy and social development are situated in the first factorial plane, which summarises nearly half of the information included in the variables (see Figure A4.2). Three categories of variables are highlighted. The first dimension of the first factorial plane separates economic and social development variables – suggested by a higher life expectancy at birth, significant fertility decline between 1990 and 2007, improved access to water and sanitation, and more family planning – from those that suggest lagging sustainable development such as high maternal mortality, illiteracy, high population growth and fertility, and a high proportion of rural population.

The second axis of this first factorial plane underscores how much education, particularly education for females, differentiates countries. Educating women and improving their social and economic status is one of the main drivers to improve living conditions for impoverished populations. However, important challenges remain in Africa. Although females enjoy a relatively high level of education in North Africa, their social and legal status is still low, even in urban areas where female school enrolment is the highest. In West Africa, particularly in the Sahel, high female illiteracy is combined with a belittled social status.

The countries with the highest values for the variables included in the PCA are placed in the first factorial plane, standing out from one another like the studied variables. Using the first axis as a classification criterion to indicate progress from right to left towards sustainable development, we distinguished four broad country categories.

(a) The first category includes North African countries as well as Mauritius and South Africa. These countries are the most advanced in the demographic transition as well as in economic terms. Fertility rates remain low and the lowest levels of infant mortality within Africa prevail. These countries' cultures also stand out from those of sub-Saharan Africa.
(b) At the other extreme, we find the countries with high fertility and Africa's lowest levels of economic and social development. These are landlocked and drought-hit countries, like the Sahelian countries, or those hit hard by longstanding civil wars (Angola, Somalia) or recurring wars (Chad). These countries continue to lag far behind in education for females and maternal and infant mortality and are the most affected by rapid population growth and severe poverty.
(c) A third group includes countries advancing significantly along the demographic transition. This heterogeneous group includes most of Southern Africa's countries, some island states (Seychelles, Sao Tome and Principe, Comoros, Cape Verde), some oil-producing countries in Central Africa that have lower fertility because they were previously affected by sterility (Congo, Gabon), and Ghana and Zimbabwe due to early implementation of health and population policies. These are generally coastal

countries or have relatively important natural resources and they are generally experiencing ongoing demographic and economic progress.

(d) The last group includes the largest number of countries, which are characterised by slow progress. This group includes countries that have faced or are facing severe internal or external conflicts, such as the Central African Republic, Eritrea, Ethiopia, Guinea, Mozambique, and Uganda. This group also includes more advanced countries regarding sustainable development that have benefited from relative political stability such as Benin, Côte d'Ivoire, Senegal, Tanzania, and Kenya. However, these are all poor and heavily indebted countries, with low economic performance and in need of substantial progress in reducing maternal and infant mortality and fertility.

Although this PCA classification highlights the broad outlines of demographic and economic interrelationships on the continent, the introduction of geographical and cultural proximities prompts us to refine this grouping and distinguish five groups of countries (see a representation of the five groups in Figure 4.1).

- The first group includes North African countries, which must be studied together because of their geographical and cultural proximity and close demographic and economic profile (see Section 4.2.2).
- The second group is composed of small island states that are at different stages of demographic transition and do not share dominant characteristics

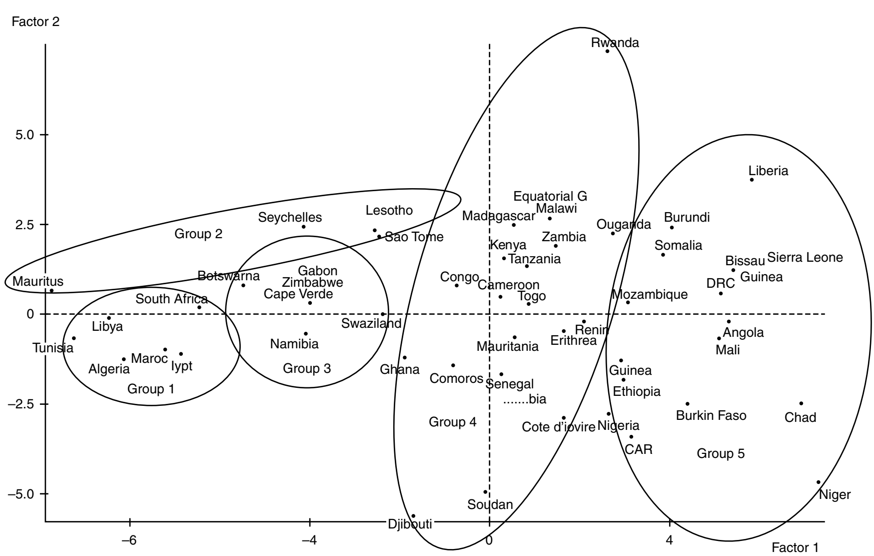

Figure 4.1 Representation of Countries in the First Factorial Plane

with the continent's other countries. Including them in the same group results from their economic and demographic proximities. They are destined for a similar economic and demographic future, even though they are situated at different levels of development that could persist.

- The third group is made up of Southern African countries, very advanced along the demographic transition and particularly affected by HIV/AIDS. Most Southern African countries are noteworthy for their substantial progress in health care and family planning until the 1990s. However, this progress was followed by setbacks due to high HIV/AIDS prevalence that is undermining most of the previously won gains (UNAIDS 2008). HIV/AIDS control is the key to this region's future.
- The fourth group is formed by all the African countries whose demographic transition seems irreversible, although mortality and fertility declines may be limited and likely to experience stabilisation stages. These countries may face economic difficulties often related to political conflicts but benefit from real assets, such as ocean access and relatively abundant resources. This group mainly includes two geographical areas: (a) most East African countries, often more advanced along the demographic transition and in human development and (b) most West and Central African coastal countries.
- The fifth group includes the African countries with the most lagging demographic transition and the lowest economic and human development. This group includes landlocked countries located in the Sahel area, to which the Central African Republic can be added, as well as countries hit by longstanding crises such as Angola, Burundi, Guinea-Bissau, Liberia, The Democratic Republic of the Congo, Sierra Leone, and Somalia.[12]

4.2.2 The Specificity of the Maghreb in the Population–Development Relationship

The Maghreb forms a relatively homogeneous area on a geographical, social, and cultural level as well as in terms of relationships between population and development.[13] Apart from Libya, overall population growth is controlled there. This control is based on a significant fertility decline since the 1960s.[14] Population growth remains relatively high considering the fertility rate because reproductive age groups represent a high percentage of the total population. This demographic structure should abate in the coming years and fertility decline should entail a decrease of reproductive groups with a generation interval. Thus, the population growth rate should be less than 1 per cent in 2025–2030 and at 0.5 per cent in 2045–2050 in the four countries (Table 4.2).

The history of the relationships between population and development in the Maghreb provides lessons for Africa's future overall. The first lesson is that the country that has advanced the most rapidly along the demographic

Table 4.2 Population Growth Rate in Maghreb Countries by Period (in %)

	2005–2010	2025–2030	2045–2050
Algeria	1.51	0.84	0.36
Libya	2.00	0.90	0.55
Morocco	1.20	0.72	0.25
Tunisia	0.98	0.55	0.09

Source: United Nations (2009). Estimation follows the medium variant of United Nations' prospects.

transition did so due to a policy not only based on nation-wide family planning, but also supporting women's legal, social, and economic rights. As early as the 1960s, Tunisia developed a global population policy including measures to strengthen women's status within the family and society, to promote literacy and encourage small-sized families (Gastineau and Sandron 2004; Brown 2007). By promoting female education, women's participation in wage employment, and raising the legal age for marriage, this policy resulted in an increase in age at first marriage. The delay in marriage was the initial and decisive factor for fertility decline and control of population growth. It has also generated a willingness in the population to reduce the number of births, making adherence to modern contraception easier.

More than fifty years after its implementation in Tunisia, the political will to support women's rights is still absent in Algeria and has only been sketched out in February 2004 in Morocco with the personal status code – the *Moudawana*. Despite this gap in family rights, Algeria and Morocco have undertaken to reduce population growth by promoting family planning services and through changes in perceptions and values linked to progress in female education and the influence of family immigration in Europe, social change has preceded legal change in this context (Courbage 2002; Yaakoubd and Vimard 2009).

Triggered by a fully transparent social policy, Tunisia's decline in population growth facilitated true progress in human development. Successes are apparent and most of Tunisia's indicators are better compared to Algeria and Morocco. Only Libya can boast similar results, but it has considerable oil income, enabling its population to attain the continent's highest standard of living. There is generally more widespread access to social facilities, higher levels of population health and less prevalent undernutrition in Tunisia. On the whole, the 2006 human development index (HDI) is higher in Tunisia than in Algeria or Morocco; Libya has a high HDI at 0.840 (UNDP 2008).

Whatever the relative differences between the Maghreb countries, they have all made significant progress in economic and social development and the gap with sub-Saharan countries is very noticeable and have considerable assets to further improve their situation. Firstly, they have satisfying health situations, having eradicated malaria and tuberculosis and contained the emergence of HIV/AIDS. The health of the population is relatively satisfactory, as shown by the infant mortality rate that has clearly decreased. For the most part, undernutrition has disappeared even if malnutrition and lack of micronutrients continues to be a public health problem and impedes economic development (Gillespie et al. 1996). Secondly, population growth, which has already slowed considerably, continues to fall. In 2030, the four Maghreb countries should have a population growth below 1 per cent annually, with a total fertility rate equal to or below two children per woman and a life expectancy greater than 75 years – demography that resembles that of developed countries.[15] This gradual reduction in population growth over a few decades has finally brought a decline in the dependency rate with an increase in the working-age population and a decrease in the percentage of young dependents. Meanwhile the slow growth of old-age dependents will only have significant consequences in several decades.

Favourable declines in dependency rates will achieve their full objectives only if a number of prevailing challenges are successfully tackled. The first challenge concerns underemployment, particularly female underemployment, which puts the actual activity rate at a disadvantage. The second challenge relates to low literacy, which affects qualifications among the active population. A third challenge pertains to productivity growth of various economic sectors and especially the agricultural sector.

4.2.3 Expectations for Controlled Demographic Growth and Demographic Bonus

Recent demographic history shows that a new pattern combining low fertility and mortality can appear in Africa. Reserved for the Maghreb's countries up to now, this pattern could characterise some countries located in sub-Saharan Africa in the near future. The countries of Southern Africa, as well as Gabon and Zimbabwe could be the first countries to enter the last phase of the demographic transition. Then, other countries (mainly included in Group 4) whose fertility is about four to five children per woman could follow. These are mainly coastal countries and other sub-Saharan regions (West, East and Central Africa): Cameroon, Central African Republic, Côte d'Ivoire, Gambia, Ghana, Kenya, Tanzania and Senegal. For the sub-Saharan African countries included in Group 5, following this new pattern is still far-off and depends on too many factors to be foreseen with any relevance.

Fertility decline results in a decline in the growth of population size, which can be considered an initial benefit from the demographic transition. However, this changes the population pyramid, with a reduction of the children's percentage and an overrepresentation of young working-age adults. The concerned countries must then shift from a phase where they need to allocate important resources to dependent children that must receive schooling to a phase where they can benefit from an increasing percentage of working-age population and spend less. This change can induce the accelerated growth of income, due to active population increase, the accelerated accumulation of capital, and less expenditure on dependent groups. This phenomenon is called a 'bonus' or 'demographic dividend'.[16]

East Asia presents the world's most successful experience of demographic bonus, representing about 25 per cent of the growth of per capita real income, reaching 6 per cent annually between 1965 and 1990, when the working-age population grew four times faster than dependent populations (Bloom et al. 2003). The Maghreb countries started to benefit from this change in the age structure for a few years beginning in the 1990s. North Africa has a sharp advantage over sub-Saharan Africa with the working-age population accounting for 64 per cent compared to 54.5 per cent for sub-Saharan Africa in 2010. However, sub-Saharan Africa also seems to be changing, though at a delayed and slower rate. The working-age population is expected to reach 60 per cent by 2030 and 65 per cent by 2050 in sub-Saharan Africa, whereas these levels will have been attained in 2005 and 2020 in North Africa (United Nations 2009).

Although fertility decline and an increase in the working-age population are necessary conditions for economic growth through the redistribution of consumption and recurrent expenditure towards investments for economic growth, these factors are not sufficient. The full effect of the demographic dividend for economic and social progress requires the implementation of efficient policies in key sectors. First, education must be promoted at all levels of the educational system for young people to become a productive labour force. Then there must be investments in the most productive sectors and activities to ensure job opportunities. Lastly, policies must support good governance in order to improve the effectiveness of sectoral policies, the promotion of the rule of law, and reducing corruption (Bloom et al. 2003). Absent efficient policies in these domains, the window of opportunity related to slowing down population growth would remain limited. In this case, the countries would face an increasing number of young people unable to enter the labour market and becoming autonomous in their family and economic life. This situation could result in social upheaval.

4.3 Demographic Changes and the Development Process

If a relationship exists between demographic growth, economic growth, and development, this relationship is not direct; likewise the link between demography and sustainable development is neither direct nor unambiguous. This link is plural since it inherently depends on societies' capacities to handle the various transformations that affect them, and these relationships need to be contextualised since population pressure can either hinder or facilitate economic growth.[17] Similarly, the slowdown of population growth can be an accelerating factor in economic growth or neutral for development, depending on the country's capacity to benefit from the demographic bonus. This complex set of phenomena, based on the diverse links between demography and economics in societies, is apparent in Africa and is explained by many studies, notably Ferry (2007).

However, most of the continent's trends share common general relationships. The components of demographic change which determine population growth and change in age structures also have an impact on economic growth and social progress. Likewise, this economic and social growth promotes changes in the natural movements of the population (birthrate and mortality) by accelerating the demographic transition. Moreover, policies aimed at improving individuals' health are in the forefront of national strategies to reduce poverty, improve human development and increase countries' production capacities. Outside of the health domain, other sectors interacting with demographic forces include education (which changes individual reproductive and health behaviours), family law and gender parity (which affects marriage, reproductive behaviour, and women's integration in productive activities), urban and rural development (which influences mobility between cities and rural areas) and social protection (which affects individual's demand for children and regulation of the labour market). Overall, policies in these areas contribute to decreasing the number of desired children and increasing the use of modern contraception while developing women's autonomy and participation in economic life (World Bank 2007; Mach 2004).

The various interactions between demographic transition components and those of economic and social development can constitute a series of virtuous circles. The predominant virtuous link that can be tested on trends in African countries concerns the relationship between progress in development and fertility decline as a basis for reducing demographic growth.

4.3.1 Relationships between Economic Growth, Human Development and Fertility Decline

Generally speaking, an inverse relationship exists between per capita income and the total fertility rate (TFR). This relationship is also observed in Africa, although the linear correlation between these two variables is relatively weak. In short, in African countries, high fertility is generally combined with low income. There are several explanations for this.

The desire to have children is generally high. Initially aimed at ensuring social reproduction, high fertility has been at the heart of strategies developed by societies to ensure the survival of many rival ethnic groups throughout the continent that face high mortality. In contexts of poverty where the opportunity costs of raising and providing health care for children are low, the arrival of another child is perceived as a social and economic gain. Children may valorise the status of the mother or have immediate economic value since they can perform economic activities. Children also ensure other functions such as providing future support for their parents in their old age, a vital role in a context where few individuals are insured or receive public assistance at retirement (Cleland and Wilson 1987; Caldwell 2005). These social considerations are accompanied by the mistaken opinions of political decision makers for whom low density in their countries allows for high population growth. Thus, international efforts to control population growth have sometimes only been met with mixed support even though family planning seems to enjoy full backing in nearly all African countries today.

Even more than per capita income, the HDI shows a very negative correlation with fertility level in Africa (Figure 4.2). For African countries, the HDI is highly correlated with the gross female school-enrollment rate and with modern contraceptive prevalence, two factors that play an important role in fertility decline. Countries in Group 4 stand out the most, with low HDIs and the highest TFRs.

In addition to the strong relationship between these two indicators, HDI dynamics should be compared to fertility dynamics to better assess the relationships between human development and demographic transition in African countries. Generally, correlations are quite weak between the growth rate in HDI and the rate of fertility decline between 1975 and 2005. However, some groups of countries present stronger relationships between these two trends. Countries classified in Group 2, including the continent's small island countries, are changing in line with the expected strong relationship between HDI increases and fertility decline. Likewise, the HDI increase in all four Maghreb countries is very strongly correlated with fertility reduction. The most unstable situations occur in Groups 4 and 5, which include the majority of the study countries. Among these, the

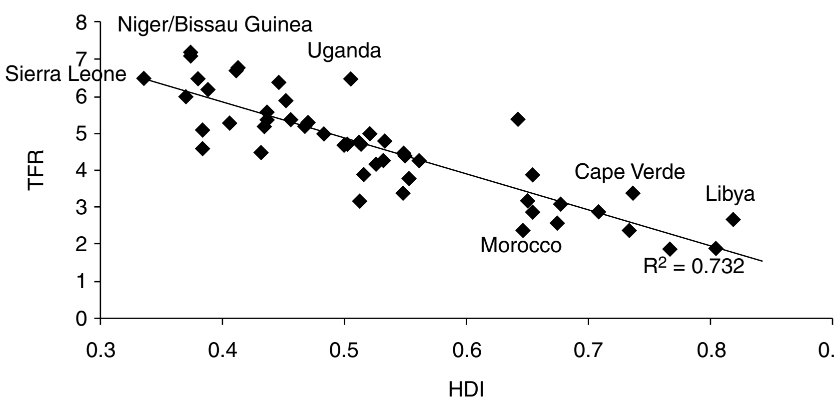

Figure 4.2 Relationship between the TFR (2007) and the HDI (2005) for African Countries

Source: Based on data from the African Development Bank (2008).

countries falling the furthest behind in terms of fertility decline generally also show the least HDI progress (Sierra Leone, Mozambique, etc.). For some of these countries, important progress in the HDI has not fostered fertility decline, probably because the human development level is not sufficient to induce demographic change (cf. Mali). The situation for countries in the third group is more ambiguous, as demonstrated by Zimbabwe where a high fertility decline is observed despite a disastrous socio-economic situation.

4.3.2 Education and Health, the Demographic Transition and Sustainable Development

The interrelationships between population and development in Africa form a complex system, where some links play a dominant role in current changes. First, there is the relationship between economic poverty and natural increase, insofar as poverty influences high mortality and high fertility. The relationship between urbanisation and demographic changes is another component since urban populations are usually the first to adopt pioneering behaviours in marriage, family dynamics, reproduction and child care. However, the systemic comprehension of the 'population–development' relationship shows that education and health play a determining role in how demographic growth and development are controlled, due to their major role in improving human capital. This holds an increasingly important place in the new economy of information and knowledge, where priority is given to skills and capacities (Sen 2000).

The education and health systems of African societies are differentiated both in their organisation and results. Even in light of significant increases in the number of literate and educated individuals and improved health status and mortality rates, the goals of providing education and health care for all and even the MDG mission to cut poverty in half through access to health care and education between 2000 and 2015 still remain utopian ideals for the majority of sub-Saharan African countries (Hugon 2007).

High demographic growth impedes widespread education in sub-Saharan Africa, and a high number of uneducated women marry early, have many children and use the health care system infrequently or inadequately. Conversely, significant efforts in schooling made by some countries in North Africa, East Africa and Southern Africa where demographic growth was initially high has facilitated delay in the marriage age, fertility decline and improved health. Generations that are smaller in number make it easier to achieve progress in education and subsequent access to employment, thus creating a virtuous circle.

Formal education is an effective way to break the vicious circle of intergenerational transmission of poverty because parents' education level is a factor in demand for education and reducing gender disparities for children. The health sector can also promote individuals' efficacy as productive agents in the economy and agents for social and political change. Improved health and academic success contribute to ameliorating the quality of human resources and foster increasing productivity (Behrman 1996). However, the interrelationships between education, health, demography and development greatly depend on the kind of production system in force. In countries in North Africa and Southern Africa to a lesser extent, the economy was geared early towards the processing of primary products and consumer goods to replace imported products. With the development of an industrialised and urban economy, improved health and education may have significantly contributed to improving productivity in all sectors of activity.

In sub-Saharan Africa, the rentier economy predominates with no surplus, where assets are mobilised for immediate profit with no concern for sustainability. This explains the difficulty in creating mechanisms for sustainable development. In the sub-Saharan system, learning has a positive impact on building national identity and citizenship and obtaining the necessary skills and know-how for many jobs. However, expanding education in the poorest sub-Saharan countries also leads to intellectual unemployment. Over-qualified workers resort to the informal sector, and brain drain towards developed countries ensues once civil servant jobs are taken and paid employment in the private sector is scarce (Hugon 2006).

More in Africa than elsewhere, education and health – at the heart of inequalities between countries – also characterise the inequalities between social groups and individuals (Goesling and Firebaugh 2004; Gwatkin et al. 2007). In African countries, the considerable inequalities between social groups in school attendance and use of health care services, and even the concept and funding of health systems – with priority usually on urban hospitals and schools – lead to greater allocation of public funding and external aid to the most privileged. When considering that in sub-Saharan Africa, a portion of state revenues comes from indirect taxation of exported agricultural products, it becomes apparent that the public sector in health and, to a lesser extent, in education become instruments of redistribution that put the poorest and rural settings at the greatest disadvantage in favour of the richest and urban class (World Bank 1993; Brunet-Jailly 2002).

This inherent inequality within the health care and education systems is both a consequence and driver of the more profound inequalities in obtaining financial, human and social capital. These inequalities seem the most decisive in explaining delays in demographic transition in most sub-Saharan countries. In households and societies that allocate few resources to education and health, working-age individuals are handicapped by low education levels and often weakened by illness, which thwarts socio-economic progress at the individual, family and societal levels. By extension, inequalities in income and capacities at a national level lead to wasted production potential and poor resource allocation (World Bank 2005).

The most complete version of the classic model for demographic transition known as ‘equitable development’ underlines the decisive role played by equitable structure of economic development and wealth distribution between various levels in the population on mortality and fertility decline. By showing that redistribution of wealth can be a powerful instrument in decreasing the fertility rate, this development model emphasises the relevance of a policy for equal distribution of income, goods and know-how for developing countries, but also the negative impact that severe socio-economic inequalities can have on a widespread fertility decline (Repetto 1978; Cook and Repetto 1982). More recently, Wilkinson and Picket (2009) show that the more unequal a society is, the more numerous and disastrous are its social problems, indicating that greater equality can benefit not only the poor but also the middle and upper classes.

4.4 Uncertainties

The complex relationship between demography, economic growth and development and the nature of Africa's integration into the global political economy are at the root of many uncertainties about the continent's future. This section outlines the relevance of three main uncertainties for the future of African development. These uncertainties relate to demography, policies in other sectors and demo-economic relationships.

4.4.1 Uncertainties Related to Demography

What will Africa's demography look like in the coming decades? The rate of mortality decline, under the constraint of the dynamic of the HIV/AIDS epidemic in some countries, is one important factor in this future. Although mortality decline has been significant since the 1960s, it has slowed down recently. This situation is partly due to the economic and political crises and structural adjustment programmes (SAPs) that have disorganised health care systems. If the SAPs have not always led to reduced public funding dedicated to health, they have led to a decreased supply of health care and a decrease in household demand for care, factors slowing down health gains (Nassar 1993; Gogué 1997). Political and economic stability and the development of the rule of law will be decisive in ensuring improved efficiency in these health systems (Vimard 2007). For the future, it is also hoped that major global health initiatives will achieve their full objectives. Pursuing these global initiatives could improve the efficiency of funding, equity of access to health care and public health outcomes on decisive points to trigger rapid mortality decline (World Health Organization Maximizing Positive Synergies Collaborative Group 2009).

However, the pace of fertility decline remains the key factor for population growth. Although fertility decline has been occurring in most African countries, its pace has varied greatly between countries; some evidence suggests various transitions have stalled – about two-thirds of the sub-Saharan countries showed no significant fertility decline during the most recent period.[18] Poor economic progress, the slowdown of mortality decline and limited recent efforts in family planning have contributed to this situation (Bongaarts 2008). This uncertain transition clearly has effects on future demographic trends with respect to population growth, size and age structure.

Regarding projections for 2025–2030, the medium-fertility assumption from the latest United Nations projections (United Nations 2009) predicts that fertility will decline to a fertility rate of 3.2 children per woman for Africa as a whole, 3.4 for sub-Saharan Africa and 2.28 for North Africa. Under the high variant, fertility is projected to remain at 0.5 children above the fertility in the medium variant and under the low variant, fertility is projected to remain 0.5 children below the fertility in the medium variant, allowing for alternative scenarios.[19] Based on these fertility variants, the annual population growth rate will vary between 1.38 and 1.99 per cent for 2025–2030 compared to the current growth of 2.44 per cent for 2005–2009 (cf. Table A.4.3). The estimated levels of growth are higher in sub-Saharan Africa than in North Africa, and the drop in demographic growth should be higher in North Africa.[20]

Based on estimations for population size, in 2030 Africa is expected to have a population of 1.4–1.6 billion inhabitants based on a population of 921 million in 2005. By 2030, the African population should increase by 57 to 74 per cent in 25 years, a considerable increase. The growth in size should be higher in sub-Saharan Africa than in North Africa, with an increase of 63 to 80 per cent south of the Sahara and 34 to 50 per cent in the north. It must be noted that in 2030, the population of sub-Saharan Africa is expected to reach approximately 1.25 billion individuals (±60 million individuals) versus 725 million in 2005. The potential for growth remains in sub-Saharan Africa, regardless of intensity. This is all the more so since population size is more likely to fall on the high end of the range (except for Southern Africa), given poor progress in modern contraception, a major factor in fertility decline (Guengant 2007; Vimard and Fassassi 2009). For North Africa, population growth – although significant – would be contained since the population is expected to reach 277 million inhabitants (with an uncertainty range of ±16 million) compared to 195 million in 2005.

Unlike the stabilisation observed in most other developing regions, Africa's population will continue to grow at a rapid pace over the coming decades. However, this tempo still remains poorly assessed in sub-Saharan Africa due to existing inequalities between countries and variations in past trends, making population growth unpredictable over the medium or long term. In strictly demographic terms, progress in the prevention and treatment of HIV/AIDS on the one hand, and progress in contraception on the other hand are major factors affecting this growth. Changes in priorities and implemented policies will be important here.

4.4.2 Uncertainties Related to Policies in Other Key Sectors

Demographic change and especially the slowing down of population growth in Africa partly depend on the effects of policies in the education and health sectors. Moreover, certain framework conditions, particularly related to political stability, good governance and high investment in job creation are necessary to sustain population decline within Africa and allow the continent to reap all the potential benefits.

The overall orientation of policies in key sectors still remains poorly understood. At this point, the Washington Consensus has been generally accepted as a relative failure for African countries, as the passage of a vision favouring state intervention to a strategy based on the power of markets significantly increased the number of the poor. The slow growth of employment in the modern sector has meant growth of the informal economy and increased unemployment (Stiglitz 2002). An analysis of 108 developing countries shows that countries faithfully applying Washington Consensus recommendations have not generally achieved better economic results than the others – either in terms of economic growth, human development or debt reduction – though they experienced the social consequences of adjustment following the reduction of social spending and subsidies (Berr and Combarnous 2004). In parallel, a positive relationship has been demonstrated between good governance and improved economic performance (Kaufman and Kraay 2003). Research has also shown that economic performance is more dependent on the quality of public institutions than on economic policies (Knack and Keefer 1995). As a result, international institutions have come to question neoliberal policies, imposed on African countries as the preferred way out of the crisis in the late 1970s (World Bank 1997).

A new consensus on the role of institutions has emerged, recognising that good governance is essential for the proper functioning of the market. This applies particularly in sub-Saharan Africa, where "states should develop, not reduce, the public sector and radically improve the quality of public services, which requires institutional capacity, especially in the areas of regulation, the provision of services and social spending" (Manuel 2003). As a result of this shifting consensus, reforms have made significant progress in many African countries, which may explain the improved economic performance during the last decade compared to the previous decade (Manuel 2003).

Currently, the international community's commitment to cut poverty in half between 2000 and 2015 and the promotion of equity (World Bank 2005) set the new framework for sectoral policies and development aid. However, the impact of this new development approach must be put into perspective regarding policy and programme content. Firstly, the content of the MDGs and their primarily quantitative formulation places them within the international institutions' traditional approach that puts a greater emphasis on addressing poverty than its underlying causes. Furthermore, broader development goals to seek greater equity (World Bank 2005) remain out of sync with traditionally recommended policies (Cling et al. 2005).

Given the importance of Africa in international development policy, discussions relating to a shifting development consensus introduce a range of uncertainties. Will the post-Washington consensus simply represent an addition to the earlier consensus or a challenge to its neo-liberal foundations? What balances or imbalances between the measures conducive to market development and those in favour of state development may emerge? What will be the priorities and importance of funding for greater equity? These are questions for debate (Boyer 2001; Berr and Combarnous 2004; Stiglitz and Serra 2008) that will determine the content of future development paradigms and development assistance and influence the futures of African economies and societies.

Beyond these questions about the nature of the international consensus, new questions arise in connection with the emergence of a school of thought supporting the contextualisation of development policies (Hugon 1999; Rodrik et al. 2008). Generally, African states are highly dependent on external funding for their development programmes; in addition, they are deprived of the maximum expertise since international institutions, major NGOs and private enterprises employ most African experts. Many African states have lost capacities to initiate development policy and are reduced to applying economic and social policies defined by international agencies that determine whether they will receive external financial resources (Tidjani Alou 2001).

In response to this situation, the Paris Declaration on Aid Effectiveness defines a concrete action plan to improve the quality of aid and its development impact. Part of this plan is that countries receiving aid exercise effective sovereignty over their policies and development strategies, allowing national governments to better define how development goals can be achieved within their countries. A first evaluation of the declaration nevertheless highlights the limits of the action plan (Wood et al. 2008). It will take several years to judge the contributions of process initiated by the Paris Declaration and how donors conform to its instructions.

Therefore, uncertainty remains about the ability of African governments to define their own economic and social policies, based on this international consensus but taking into account each country's specificities. This capacity will initially depend on governance requirements, peace and security, which are the main foundations of efficient government action and which pose problems in Africa, despite recent progress (Stern 2005). The chances of success of economic growth and human development policies are greater in countries with sustainable domestic security. Uncertainties are greatest in countries that are politically unstable or subject to recurrent civil conflicts. For example, the ability of the Democratic Republic of Congo to stop rebellion, ensure the security of its people and establish the rule of law are all highly uncertain elements affecting its development prospects. In sum, uncertainties relating to other key sectors relate to how international development policies might take account of African specificities (weak states, commodity dependant economies, widespread poverty, etc.) and how individual countries can develop development strategies suited to their history and needs of their people.

4.4.3 Uncertainties Related to Demo-Economic Relationships

Sub-Saharan Africa is extremely fragmented, with 27 countries having less than 10 million inhabitants (in 2005) and 20 countries whose GNP is below $10 billion (in 2007) for the 49 countries that make up the region. However, there is a concentration of economic activity and population with just five countries accounting for 68 per cent of total production and 29 per cent of total population (Table 4.3). Consequently, the future of demo-economic relationships in sub-Saharan Africa depends on a few key countries that are major actors representing potential 'drivers of growth' (World Bank 2006).

Given that most of the other countries have low economic and demographic weights, it must be assumed that sustainable development can only move forward within regions surrounding these key countries. Fortunately, these are spread out over the sub-continent, from Southern Africa (South Africa) to West Africa (Nigeria) and across Central Africa (Angola) and East Africa (Kenya, Sudan). The spillover effect triggered by these countries will depend on their own internal dynamics, mostly resting on their medium- and long-term political and social stability. With the long civil war that decimated its population and economy (1975–2002) at an end, Angola can now play a greater driving role based on a flourishing oil and mining industry. Conversely, Nigeria currently appears to be hindered by serious internal conflicts. Civil conflicts have also hit Sudan and Kenya, with greater intensity and consistency in Sudan. As for South Africa, the burden of HIV/AIDS on the health care system and its negative impact on productivity due to the deaths of educated young adults has put brakes on its expansion as the regional driver of growth.

Table 4.3 Economic and Demographic Weight of Five Key Sub-Saharan African Countries

Country	**Gross domestic product (in millions of dollars, 2007)[a]**	**Population (in millions, 2005)[b]**
South Africa	274	47
Nigeria	137	131
Sudan	37	36
Angola	44	15
Kenya	26	34
All of sub-Saharan Africa	*761*	*905*

[a]World Bank (2008).
[b]United Nations (2005a).

The spillover effects of countries that are drivers of growth will also depend on the level of regional integration and its capacity to promote peace between states, the competitiveness of national economies and the efficiency of social systems. Building regional integration is difficult in sub-Saharan Africa due to political divisions, distance from large international markets, and low economic density (World Bank 2009). Regional integration is also far from responding to these challenges, even when considering the economic progress achieved by the Southern African Development Community (SADC). This organisation, built around South Africa, includes the only sub-Saharan countries where manufacturing accounts for more than one-fifth of total production, evidence of progress towards more equitable economic growth (BIT 2003). Building on initial successes, in 2008, representative countries of the three existing regional organisations in East and Southern Africa worked toward the creation of a larger single market to accelerate economic integration.

In West Africa, progress in regional integration through the Economic Community of West African States (ECOWAS) remains limited because this institution lacks legitimacy and member states give it little power (Tidjani Alou 2005). The future of West African integration appears to be linked to broadening the West African Economic Monetary Union (UEMOA) to include the region's Anglophone countries and strengthening its action for 'the creation of open and competitive markets, based on the rationalisation and harmonisation of the legal environment' that constitutes its main objective.

4.5 Possible Trajectories of Demographic Changes and Development

Current trends in African countries are extremely diverse as evidenced by their disparate levels of economic and demographic growth in the beginning of the twenty-first century. Moreover, from 1996 to 2005, only eight sub-Saharan African countries achieved or came close to an annual growth rate of 7 per cent of GNP, the level needed to meet the MDGs given the population growth rates, while some countries had growth below 1 per cent of GNP, while still others were null or negative.[21] As for demographic growth between 2000 and 2005, it ranged from below 1 per cent in five countries with the lowest rate in Lesotho to over 3 per cent in 12 countries, with the highest rate in Eritrea. Diverse trends are expected to continue into the coming decades, even though the neighbourhood effects of countries that can potentially drive economic growth, development and pioneering demographic behaviours will hopefully lead to a relative homogenisation of courses. Whatever the foreseeable diversity in terms of economic and demographic dynamics, some typical trends can be envisaged, based on the major observed ones and our understanding of the most meaningful interrelationships. Three possible trajectories for Africa's future have been retained. The first one concerns the demographic bonus that Africa may experience. The second trajectory is driven by the growth of an open economy. The third trajectory corresponds to the spread of poverty traps.[22]

4.5.1 The Full Effect of the Demographic Bonus on Sustainable Development

This trajectory favours demographic growth control as the first step of a virtuous circle towards primarily endogenous development that is equitable and sustainable. In this trajectory, demographic uncertainties have been lifted in favour of reduced population growth. An actual improvement in family planning programmes coupled with parents' lowered demand for children results in a further decline in the number of births. This triggers a rapid catch-up effect by increasing health care coverage rates for mothers and children and school enrolment rates for primary followed by secondary levels (Guengant 2007). More broadly, changes in the population pyramid favouring adult working-age individuals over dependant populations promote improvements in educational and health levels. These advances in education and in health lead to decreases in unemployment and under-employment and an increase in work productivity. By containing unemployment and poverty among young people, education can also break the intergenerational cycle of poverty currently predominating both in urban and rural settings.

When accompanied by increased investments in the agricultural sector, progress in education and health in rural settings leads to improved agricultural productivity. In turn, this raises family incomes that are currently too low, while transferring a portion of the resources from this sector (labour, primary production) towards secondary or service activities with greater added value. This progression promotes improved valorisation of primary production and the strengthening of industrialisation and urbanisation, both factors that accelerate the demographic transition.

Secondly, the process of agglomeration and population densification provokes a surge in demand, driving economic growth. This demand increases and diversifies industrial and artisan production and business that are profitable for the urban economy, but also increases solvent demand for food products. This increase contributes to a new phase in agricultural development that responds positively to demands placed on the market through enhanced productivity. In this context of high demand, higher population density and improved human capital promote the implementation of new farming techniques that increase productivity, protect soil fertility and decrease land use. This is the first step towards transforming agriculture into a stabilised system in terms of land use and its reproducibility while protecting the environment by conserving forests and sensitive ecological areas still available.

This trajectory follows Boserup's model, where agricultural technical progress results from demographic pressure (Boserup 1970); the West African Long Term Prospective Study (WALTPS) model constructed in the 1990s where economic growth is drawn from urban demand (Cour 1994), and the World Bank sustainable development model, where environmental and resource conservation are conditions for long-term sustainable agricultural development (Cleaver and Schreiber 1994). The trajectory corresponds to implemented sustainable development activities based on the quick control of population growth, economic growth that is highly endogenous (first on a regional and then on a continental level), improved human capital and environmental conservation. It assumes quickly lifting the demographic constraint and the implementation of sectoral policies focused on self-reliance and social policies that promote equality.

4.5.2 From Growth and Control of an Open Economy to Demographic Change

This second trajectory rests on African economies' growing integration into the international economy due to progress in productivity and gains in competitiveness. It presents great potential for economic growth, an important factor in demographic transformations and the eventual control of population growth. This virtuous scenario is related to changes in the international environment and regional integration and results from a set of external (progression of multilateralism, diversification of partners in Asia and North America) and internal factors (improving governance and security, creating an environment conducive to the attractiveness of capital).

This trajectory assumes the implementation of sectoral policies and business legislation that promote liberal policy and a move away from extensive economic growth to more intensive growth. This supposes major internal adjustments, significant physical and human investments and considerable external private investment. This trajectory also assumes that substantial progress will occur in regional integration. This policy leads to growth in the private sector, intensification of agriculture and diversification of exporting mining products and services. This trajectory based on international competitiveness corresponds to improved formation of human capital, specialisation in more technically advanced products, and greater interregional mobility of labour- and capital-related factors. Acceleration of regional integration increases labour mobility and population movements towards urban centres and coastal areas. The urban informal economy and extensive agriculture continue to seek labour, even if rural and urban production intensifies overall. The success of this economic growth model requires high-quality and far-reaching basic education and health care systems that will improve work productivity and qualifications of the workforce.

With rapid progress in education and urbanisation, an increased number of educated and urbanised wage earners might support women's professional projects and improved human capital among the new generation. These changes could trigger a decrease in demand for children and fertility as well as a slow-down in demographic growth. The intensification of production, the influx of private capital, and the diversification of the economy limit demand for internal and international labour and curb migration.

Ultimately, this trajectory brings forth high levels of economic growth, founded on a liberal policy of integrating all regional entities into the global economy, which significantly improves the population's education and health levels: improvements which support the transformation of reproductive behaviours towards reducing population growth.

4.5.3 The Spread of Poverty Traps on a National or Regional Scale

The uncertainties related to the degree of slowing population growth as well as to the effectiveness of the fight against poverty lead us to design a darker pathway of the future of Africa. Given existing processes, the spread of poverty traps can be envisaged through the accentuation of existing vicious circles. These combine uncontrolled demographic growth and the maintenance of a rentier or weak subsistence economy, exacerbated by various national or ethnic claims.

In this third trajectory, the lack of improved efficacy in the health care and education systems and the poor development of family planning services consolidate rapid demographic growth. Fertility and mortality remain high, resulting in a high dependency ratio and the weak improvement of human capital, unfavourable to improving labour productivity and investment. This corresponds to an inability among countries to diversify their production systems towards activities with high added value, strengthen mechanisms for regional integration and enable economic growth that is sufficiently greater than demographic growth to develop investments in social and productive sectors.

Population dynamics are marked by an increase in urban migration that cannot absorb the rural overflow, pressure on the job market and consequently, unemployment and instability. Without the creation of new means of subsistence, the rural exodus alone cannot lessen land pressure, and declining agricultural productivity causes food insecurity. This poverty can be a source of social conflicts even if the population's standard of living maintains itself through expansion of the informal economy. Due to social and economic crises, matrimonial instability progresses and the capacity of family and lineage solidarity systems to alleviate financial difficulties diminish. This worsens the crises' negative effects on living conditions, health and education of the most vulnerable individuals. Exhausting the prospects of personal valorisation within one's country further opens the path to emigration to the West and weakens states even more with brain drain.

A scenario combining overpopulation and agricultural over-exploitation on a more regional scale can be linked to this national-based trajectory. This scenario is rooted in the linkages between a growing rural population and an environment unable to handle excessive densities. Overpopulation causes high deforestation resulting in soil erosion. Simultaneously, excessive demographic pressure leads to diminishing availability of arable land per household, overuse of land and limitations or disappearance of pastures. All this further impoverishes agricultural families and accelerates rural exodus among individuals, who often have low levels of literacy and training, and who find very few outlets in the urban employment market. This situation, where rural poverty and urban instability reinforce each other, can already be grasped in distinct ecological contexts, whether in the Sahel or in the Ethiopian Highlands. It could spread if investments and improved training for farmers fail to sufficiently improve farming techniques to respond to the demographic pressure in some overexploited rural settings.

This trajectory could have two variants. The first would follow from extensive economic growth based on international revenues (oil and products from mining and plantation agriculture). Hence, the economy would gain from exporting without diversification where high instability of prices would drive down competitiveness and increase foreign debt. This would involve a regression of state intervention in economic and social sectors and resorting to external support. As with any extensive model, this runs the risk of depletion when the state would have limited means to support social systems in a situation of rapid demographic growth.

In the case of serious socio-economic crisis, a scenario that falls back on identity or national values, leading to internal conflicts based on ethnic, religious or social differences or conflicts between neighbouring countries is foreseeable. In a context of specialisation in products with low added value, scarcity and lack of progress in productivity, an engulfing crisis could ensue. Social tensions would lead to discrimination in the labour market affecting both wage earners and those in the informal sector. Internal regional inequalities within countries could increase and intergenerational conflicts could arise as more young people seek jobs in a tight labour market. This economic crisis trajectory is compatible with the Malthusian poverty seen in other parts of the world (Bangladesh, Latin America), where fertility decline would be linked to the breakdown of households and weakening of intergenerational solidarities causing a rise in mortality.

4.6 Conclusion: Regional Dimensions of the Population-Development Relationship

Now as before, low population density, long distances between main activity centres and intense divisions between countries contribute to underdevelopment in sub-Saharan Africa (World Bank 2009; Iliffe 1995). Thus, the proximity between economic agents is restricted and the diffusion of pioneering demographic behaviours within sub-Saharan Africa is also impeded. This gap also prevails between sub-Saharan Africa and the rest of the world, particularly with North Africa, which does not suffer from the same geographical and political hardships.

These structural drawbacks in large part explain the region's inability to benefit from the initial phases of its demographic growth to bring about a true economic take-off while reducing population growth, as other developing regions have been able to do. Currently, several sub-Saharan countries are characterised by a population increase that is too fast relative to production system capacities and major difficulties in freeing up sufficient resources for education and improving human resources. For these countries, young populations continue to be a burden more than a resource. The future choices and content of development and population policies are key issues since the usual model for demo-economic change implemented in other regions has often failed due to deficient health, the low level of technology and the high level of the dependent population (Clapham 2006).

We have demonstrated the existence of virtuous circles in sub-Saharan Africa that must be encouraged and prioritised. For example, progress in schooling improves women's education and participation in economic activities. This contributes to a decline in under-five mortality, fertility and population growth. This declining population growth has an important indirect influence on the development by allowing a reduction in the dependency ratio, outlined above, which in turn promotes poverty reduction and investment in human capital as factors of socio-economic progress. We have also highlighted several vicious cycles that must be bypassed or prevented. Certainly, the most dramatic situation is where civil conflicts cause the disorganisation of social systems and production structures, growing monetary poverty and deteriorating living conditions, causing a rise in mortality while instilling serious social instability that devastates institutions. Highlighting these cycles demonstrates that we are faced with a global system where the demographic dynamic is an endogenous component that affects other components while being subjected to their influences. The population growth decline will allow for increased economic and social investments. However, sustained control of African demography will only happen when healthcare and education and more broadly, all components of human and social capital, are improved. Political action must take into account the effects and reciprocal counter-effects of demographic policies and programmes in other key sectors for the population variable as well as for other social and economic structures.

Encouraging cumulative development processes will require overcoming the impediments of economic geography and resolving the most crucial demographic issues. Accelerating urbanisation while improving infrastructure, promoting land-use development by building transportation networks and improving regional integration through political cooperation are preferred means for improving the geography of development (World Bank 2008). UNCTAD considers strengthening intra-African integration to be equally indispensable by defining two goals: to reinforce political unity throughout the continent and promote economic growth and development (Cnuced 2009).

The promotion of regional integration, defended by international institutions and centred on a few countries that are potential drivers of growth, could result in regional areas for development if the liberalisation of migration movements enables a better distribution of human resources and population policies are adapted in each region. Today, demographic constraints for sustainable development vary across regions. The economic and social development of Southern Africa is hindered by the high prevalence of HIV/AIDS that makes combating this pandemic a priority. This is as important as the priority given in West and East Africa on controlling fertility by ensuring universal access to high-quality family planning programmes. This implies that the international priorities imposed on the countries be greatly adjusted to a more regional understanding of population problems and by acknowledging each country's specificities regarding demographic issues, as well as their geographic and economic characteristics. Nevertheless, progress in human development can be decisive at a certain point in accelerating demographic changes, particularly a decline in mortality and controlling fertility.

As for North Africa, it must still reinforce fertility decline, particularly in countries where it has advanced the least (Egypt, Libya). It must also reform its production systems to provide employment to a growing active population, while pondering what further programmes are needed to compensate for the effects of an ageing population occurring for the first time in Africa.

In addition to the issues specific to its large regions, we conclude with two major issues facing Africa. The first issue relates to rural and agricultural development, given the percentage of population living in rural areas and the need to ensure food security in fast growing cities. In a region where 40 per cent of exports come from the agricultural sector and where poverty mainly affects rural areas, agricultural growth can have a major impact on reducing poverty and fostering economic growth. Consequently, the challenge is to improve investment policies to significantly increase the currently low productivity (World Bank 2006) and ensure that agricultural production systems – traditionally extensive with high land consumption – become sustainable. The second issue concerns land development since over-farmed regions already coexist with desert land or areas undergoing desertification on a continent that will be the most vulnerable to the impacts of climate change, which could lead to reductions in the availability of arable land and declining crop yields.

Regardless of constraints, today North Africa is confronted with the challenge of reaping the full benefits of declining population growth in terms of economic and social development, while sub-Saharan Africa must engage in the virtuous circle of a slow-down in population growth and socio-economic growth. To drive towards greater sustainable development through population control, socio-economic progress, and sustainable use of resources, these regions have the opportunity to benefit from greater integration into a global market by better defining, and even redefining their development policies using the systemic and context-specific approach outlined in this study.

Appendix

Table A4.1 Demographic Indicators by Region in Africa

Indicators	Population (thousands)	Density (inh. per sq. km)	Annual growth rate (%)	Birth rate (per 1000)	Death rate (per 1000)	TFR (children per woman)	Life expectancy at birth (in years)	Under-five mortality (per 1000 live births)	Population under 15 years of age (%)	Population over 60 years of age (%)	Urban population (%)	Active population (% aged 15–64 years)
Year	2005	2005	2000–2005	2000–2005	2000–2005	2000–2005	2000–2005	2000–2005	2005	2005	2005	2000
Source	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(2)	(3)
Southern Africa	54,055	20	0.7	24	17	2.9	48	79	33	7	57.3	66.3
East Africa	287,707	30	2.2	38	15	5.0	49	159	41	5	22.7	80.3
Central Africa	109,461	17	2.6	46	20	6.2	43	204	46	5	41.1	74.5
West Africa	263,636	43	2.4	42	17	5.8	46	193	44	5	42.9	72.3
Sub-Saharan Africa (altogether)	714,859	29	2.3	40	17	5.3	46	172	42	5	35.9	–
North Africa	190,895	22	1.7	26	7	3.2	67	61	33	7	50.9	59.8
Africa	905,936	30	2.2	38	15	5.0	49	159	41	5	38.7	71.5

Sources: (1) *United Nations*, World Population Prospects: The 2004 Revision: Wall Chart, Population Division, Department of Economic and Social Affairs, New York, 2005; (2) *United Nations*, World Urbanization Prospects: The 2007 Revision. Highlights, Population Division, Department of Economic and Social Affairs, New York, 2008; (3) *OIL*, Rapport sur le travail dans le monde, Geneva, 2000.

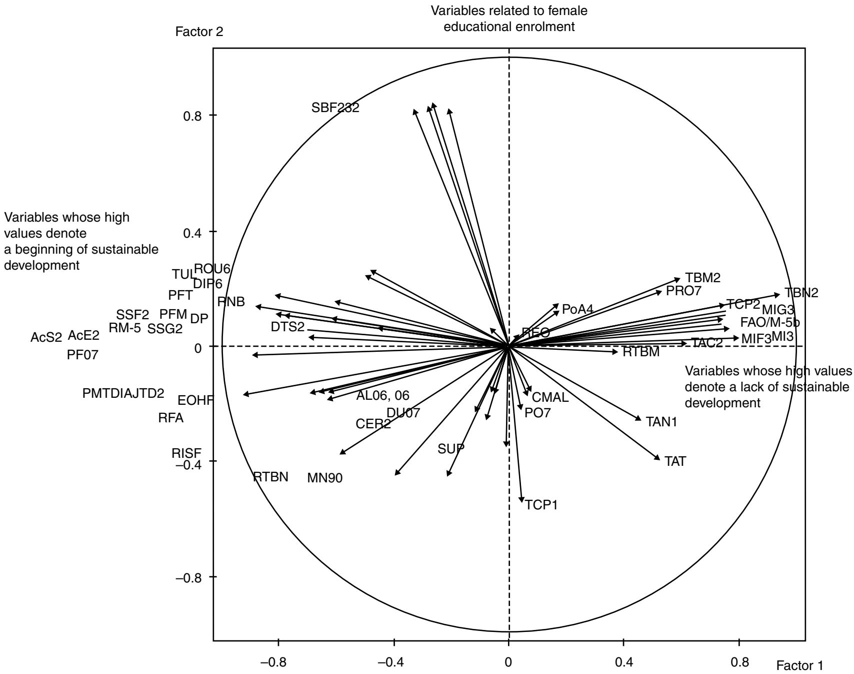

Figure A4.1 Representation of Variables in the First Factorial Plane

Note: Figure 2 defines the countries' situation according to the most determinant variables in terms of socio-demographic and health change. Three groups of variables are underscored in this graph: (1) Variables that discriminate countries the most are those referring to health progress, access to drinking water, secondary enrolment, contraception use, etc. These are located on the left side of the graph; (2) Variables for which high values imply a lagging development, such as under-five mortality, migration and percentage of rural population, etc. These variables are situated on the right side of the graph; and (3) Variables referring to education, particularly female education, located at the top of the graph.

List of variables in the Figure

Abbreviation	Wording	Abbreviation	Wording
AcE2	% of population with access to water (2004–2006)	RFA	% de decrease of the total fertility rate among the 15–19 years old (1997–2007)
AcS2	% de population with access to sanitation (2004–2006)	RISF	% of decrease of the TFR (1997–2007)
AJC2	Daily calorie intake per inhabitant (2003)	RM-5	% of decrease of the under-five mortality (1992–2007)
DTS2	Total health expenditure as % of GDP (2003–2005)	RNB	Gross national income per capita (2006, in $US)
E0HF	Life expectancy at birth (2007)	RTBN	% of decrease of the crude rate of birth (1997–2007)

Continued

List of variables in the Figure – continued

Abbreviation	Wording	Abbreviation	Wording
M-5b	Under-five mortality in 2007	SBF2	Gross enrolment rate for girls (2005–2007)
MIF3	Infant mortality rate (2007, female)	SSF2	Gross enrolment rate in secondary schools (2005–2007, female)
MIG3	Infant mortality rate (2007, male)	SSG2	Gross enrolment rate in secondary schools (2005–2007, male)
MN90	Net migration in 1990	TAN1	Natural growth rate (1996–2007)
MTD1	Average variation of the import dependency rate (2001–2005)	TAT	Adult illiteracy rate in % (2007)
PF07	% of female population (2007)	TBM2	Crude death rate (2007)
PFM	Modern contraceptive prevalence (2003–2007)	TBN2	Crude birth rate (2007)
PR07	% of rural population (2007)	TCP2	Population growth rate (1996–2007)

Table A4.2 Population Size and Rate of Growth According to United Nations' Variants, 2005–2030

	Population Size (in thousands)			
		in 2030		
	in 2005	**Medium Variant**	**High Variant**	**Low Variant**
Southern Africa	55,041	64,037	68,244	59,840
East Africa	287,413	518,064	544,638	491,542
Central Africa	113,185	201,602	211,561	191,682
West Africa	269,990	463,133	486,099	440,209
Sub-Saharan Africa	725,629	1,246,836	1,310,542	1,183,273
North Africa	195,444	277,351	293,484	261,239
Africa	921,073	1,524,187	1,604,026	1,444,512
	Rate of growth (in %)			
		in 2025–2030		
	in 2005–2009	**Medium Variant**	**High Variant**	**Low Variant**
Southern Africa	1.04	0.43	0.80	0.02
East Africa	2.59	2.00	2.29	1.69
Central Africa	2.60	1.95	2.23	1.65
West Africa	2.51	1.83	2.11	1.52
Sub-Saharan Africa	2.44	1.83	2.11	1.51
North Africa	1.71	1.05	1.36	0.71
Africa	2.29	1.70	1.99	1.38

Source: United Nations (2009).

Table A4.3 Economic Growth and Demographic Growth by Country

Level of demographic growth: mean annual rate of population growth (in %), 2000–2005	**Level of economic growth: mean annual rate of growth of per capita GDP (in %), 2000–2004**			
	Negative or Null Growth (from –3.4% to –0.0%)	**Low Growth (from 0.1 % to 1.9%)**	**Sustained Growth (from 2.0% to 3.9%)**	**High Growth (4% and over)**
3 % and over	Eritrea (–3.4; 4.3) Somalia (0.0; 3.2) Niger (0.0; 3.4) Burundi (0.0; 3.0) Congo (–0.5; 3.0)	Uganda (1.8; 3.4) Benin (1.2; 3.2) Burkina Faso (0.3; 3.2)	Chad (3.6; 3.4) Guinea Bissau (3.8; 3.0) Mali (2.3; 3.0)	Sierra Leone (5.3; 4.1) Mauritania (4.0; 3.0)
Between 2% and 2.9%	D. R Congo. (0.0; 2.8) Madagascar (–1.5; 2.8) Togo (–0.7; 2.7) Comoros (–0.1; 2.6) Malawi (–0.3; 2.3) Equatorial Guinea (0.0; 2.3) Djibouti (0.0; 2.1) Libya (0.0; 2.0)	Gambia (0.8; 2.8 Ethiopia (1.3; 2.4) Rwanda (0.3; 2.4) Senegal (1.6; 2.4) Guinea (1.0; 2.2) Kenya (0.3; 2.2)	Sao Tomé and Principe (2.3; 2.3) Nigeria (27; 2.2) Ghana (2.4; 2.1)	Angola (4.6; 2.8) Gambia (4.5; 2.8) Cape Verde (40.0; 2.4) Mozambique (6.0; 2.0) Tanzania (46; 2.0)
Between 1% and 1.9%	Egypt (0.0; 1.9) Côte d'Ivoire (–2.4; 1.6) Liberia (–2.8*; 1.4)	Zambia (0.3; 1.7) Gabon (0.3; 1.7) Central African Republic (0.3; 1.3)	Cameroon (2.7; 1.9) Algeria (3.0; 1.5) Morocco (3.0; 1.5) Namibia (3.2; 1.4) Tunisia (3.4; 1.1) Mauritius (2.9; 1.0) South Africa (2.2; 0.8)	Sudan (7.5; 1.9)
Below 1 %	Seychelles (–2.3; 0.9) Zimbabwe (–6.2; 0.6) Swaziland (–0.7; 0.2)	Lesotho (1.9; 0.1)		Botswana (5.7; 0.1)

Note: The first number in parentheses corresponds to the rate of economic growth per capita, the second to the rate of demographic growth during the respective observation periods.

Source: *World Bank*, Africa Development Indicators 2006, Washington DC, Oxford University Press, 2006, 152 p.; United Nations, World Population Prospects: The 2004 Revision: Wall Chart, Population Division, Department of Economic and Social Affairs, 2005.

Notes

1. The demographic transition describes the shift from a demographic regime of high mortality and fertility to one of low mortality and fertility. The period during which mortality decline precedes the fall of fertility refers to a phase of more or less intense and lasting population growth depending on the paces of mortality and fertility decline respectively, and on the time interval between these two declines.
2. The UN prospects are relatively reliable insofar as they are based on the most recent survey findings and on assumptions regarding future behaviours which follow recently observed trends. The medium variant – our main reference – is based on a fertility decline. The variant is also based on an assessment of the impact of HIV/AIDS using the levels of access to antiretroviral treatments in the worst-affected countries. Regarding the projections twenty years ahead, these can be considered as a globally acceptable basis, allowing for the fact that demographic phenomena are characterised by a relative inertia. However, long-run prospects must be considered with caution since some unknown phenomena may not be taken into account such as new pandemics, economic crises, etc. These should be seen more as a basis for reflection.
3. *Source*: OECD website, http://stats.oecd.org, 26 June 2009.
4. The United Nations Department of Economic and Social Affairs and UNHCR websites.
5. Urban populations will be nearly 40 times larger over a century, with cities counting an estimated 33 million inhabitants in 1950; 373 million in 2007; 658 million in 2025; and 1234 million in 2050 (United Nations 2008).
6. The last stage of the demographic transition is one in which mortality and fertility are low, with a life expectancy exceeding 70 years and a fertility rate corresponding to the threshold of replacement of generations (2.1 children per woman). The phases corresponding to the middle of the demographic transition are those where mortality and fertility decrease without reaching their lowest level.
7. The fertility transition is the passage from a high-fertility stage, whose level varies according to the populations but which may reach 6 to 7 children per woman, to a low-fertility stage corresponding to the threshold of replacement of generations.
8. The dependency rate indicates the number of non-working population in relation to the number of working individuals.
9. These include the following countries: Cape Verde, Congo, Eritrea, Ethiopia, Kenya, Rwanda, Sierra Leone, Somalia and Tanzania.
10. The population issue has also been disregarded as a result of global decline of population growth, particularly due to high fertility decline in Asia and Latin America, which has put the population problem and the fear of an exploding population in the background.
11. Data used for the analysis are drawn from African Development Bank (2008).
12. There is no strict correspondence between the position of countries in Figure 4.1 and their classification into the five groups. The figure corresponds to an automatic categorisation, made by mathematical procedures. The typology refines this categorisation taking into account a number of geographical factors in grouping countries that are somewhat less homogeneous in terms of the variables considered in the PCA.

13. In this section, we deal with the Maghreb countries since the other North African States stand apart in different ways. Egypt, slightly behind the Maghreb countries in its demographic transition, is focused on its geostrategic relations more towards the Middle East. Sudan is grouped with sub-Saharan Africa based on close cultural, socio-economic, and demographic similarities.
14. The four Maghreb countries are among the fifteen countries of the world that have benefited from the highest fertility decline between 1975–1985 and 2000–2005 (United Nations 2009).
15. Based on the medium variant from United Nations (2009).
16. The history of populations shows that fertility decline is a structural phenomenon that seldom reverses, except in cases of major events such as world wars and its catch-up effects. Once fertility begins to decline in a significant manner, it may stall or fluctuate slightly around an equilibrium point; however, low fertility remains a permanent component of the demographic regime.
17. 'Malthusian' situations exist where demographic pressure creates high tensions and plays a negative role, as seen in the highlands of Madagascar, the hills of Burundi and Rwanda, the Comoros Islands, and along Lake Chad or even in Sahelian areas threatened by drought. However, there are also 'Boserupian' situations where high density leads to agricultural and social innovations, as demonstrated by the examples of positive adaptations to demographic pressures observed in the Bamileke highlands, Kenya and Togo (Hugon 2007; Quesnel and Vimard 1999).
18. Fertility in sub-Saharan African countries has decreased annually, going from –0.07 children per woman to –0.02 children per woman for 1998–2004 (Bongaarts 2008)
19. A constant fertility variant was also developed as a reference point by the United Nations; we have not included it here since it provides no predictive outcomes.
20. Distinctions between the different areas of sub-Saharan Africa are quite significant. On the low end, Southern Africa's annual growth of 0.4% is contrasted with other regions that are situated between 1.8% and 2% (data for medium variants).
21. This annual rate of 7 per cent is the level of growth adopted by the New Partnership for Africa's Development to achieve the MDGs, particularly the goal of reducing by half the proportion of Africans living in poverty by the year 2015 (NEPAD 2001, Base Document).
22. Construction of these trajectories was inspired by a prospective study conducted in Côte d'Ivoire in the early 2000s (Hugon et al. 2002).

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5
Climate Change and African Development

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Climate change poses the most significant threat to the development of humankind and the earth as a whole (Boyd et al. 2009). As Kofi Annan commented recently, "the speed and scale of climate change is making the traditional knowledge of when to plant and when to harvest, passed down through generations, much less accurate than in the past."[2] Scientific evidence as a whole remains clear: the earth has experienced an average of 0.76°C temperature rise already in the twentieth century, with some effects already noticeable (IPCC 2007a). Climate change itself, defined as any form of climatic inconstancy, has occurred over many millennia (see Box 5.1 for definitions of climate, climate variability and climate change). However, human-induced increases in emissions of carbon dioxide and related gases since the later nineteenth century have made climate change more than just a natural phenomenon. The impacts of a changing climate on Africa and its development are the focus of this chapter. Highly increased rates of change have been recorded, carrying the potential for significant impacts on current and future world populations and environments.

5.1 Climate Change and the Global Development Agenda

The developing world, and particularly Africa, is most vulnerable to the risks of climate change. The Intergovernmental Panel on Climate Change (IPCC) reports that the global average surface temperature is likely to rise by between 1.8°C and 4.0°C by the end of the twenty-first century (IPCC 2007a). Recent evidence has shown that current emissions are higher than those projected by the highest emissions scenario developed by the IPCC (Anderson and Bows 2008; 2011; New et al. 2009; Raupach et al. 2007). Climate change threatens future development but will also undermine many development gains experienced already: it is estimated that even if the goal to limit global temperatures to 2°C rise by 2100 is reached, there will still be a 4 to 5 per cent permanent reduction in annual income per capita in Africa (World Bank 2010), and the Global Humanitarian Forum

Box 5.1 Definitions of Climate, Climate Variability and Climate Change

Following the IPCC definition, *climate* refers to "the 'average weather', or more rigorously, as the statistical description in terms of the mean and variability of relevant quantities over a period of time ranging from months to thousands or millions of years. These quantities are most often surface variables such as temperature, precipitation, and wind. Climate in a wider sense is the state, including a statistical description, of the climate system. The classical period of time is 30 years, as defined by the World Meteorological Organization (WMO)" (IPCC 2007b: 871).

Climate variability "refers to variations in the mean state and other statistics (such as standard deviations, statistics of extremes, etc.) of the climate on all temporal and spatial scales beyond that of individual weather events. Variability may be due to natural internal processes within the climate system (internal variability), or to variations in natural or anthropogenic external forcing (external variability)" (IPCC 2007b: 872).

Climate change "refers to any change in climate over time, whether due to natural variability or as a result of human activity. This usage differs from that in the United Nations Framework Convention on Climate Change (UNFCCC), which defines 'climate change' as: 'a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods' " (IPCC 2007b: 871).

estimates that 325 million people worldwide are already affected by climate change (GHF 2009). The potential of a higher range of up to 4°C change in global average temperature by the 2070s, discussed by New et al. (2009), would have devastating effects.

Climate change has entered relatively recently on the international development agenda and has swiftly taken on great importance (Huq and Ayers 2007). It is now widely considered that developing countries will suffer the severest impacts on human populations through threats to food production and food security, water security and the (already relatively weak) economic base of many nations. African economies are highly dependent on agriculture, most of which is rain-fed and subsistence agriculture involving 65 to 70 per cent of the population to produce 25 to 30 per cent of Africa's gross domestic product (GDP) (World Bank 2009; Foresight 2011). Climate change and increased variability spell potential disaster for smallholder households and nations reliant on climate-sensitive production.

Climate change has already modified governance and social aspects of the development process with new actors getting involved as opportunities arise in the private sector. Climate change brings further challenges that directly confront existing development approaches such as climate-proofing existing development initiatives, low carbon pathways to development vs. business-as-usual approaches (Newell et al. 2009) and biofuels that compete for valuable agricultural space for food production (AEA 2009).

But climate change is not happening within a static field of international development, as other chapters in this book confirm. The focus of international development as a whole is changing in Africa now due to demographic change, technological change, new international actors and new activities of existing international actors, including the European Union (EU), among other factors (see for example Chapters 4, 6, and 8 in this volume).

To explore the role of climate change in influencing Africa's future, this chapter first outlines the state of knowledge on how climate variability and climate change are already affecting African development outcomes. It then examines projections for climate change to 2030 and their potential impacts. Finally we consider implications for African development and development cooperation.

5.2 Climate Variability, Climate Change, and African Development Outcomes

When considering the effects of climate change on African development, the starting point is to examine existing evidence of climate change impacts. One aspect that needs careful attention is to analyse climate change against the backdrop of underlying climate variability, which is particularly pronounced on the African continent. We discuss first why and how climate is variable in Africa and its sub-regions in a short section that provides an overview of key physical aspects related to this variability. Then we examine current evidence for climate change, and the impacts on a number of key sectors relevant for development in Africa. Finally we consider future directions for African development in the light of climate change.

5.2.1 Climate Variability in Africa

This brief summary cannot do justice to the wealth of detailed meteorological and climatic information available elsewhere on the region and sub-regions (e.g. historical data in Harrison-Church 1956; Nieuwolt 1982; Nicholson 2000; Hulme et al. 2001; 2005). However a few broad statements provide an overview. African climates can be broadly grouped into three main climate types: the arid climate type covers the largest area (57 per cent), with tropical (31 per cent) and temperate areas (12 per cent) accounting for the remainder (Peel et al. 2007). Alternatively, climate zones can be distinguished according to the length of the growing period (see Figure 5.1). The African continent's climates are determined generally by latitude and altitude and differ based on precipitation ranges from hyper-arid zones with wet periods no longer than one month in duration to humid zones, where rainfall is higher than the evapotranspiration for between 9 and 12 months (FAO 1986). Rainfall amount, duration and seasonality are the most important factors in differentiating current climates in Africa due to the generally high temperatures and low rainfall across the continent as a whole (Economic Commission for Africa 2000; UNEP 2006).

High rainfall variability is a major determining feature of the African drier climates (arid and semi-arid). This variability can be seasonal, inter-annual, and decadal or follow longer time scales (Lebel and Ali 2009). Rainfall is also highly unpredictable, especially in the arid and semi-arid areas, both in terms of amounts from year to year and spatial distribution (FAOSTAT 2000). Several challenges arise from these high levels of climate variability: periodic extreme weather events such as droughts, floods and tropical

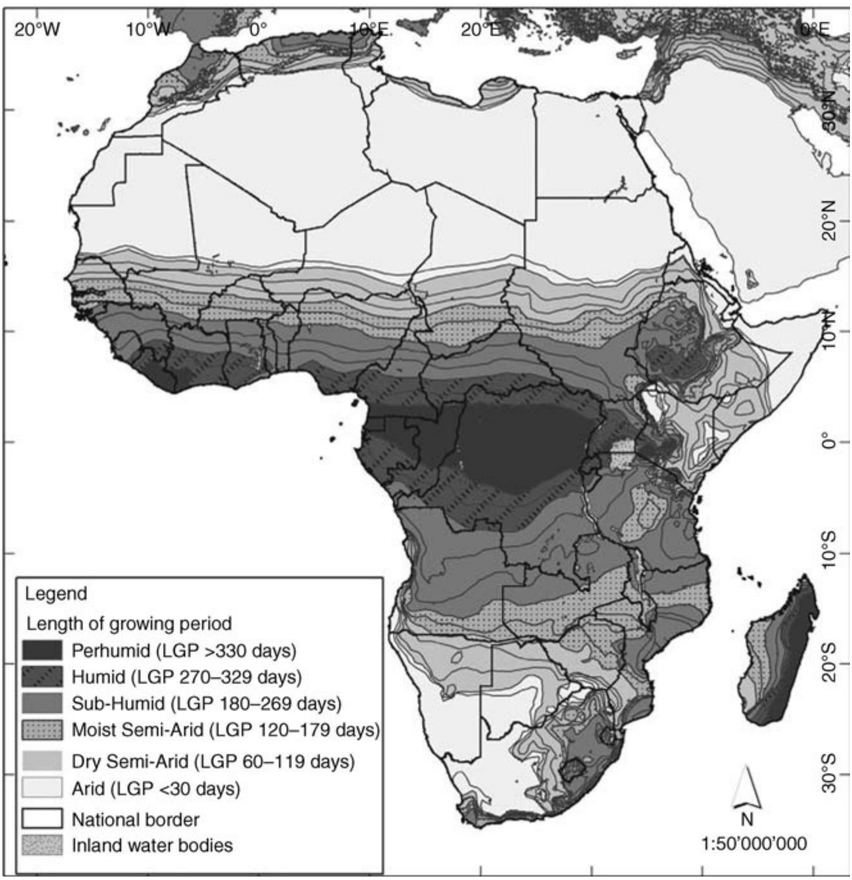

Figure 5.1 Major Climate Zones of Africa According to the Length of the Growing Period

Source: FAO/IIASA 2000: Global Agro-Ecological Zones. Category: DIE.

cyclones are characteristic of different parts of Africa. Such events damage crops and infrastructure, thereby threatening livelihoods. For example, ten major droughts of 1–4 years' duration occurred in East Africa in the last 50 years (FAOSTAT 2000; Ifejika Speranza 2006). These drought periods are sometimes interspersed with floods. Cyclone-related winds and heavy rainfall are also common in eastern and southern Africa. Cyclone-related activities also caused the failure of the March–May 2000 rainfall season in tropical eastern Africa (Ambenje 2000). In Southern Africa five cyclones affecting over 100,000 people have occurred in the past 30 years (CRED DB EM-DAT 2010).

Variability is a result of various global, regional- and small-scale climatic processes including long distance connected climatic processes such as sea surface temperatures and the El-Nino/La Nina southern oscillation (ENSO) (see Box 5.2 for details). The inter-tropical convergence zone (ITCZ), the African jet streams, the tropical Easterly jet, the North Atlantic oscillation (affecting North African rainfall), the southern annular mode (affecting South African rainfall), monsoons, cyclones and sub-tropical anticyclones, and the easterly/westerly wave perturbations all influence regional weather patterns and climate variability in Africa (Ambenje 2000; Knippertz et al. 2003; Bowden and Semazzi 2007, Christensen et al. 2007, Paeth and Thamm 2007). Land surface characteristics such as vegetation cover and associated dynamic feedbacks also play an important role in African climates (Reason and Rouault 2005; Christensen et al. 2007).

These overlapping processes in the climate system cause significant complications for understanding and predicting weather, and weather-related climate variability. The overlapping processes causing rainfall variability also explain the 'initial' conditions affected by anthropogenic climate change. These conditions vary across sub-regions, as the discussion of climate variability and impacts below indicates.

Box 5.2 The ENSO and the ITCZ and their Influences on Climate Variability in Africa

El Nino is an ocean atmosphere effect, with warming of the Pacific Ocean on a 2–7-year timescale. This affects Africa and the West Indian Ocean Islands through changes in rainfall variability and winds across southern and eastern Africa. In the Eastern Africa region, "(E)l Niño episodes usually cause greater than average rainfall in the short rainfall season (October–December), whilst cold phases (La Niña) bring a drier than average season" (McSweeney et al. 2008:1). The Inter-tropical Convergence Zone (ITCZ) atmospheric belt causes the seasonal migration of the tropical rain belts to north and south. Sensitive to Indian Ocean sea-surface temperatures in its movements, the ITCZ influences rainfall regimes and seasonal rains and winds across the whole of Africa (see Christiensen et al. (2007) and McSweeney et al. (2008) for further information).

5.2.1.1 Northern Africa

Northern Africa is one of the most arid areas of the world, comprising both arid and semi-arid climatic zones, with a wetter coastal strip (UNEP 2002). Variations in daytime temperature and changes in prevailing winds mark the difference between seasons (Elmallah and Elsharkawy 2011). Rainfall is highly variable across the region – from 5 mm mean annual rainfall (Sahara) to 1600 mm on parts of the coast in the period 1925 to 1990 (Nicholson 2000). Temperature extremes are significant: –24°C and + 58°C have been measured at locations in the region in the first half of the twentieth century (Collins 2011). Recurrent droughts characterise the northern African climate (Hulme et al. 2001; Mougou et al. 2011). Algeria, Morocco and Tunisia experienced 6–7 years of drought between 1980 and 1993, and Morocco has experienced a drought every third year on average over the last century. Flash floods are also common, causing soil erosion (Swearingen and Bencherifa 2000). Drought aggravates the effects of overgrazing, increasing degradation of natural vegetation and soils and has major socio-economic significance in northern Africa because rain-fed cereal cultivation is predominant in that region.

5.2.1.2 Western Africa

The climate of the West African sub-region varies from north to south and is mainly governed by the seasonal movements of the ITCZ (Giannini et al. 2003, Omotosho and Abiodun 2007). The climates in the region range from humid equatorial conditions at the coast to arid conditions in the northern Sahelian countries. The precipitation range is wide, increasing from the inland Sahelian region (<100 mm ppt/year) towards the coast (4000 mm in Guinea and highlands of Nigeria/Cameroon border), according to data from the period 1925–1990 (Nicholson 2000). In the Sudano-Sahelian region, the climate is generally dry and characterised by two seasons while the southern humid areas have one season. The Sahel experienced a decrease in rainfall from 1970 to the 1990s, with recurrent droughts (UNEP 2002). Evaporation rates are high, with no perennial run off in Sahelian water courses and flash floods are common in high precipitation events. Rainfall in the Sahel has reportedly increased since the end of the 1990s, although, surprisingly, “the annual average rainfall is still as low as during the drought of the 1970s” (Mahé and Paturel 2009: 538). Besides droughts, heavy rainfall events lead to flooding as experienced in 2003 and 2007 (Brooks 2004; African Centre of Meteorological Applications for Development 2007; UN OCHA 2007). Rainfall variability thus adversely affects food production, food security, rural livelihoods and hydropower generation. The recent trend of increasing vegetation greenness in the Sahel has been related to increasing rainfall but also to land use change and migration (Olsson et al. 2005).

5.2.1.3 Central Africa

Central Africa's climate varies from tropical-dry to equatorial.[3] Rainfall and temperature patterns in Central Africa vary considerably, with unpredictable seasonal variations. Rainfall is relatively high and reliable over the central and coastal parts of the sub-region. Mean annual rainfall in the period 1925 to 1990 for the region ranges from 1200 to 2000 mm (Nicholson 2000) but significant variation exists between 500 (Djamena, Chad) and 3850 mm/year (Douala, Cameroon) (UNEP 2002). Rainfall is more variable towards the north. Temperatures are high (24–26°C) in the low-lying coastal forests, varying little due to persistent cloud, while in the high-relief mountainous areas, mean annual temperatures are lower and more variable (19°C and 24°C). The semi-arid zones experience a high temperature range between day and night. Droughts in the Central African semi-arid Sahelian zone have become more frequent since the late 1960s. Flooding is common in the more humid areas of Central Africa, especially where forests and natural vegetation have been cleared for cultivation or human settlements (UNEP 2002).

5.2.1.4 Eastern Africa

Rainfall is highly variable across Eastern Africa: mean annual rainfall in the period 1925 to 1990 ranges from 200 mm in the arid parts of Somalia and Kenya to 2400 mm in southern Tanzania (Nicholson 2000). Due to different altitudes and latitudes, there is a large variation in the distribution of rains from the Indian Ocean towards Central Africa and from the north to the south. Large parts of eastern Africa are arid or semi-arid, with annual rainfall below 500 mm. Rainfall is highly unpredictable, both in terms of amounts from year to year and in the spatial distribution within a given year (Ogallo 2000). Frequent droughts have occurred in each decade over the past 50 years in Eastern Africa (FAOSTAT 2000; Ifejika Speranza 2006). The droughts occur against the backdrop of widespread poverty and limited access to resources. This compromises the ability to cope with and to respond in crisis periods, and recurrent drought whittles away household resources, damaging long-term coping strategies. Persistent deficits in rainfall in eastern Africa continue to have serious impacts on crop and livestock production and on national economies. Crop failure has led to increasing food prices and dependency on food relief in Burundi, Ethiopia, Kenya and Uganda (UNEP 2002; Fews-Net 2011). Low rainfall causes water scarcity that adversely affects local hydrology, biodiversity and availability of water for domestic, industrial and irrigation purposes (UNEP 2002; Republic of Kenya 2010a).

5.2.1.5 Southern Africa

Southern Africa's climate also exhibits variation in climate zones, from desert to humid sub-tropical, and high levels of variability within the zones

(Tadross et al. 2009). Temperatures vary in the region, and annual rainfall in the period 1925 to 1990 ranged from 20 mm in the Namibian desert to 1600 mm in the north west of Swaziland (Nicholson 2000). Rainfall in Southern Africa is strongly influenced by the ITCZ, the southern oscillation index (SOI), the Antarctic oscillation (AAO) and the ENSO. The ENSO has been associated with changes in onset and cessation dates of the rainy season, the frequency of rain-days, heavy rains often accompanied by severe floods (as in 1999/2000 when Mozambique was exceptionally hard hit), or drought, as in 1982/83 when much of Southern Africa was severely affected (UNEP 2002, citing the National Drought Mitigation Center 2000; Tadross et al. 2009). Existing climate variability makes extreme climatic events like flooding, dry spells, cyclones and droughts a major challenge in Southern Africa. These climatic events reduce agricultural production, cause food insecurity and sometimes fatalities (CRED EM-DAT 2009).

5.2.1.6 Western Indian Ocean Islands

The western Indian Ocean sea surface temperatures, the Indian monsoon and the ENSO influence rainfall patterns in the western Indian Ocean islands (Ingram and Dawson 2005; Senapathi et al. 2010). Few studies of climate variability and change in the western Indian Ocean Islands are currently available. Data that are available show that monthly precipitation in this sub-region is highly variable. For example, parts of southeastern Madagascar have mean monthly rainfall of 240 mm (±198mm), but monthly rainfall has ranged from 10 to 1200 mm at extreme ends of the spectrum during the 1990s (Dunham et al. 2011). Mean annual rainfall in most of southern Madagascar is less than 800 mm per year while areas in the northeast receive on average more than 3500 mm rainfall per year (Tadross et al. 2008). Average minimum temperature is less than 5°C while mean maximum temperature is greater than 36°C (Tadross et al. 2008). The sub-region averages ten tropical storms or cyclones annually between November and May (four per year in Madagascar) (UNEP 2002). Similar to the eastern African region, the ENSO is also associated with floods and droughts (UNEP 2002). Periodic cyclones damage buildings and infrastructure, and the associated heavy rains destroy crops, cause flooding and threaten lives (CRED EM-DAT 2009; IFRCRCS 2011).

As this overview indicates, all the sub-regions in Africa encompass a variety of climates, which experience high climatic variability in precipitation and temperature range. Climatic variability can cause adverse consequences across many economic sectors and livelihoods, ranging from agriculture to hydro-power generation. These consequences are likely to be exacerbated by climate change.

5.2.2 Observed Climate Change

As we have seen, variability is a major determining feature of climate in the various sub-regions of Africa. Climate variability is predictable to an extent, but localised effects are far less predictable, and extreme events frequently cause serious impacts and disasters on the human population. In discussing human-induced climate change, it is important to note, firstly, that measuring it is a complex activity, hindered by incomplete data sets from much of the African continent (Washington et al. 2006). Secondly, although climate change has already been observed in different parts of Africa, its current and projected effects are dwarfed by those of climate variability, with the underlying climate change signal difficult to tease out separately (Hulme et al. 2005). As human-induced climate change is a relatively new phenomenon compared to climate variability, there is limited knowledge on anthropogenic climate change feedbacks, earth system tipping points, and ecological, economic, social and political responses.

Observed changes in climate to date include temperature increases in the Sahel, in tropical forests, Southern Africa, eastern Africa and North Africa (see Figure 5.2) (Meehl et al. 2000; Boko et al. 2007). Temperature decreases have also been observed in Cameroon and in parts of Malawi, Senegal and Nigeria (Hulme et al. 2001, 2005). Collins (2011) has reported significant increasing temperature trends in all African regions during the past two decades (1995–2010). Changes in rainfall patterns have also been observed. Across Africa the wet season started on average 9–21 days later from 1978 to 2002 (Kniveton et al. 2009). Rainfall has decreased in the Horn of Africa (Fischer et al. 2005), in Botswana, Zimbabwe, the Transvaal, and in the Sahel during the period from 1961 to 1990 (Hulme et al. 2005). An increase in rainfall extremes has been observed for Southern Africa and the Guinean coast. These impacts are variable within and between the sub-regions, with increases and decreases in both rainfall and temperature noted over time within one sub-region.

5.3 Africa in a Changing Climate: Projections and Impacts

5.3.1 Projected Climate Change to 2030

What can Africa expect in looking forward to 2030? This section examines projected climate change to 2030 and impacts on a number of key sectors related to African development prospects. A period of change is certain, and through its thorough assessment of scientific literature available, the IPCC provides a broad assessment of changes expected in 2100 in Africa from the Fourth IPCC Assessment Report. Key messages from this assessment include the following:

- All of Africa is *very likely* to warm during this century (to 2100).[4]
- Warming is *very likely* to be above the global average across the continent and in all seasons, with drier sub-tropical regions warming more than the moister tropics.

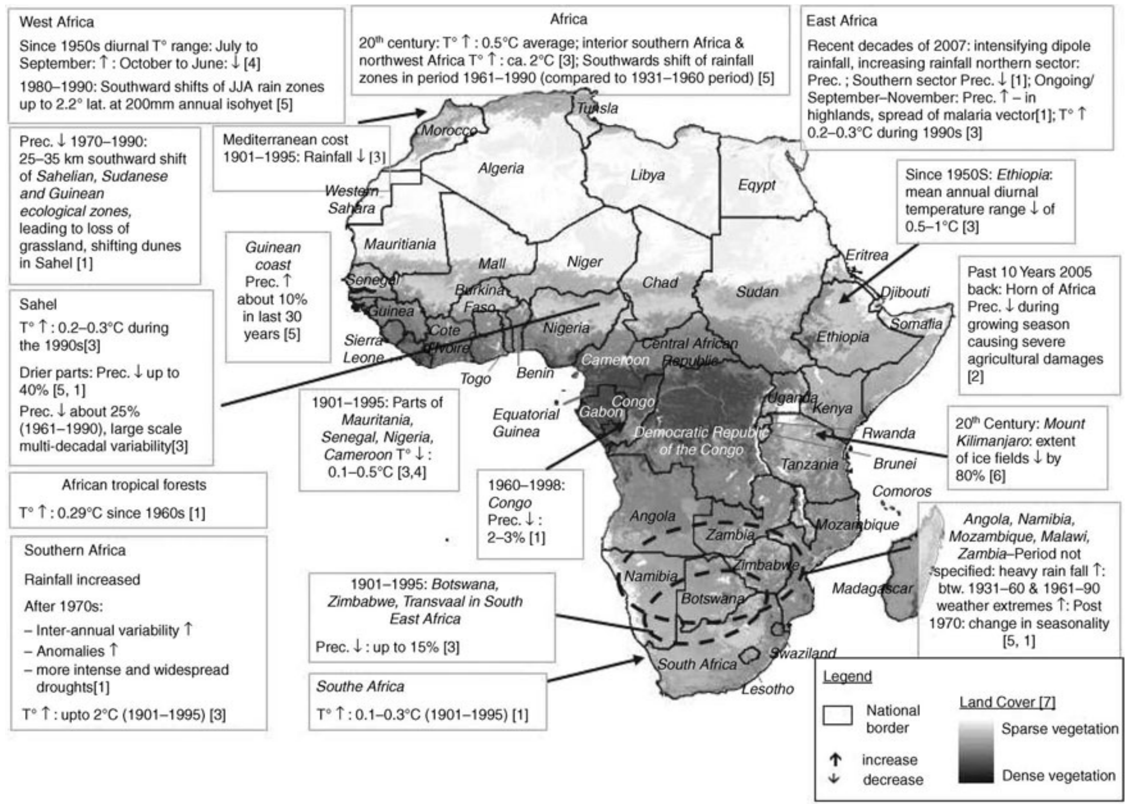

Figure 5.2 Observed Climate Change Impacts in Africa

Sources: [1] Boko et al. 2007; [2] Fischer et al. 2005; [3] Hulme et al. 2001; [4] Hulme et al. 2005; [5] Sivakumar et al. 2005; [6] Lemke et al. 2007; [7] Source Map: Global Land Cover 2000 (FAO-FIMA 2007); For further details please see Ifejika Speranza 2010

- Annual rainfall is *likely* to decrease in much of Mediterranean Africa and the northern Sahara.
- In Southern Africa, rainfall is *likely* to decrease.
- Annual mean rainfall in East Africa will likely increase (Christensen et al. 2007: 850).

The conclusions of the IPCC's Working group II of the Fourth Assessment Report (AR4) that "agricultural production and food security (including access to food) in many African countries and regions are likely to be severely compromised by climate change and climate variability" (Boko et al. 2007: 435) has been generally confirmed by various subsequent studies (e.g. Jones and Thornton 2009; Müller et al. 2011).

On a shorter time scale than the 2100 horizon of the AR4, most global circulation models show very similar amounts of average warming and variation up to 2030; very few focus on such near-term change. Greater differences are manifest between the models from 2060 onwards due to different assumptions about economic development rates and related emissions. Near-future (up to 2030) warming projections are consistent with warming observed for the past few decades and are little affected by different scenario assumptions or different model sensitivities (Solomon et al. 2007). This is due to the warming of the climate system to which the earth is already committed. The long time scales of adjustment of the earth's systems mean that climate change would continue at a rate of 0.1°C per decade for the next two decades, and sea level would continue to rise, even if all anthropogenic emissions stopped today (Solomon et al. 2007). Southern Africa's temperature could increase about 1.6°C by 2050, leading to seriously increased water stress (Boko et al. 2007).

When considering climate change, we need to bear two factors in mind. First, in both near term and longer term (to 2100), climate change is only a small proportion of normal climate variability according to observational evidence, as Hulme et al. (2005) report. Second, models show considerable uncertainty around climate projections. Projections under the three IPCC emissions scenarios models for Kenya's future, for example, show similar annual temperature change until the 2040s, but the variability around these projections is considerable in all scenarios. Nevertheless, under these different scenarios, the difference between the climate change effects by 2030 is minimal (McSweeney et al. 2008).

Under the different scenarios of future global temperature trends from the Special Report on Emissions Scenarios (SRES), global circulation models (GCMs) predict about a 1°C increase in average global temperature by 2030. This change is unavoidable, but current emissions will affect the proportion of future change considerably. Current emissions are beyond those of the highest scenario modelled by the SRES scenarios, so we do not have accurate modelling for the current global situation (Anderson and Bows 2011).

On a shorter time scale, whilst some indicators are becoming clearer, climate modelling still struggles to provide the level of downscaled accuracy that is required at the local and meso-levels for planning purposes. Christy et al. (2009) found that temperature trends for the 1946–2004 period showed little change for maximum temperature in East Africa, although minimum temperature was increasing. In Tanzania, for example, "scenarios of future climate from multiple climate models indicate no consensus on future changes in temperature or rainfall volatility, so that either an increase or decrease is plausible" (Ahmed et al. 2011: 46).

Precipitation is likely to decrease for most parts of sub-Saharan Africa (SSA) while rainfall variability and frequency of intensive rainfall events is likely to increase over time. There are likely to be shifts in onset and end of rainy seasons. Liu et al. (2008) show that temperature increases will negatively impact the production of certain crops. Due to increases in temperature, highland areas will become more conducive for agriculture but will also be more susceptible to malaria, and new diseases and pests are expected in areas where they were hitherto unknown or uncommon (Schreck and Semazzi 2004; Chen et al. 2006; Pascual et al. 2006). Under these circumstances, near-future climate change will most likely intensify the already observed changes if no actions are taken to adapt to climate change and to reduce greenhouse gas (GHG) emissions.

Although considerable progress has been achieved in the downscaling of precipitation projections for Africa, major limitations remain as different regional climate models produce diverging projections of precipitation changes over Africa (Paeth et al. 2011).

5.3.2 Major Impacts of Climate Change in Africa

Climate is a significant factor in the economic development and advancement, and the subsistence existence of the poor in Africa, in particular for the agricultural and water resources sectors at regional, local and household levels (Boko et al. 2007). Barrios et al. (2010) show that rainfall is an explanatory and conditioning factor of economic growth in sub-Saharan Africa, as declines in rainfall contributed to the poor growth rates (in GDP per capita) observed in the region. Climate change will affect development initiatives, human lives and ecosystems.

This section uses existing work on the impacts of climate change on African development as a point of departure for the following discussion. We briefly examine impacts in six main areas, all of which are also affected by existing social and development changes. Two overarching threads run through this debate. The first is population pressure. With a population expected to increase 50 per cent by 2010 levels to 1–1.5 billion by 2030 on current trajectories (United Nations 2008b), development efforts and livelihood options are under pressure to deliver more with fewer resources. The second is of institutions, policy and governance. These shape the framework conditions within which African populations adapt to climate variability and change.

5.3.2.1 Impacts on Biodiversity and Ecosystems

The impacts of climate change on ecosystems, interpreted for Africa, indicate increasing risks of species extinctions and increasing shifts of species ranges and wildlife fire risk at increases of 1°C (Millennium Ecosystem Assessment 2005, Fischlin et al. 2007). About half of the sub-humid and semi-arid parts of the Southern African region are at moderate to high risk of desertification (e.g. Reich et al. 2001; Biggs et al. 2004 in Boko et al. 2007). Biggs et al. (2008) estimate that the decline in biodiversity in Southern Africa will accelerate between about 2020 and 2060, implying that efforts to reduce the rate of biodiversity decline as targeted by the Convention on Biodiversity (CBD) will be very challenging to achieve. Warming trends in the Tsaratanana Massif in northern Madagascar has been associated with mean shifts in ranges for 30 reptiles and amphibian species (Raxworthy et al. 2007). However, many countries in Africa do not have a comprehensive documentation of existing biodiversity and ecosystems, making it extremely hard to predict impacts on ecosystems. In fisheries, countries such as Malawi, Guinea, Senegal, Guinea-Bissau and Uganda are the most vulnerable in Africa to potential climate change impacts, as climate change could lead to either increased economic hardship or missed opportunities for development in countries that depend upon fisheries but lack the capacity to adapt (Allison et al. 2009).

5.3.2.2 Impacts on Food Security, Agriculture and Land Use

As a whole, African agriculture faces limitations in achieving its production potential due to many reasons including limited access to inputs and markets, and households' variable investments of labour and other inputs. Climate-induced risks and effects are just one in a host of factors affecting food security and agricultural production in Africa (IAASTD 2008; Nelson et al. 2009).

Although proportions of rural dwellers in Africa will decline in the next 20 years due to increasing urbanisation, most of Africa's population is highly dependent on agriculture and will remain so in this period. Climate change is an additional pressure that exacerbates Africa's ongoing challenge of food insecurity and poverty, as the Climate Futures and Global Agriculture report and others have described (IAASTD 2008; Nelson et al. 2010). Most African economies are rain-fed agriculture-based, and in many regions crops are already being grown under marginal conditions of low rainfall and high temperature (Ifejika Speranza 2006; Boko et al. 2007). Food security remains a priority issue that is directly related to political stability, as evidenced by the 2010 riots in Mozambique relating to basic food price hikes. Although further investigation is ongoing, rain-fed agricultural yields could be considerably reduced (Jones and Thornton 2009). In Algeria, Morocco and Tunisia, this might mean a yield reduction of 50 per cent (Agoumi 2003; IPCC 2007b). Increased levels of drought, flood and seasonal rainfall variability (onset of rains) due to climate change and increased climate variability intensify the pre-existing challenges and constraints of poor soil fertility, pests, crop diseases, and a lack of access to inputs and improved seeds. In short, climate change will greatly compromise agricultural production in Africa and many studies already indicate the likely impacts.

Projections of climate change show that impacts may be both positive and negative in terms of yields (Müller et al. 2011). Many areas will experience increasing temperatures and declining precipitation, such as in northern Nigeria. This implies more stress on crops and the dependent livelihood systems (cf. Abiodun et al. 2011). Wider negative impacts include a transition of land from high agricultural productivity to low productivity, best suited to livestock production (Jones and Thornton 2009). Some claim that other areas may experience significant increases in yields of certain crops (e.g. Liu et al. 2008). Where temperature and rainfall are projected to increase simultaneously (e.g. southern Nigeria), benefits of increased rainfall may be offset by increased evaporation due to higher temperatures (Abiodun et al. 2011).

The severity of impact of increases or decreases in temperature and rainfall also differs from crop to crop and according to different SRES scenarios (Liu et al. 2008). For example, projections show that maize yield decreases by 17 per cent per 1°C increase in temperature for January–June growing season in Tanzania but expect minimal effects on sorghum yields (Ahmed et al. 2011). Liu et al. (2008) found that certain crops may increase yields whilst others decline. Modelling different SRES scenarios, they predict that changes in temperature, precipitation and CO_2 concentration for SSA as a whole will "lead to 16–18% lower yield for wheat, 7–27% higher yield for millet, 5– 7% higher yield for rice, and 3–4% higher yield for maize", though minimal changes in sorghum and cassava are expected (Liu et al. 2008: 228).

According to Burke et al. (2009), the effects of increasing growing season temperature by 2050 will be considerable for maize, millet and sorghum and will dwarf changes in crop areas attributable to changes in precipitation. This is because precipitation already has a high temporal variability and will change less than the expected temperature increases due to climate change. Fourteen African countries could have 'novel' climates over at least half of their current crop area by 2050 for maize. Since such crop climates will continue to exist in Africa, the affected African countries can benefit from accessing genetic resources from the few African countries with similar climates to those expected in future. However, there are few currently existing analogues for Sahelian countries' new climates and their maize, millet and sorghum production. Some countries, such as Sudan, Cameroon and Nigeria, will need to conserve their genetic resources now as their maize landraces are poorly represented in major gene banks (Burke et al. 2009).

Climate change is also affecting land that is already under a process of change. Many croplands that are already marginal for cropping are likely to become increasingly marginal, as impacts in the marginal cropping lands may be severe, especially where poverty rates are already high (Jones and Thornton 2009). Leblanc et al. (2008) report that land clearance has resulted in a modification of the soil properties and infiltration capacity and has led to an increase in runoff. Drying increases the risk of forest fires, already a major hazard in many parts of Africa. Finally, the existing political structures often hinder adaptation – land tenure complications may not favour the poor, allow women full access or may not enable a range of choices of crops on land (IAASTD 2008). International interest in land in Africa has peaked in recent years, with 'land grabs' by many richer nations that are recognising future food security challenges and seeking to shore up their own political and economic security with overseas investment (Ifejika Speranza 2010). Conflict may well be the result of tensions that increase to flash points. However, others warn to be extremely cautious in assuming a direct link between scarcity and conflict in Africa, arguing that "whether or not climate change contributes to destabilising violence in Africa depends not only on the biophysical conditions but also on an area's susceptibility to conflict and the capacity of the population to adapt to changing conditions", as well as governance, governments and leadership (Brown et al. 2007: 1149).

As the variations in projected yields are very difficult to ascertain with any certainty, local resilience-based adaptation becomes crucial (Jones and Thornton 2003; Thornton et al. 2009; Ensor and Berger 2009). Farmers are more likely to adapt if they have access to extension, information on climate change, credit and land. Food aid, extension services and information on climate change facilitate adaptation among the poorest farmers (Bryan et al. 2009). Governance and land tenure is a strong determinant of ability to adapt (see Section 4.2). Investments in irrigation can be an effective adaptation measure, particularly in water-stressed areas. However, on the whole international and national investments in agriculture and rural development in Africa have been declining for many years (Djurfeldt et al. 2005; World Bank 2007). Existing research primarily focuses on commercial crops such as maize and wheat rather than on other African staples such as sorghum, millet, banana and yam (Challinor et al. 2007). Improved management and conservation of available water resources, water harvesting and recycling of wastewater could generate water for irrigation purposes, particularly in the arid and semi-arid areas (Kabubo-Mariara and Karanja 2007).

Beyond agriculture and crop yields is the issue of land use. The impacts of ongoing human development activities on local climates may be far greater than those of climate change. Studies in Africa find that, up to 2025, the local impact of land degradation and reduction of vegetation cover on local changes in temperature and precipitation is higher than the impacts attributable to global warming. Ongoing land degradation is a powerful underlying factor, with Paeth and Thamm (2007: 414) claiming that "land degradation may play a more important role in African climate change up to 2025 than GHG-induced radiative heating" due to the local albedo effects of land use change (see also Abiodun et al. 2008). Dryer and warmer conditions will also lead to land degradation and vegetative cover quality reduction in much of Africa (Paeth and Thamm 2007).

5.3.2.3 Impacts in the Water Sector

Climate change influences the availability and quality of water resources, and poses a serious threat to populations in Africa (Vörösmarty et al. 2005; Ludi 2009). About 25 per cent of the African population experiences high water stress, with about 40 per cent of the African population having no access to improved water supplies (Vörösmarty et al. 2005; Boko et al. 2007).[5] Le Blanc and Perez (2008) found that water stress is likely to increase as a result of demographic growth in the Sahel and in the Horn of Africa towards 2050 while Southern African will be far less affected due to the lower demographic growth associated with HIV/AIDS.

Lake and river water levels respond to climate variability and change, though this response may be indirect or complicated by ground water recharge and infiltration rate variability depending on other human-induced factors. Despite heavy rainfall events, Southern Africa is expected to experience the greatest reduction in runoff by 2050 (Boko et al. 2007). Again, data from specific case studies is patchy. Decreased precipitation in the Zambezi Basin is projected to be about 15 per cent. Potential evaporative losses will increase by 15–25 per cent and runoff should decrease by 30–40 per cent (cf. Cambula 1999; Arnell 2004). In the Ouergha watershed in Morocco, a 1°C increase in temperature could change runoff on the order of 10 per cent, assuming that the precipitation levels remain constant (Agoumi 2003).

Coastal subsidence and reduced sediment loads already increase sea levels in the Nile delta and climate change is likely to increase this trend (Agrawala et al. 2004). While water consumption in Egypt is already exceeding available renewable sources, climate change could reduce water flow in the Nile, which also depends on developments in the upstream countries and how climate change affects such countries (Boko et al. 2007). With African agriculture currently absorbing 70 per cent of the freshwater supply, this leaves a low proportion for industrial development and human consumption.

Water scarcity already causes conflict in Sahelian Africa and other regions. Transboundary water cooperation is currently a major area of policy and research activity in river basins in Africa (Goulden et al. 2009). In addition to these challenges, drought conditions triggered by climate change could be one of the factors that threatens existing development achievements through lowering hydropower production. As an example, the water level dropped in Kariba dam by 11.6 m between 1981 and 1992 (UNEP 2006). Siltation from floods also reduced the storage capacity of the Kindaruma Dam in Kenya from 16 to 11 million cubic metres (Republic of Kenya 2010a).

Whilst the science is far from certain in terms of future impacts, it is clear that water-stressed Africa will be hard hit by any climate impact which decreases water availability and precipitation levels.

5.3.2.4 Impacts on Health

There is no doubt about the impacts of climate on health. The World Health Organization (WHO) has estimated that anthropogenic climate change in the last decades of the twentieth century already results in over 150,000 lives lost annually (Sunyer and Grimalt 2006). Africa may suffer the highest impact of climate change on health (Sunyer and Grimalt 2006). However, this is against the backdrop of lack of basic development and investment in health care. The lack of health infrastructure, disease surveillance systems, inadequate basic health education and political prioritisation mean that disease continues to kill or weaken many. Climate change exacerbates a weak health system through increasing variability in disease locations, and spreading disease through impacts of extreme events in particular to humans and livestock.

Climate change plays an important role in the seasonal pattern or temporal distribution of malaria, cholera and other diarrhoeal diseases (Confalonieri et al. 2007). Three examples describe this. First, with increasing temperature, malaria has resurfaced in Southern Africa and in the highlands of East Africa and will further reduce the productivity of labour (Boko et al. 2007). The economic impacts of malaria are estimated as an average annual decline in economic growth of 1.3 per cent for those African countries with the highest burden (Gallup and Sachs 2001). Although climate change may influence malaria vectors redistribution in Africa, the presence of malaria vectors within a region does not automatically translate to the disease as adaptation measures can moderate transmissions (Tonnang et al. 2010).

Second, in Africa, about 162 million people live in meningitis-risk areas (Molesworth et al. 2003). Meteorological parameters such as low air humidity, wind speed and dust load (airborne dust) have been associated with meningitis incidence (Molesworth et al. 2003; Sultan et al. 2005). For instance, airborne dust from the Sahara can create conducive conditions for the spread of meningitis (Sultan et al. 2005). If the meteorological parameters change as a result of changes in temperature and rainfall to become more conducive for the spread of meningitis (e.g. a drier and dustier environment) in wider geographical areas, the current areas at risk of meningitis epidemics (meningitis belt of Africa spanning from Senegal to Ethiopia) could extend or contract, thereby increasing or reducing population exposure to the disease. Still, few studies have been carried out on the relationship between meningitis epidemics and climate change.

Third, extreme rainfall events trigger floods and influence the occurrence of water-borne diseases. In the Mozambique floods of February 2008, 700 people were infected with cholera (United Nations 2008a). If climate change increases the frequency of these weather conditions and extreme events, changes in disease prevalence are to be expected, making it imperative to improve the health infrastructure across Africa to be able to deal with the impacts. Extreme rainfall events have been found to lead to short-lived outbreaks of diarrhoea but low rainfall and an associated water scarcity can lead to increased diarrhoea for the whole dry period duration, thereby increasing the burden of chronic disease in low- and middle-income countries (Lloyd et al. 2007).

Not only human health, but animal health may be affected. Previously, heavy rainfall following droughts has also led to outbreaks of animal diseases such as rift valley fever and blue tongue in East Africa and of African horse sickness in South Africa (Baylis and Githeko 2006). Hence climate change will likely influence the epidemiology of diseases, affect pathogens, disease hosts and vectors.

5.3.2.5 Impacts on Settlements and Population

Climate change is likely to affect human settlements. While scientific links cannot be made directly between specific extreme weather events and climate change currently, climate change is expected to increase the frequency and severity of climate events. Extreme climate events like floods and cyclones cause severe infrastructure damage – flood waters submerge houses, settlements and infrastructure. Roads are swept away and communities are cut off. Even in areas that experience droughts, floods are also common affecting hundreds of thousands and causing significant damage (Awuor et al. 2008). Rains caused widespread flooding and related mortality, submerging agricultural land and damaging bridges, roads and houses in western and eastern Africa in 2007 and in Southern Africa in 2009 (African Centre of Meteorological Applications for Development 2007; UN OCHA 2007; 2009; Republic of Kenya 2010a). Torrential rains in West Africa during July to September 2007 affected over 800,000 people in 14 countries, displacing over 44,000 people (UN OCHA 2007). Such disasters have provoked a mobilisation of resources from humanitarian assistance providers including the European Union (EU). For least developed countries like Mali and Burkina Faso, having financial resources to address contingencies such as this remains a challenge, implying that they are likely to remain dependent on international humanitarian resources in the aftermath of future events of this nature.

Densely populated coastal settlements and river estuaries are particularly vulnerable. When complicated with projections of population growth, unplanned urbanisation in Africa and poor infrastructure, the impacts of flooding, coastal erosion and high precipitation may be severe (Dossou and

Gléhouenou-Dossou 2007, Satterthwaite 2009; Toulmin 2009; Adelekan 2010). In the coastal areas of Africa, coastal erosion is already destroying infrastructure, housing and tourism facilities, as in the residential region of Akpakpa in Benin or the exclusive residential areas of Lagos (Niasse et al. 2004 in Boko et al. 2007). Such coastal erosion is not only attributable to natural factors but human interventions such as the creation of new settlements along the coastal strips.

Indirect effects of climate change on infrastructure and cities are not sufficiently understood currently in Africa by urban government planners. Many of the highest populated areas are coastal cities on African deltas, leaving them naturally vulnerable to sea level rise and extreme tidal or weather events (Klein et al. 2002). The West African coastline Accra–Niger delta will house more than 50 million people by 2020 (Boko et al. 2007). However, given that migration into cities is also on the increase, services will be stretched and planning regulations are less likely to be enforced, storing up risk for potential human disaster.

5.3.2.6 Impacts on Tourism

Climate change may negatively affect tourism in Africa. Ehmer and Heymann (2008) report that tourism may suffer from worsening climatic conditions near popular beaches or declining wildlife populations in adventure travel hotspots as a result of ecosystem shifts in response to climate change. Tourism accounts for a minor but respectable proportion of GDP (between 11 and 19 per cent) in Kenya, Morocco, Tanzania, Tunisia and South Africa amongst others (Ehmer and Heymann 2008; Republic of Kenya 2010b; Lunogelo et al. 2010; World Travel and Tourism Council 2011). While there are variations across the continent in how severely economies are expected to be affected by tourism declines, due to low adaptive capacities, many countries in Africa will likely be unable to make investments in adaptation to climate change which could secure their earnings from tourism.

5.4 Directions for Development with Climate Change in Africa

In our opinion, four considerations will have a major influence over the future directions for development with climate change in Africa: first, how to incorporate scientific uncertainty into planning; second, governance and political will and ability to respond to climate change at all levels of society; third, the level of regional cooperation on climate change; and finally, levels of funding available for climate initiatives.

5.4.1 Incorporating Uncertainty into Planning

Previously in this chapter, we have pointed to a considerable body of research that has attempted to chart the effects of a changing climate on African development prospects. Even as climate science gradually improves, the generally poor meteorological evidence base in Africa hinders the creation of dependable scientific data and downscaled models to inform African development decisions and local responses. Poor institutional investment in meteorological data collection and digitisation to electronic format also render existing data unavailable for use.[6] Efforts are being made to align climate science with 'traditional' climate knowledge to overcome some of this gap. This uses some local people's detailed understandings of the weather and climate patterns where they live, which complements existing scientific data (see Nyong et al. 2007 on Sahelian people's knowledge, for example). However, these sources of knowledge have not consistently been brought together yet to improve future modelling projections of climate change. UNDP and Oxford University, meanwhile, have created a database for many African countries that provides information about the latest science and trends and uncertainties of projections in a format that planners can use.[7]

Working within conditions of such uncertainty is difficult. Dessai and Wilby have worked to systematise a process of robust decision making in the face of uncertainty. Using this process, climatic uncertainty and probabilities and risks of certain outcomes can be integrated into decision making and planning (Dessai and Wilby 2010; Wilby et al. 2009). Over the next few years, a refinement and development of this process may assist many countries in thinking through sectoral planning issues that may be affected by climate change. Developing Dessai and Wilby's ideas, Reeder and Ranger (2010) provide a good discussion of how to deal with the 'deep uncertainties' posed by climate change in their analysis of the UK Thames Barrier 2100 project. This kind of approach addresses 'ballooning uncertainties' through context-driven deliberations among scientists, stakeholders and decision-makers, which take more time, but can lead to more robust, effective, and accepted decisions.

In the African context, such an approach for dealing with 'ballooning uncertainties' is highly appropriate. Additional uncertainties relate to the interaction of climate change with other variables influencing development outcomes, including existing climate variability, land use, water use change and urbanisation, as this chapter has emphasised. The political and social contexts influencing the nature of the response to climate pressures represents one of the most important uncertainties in gauging the future climate impacts. Ranger and Garbett-Sheils take forward the issue of planning with uncertainty in the context of developing countries, with a set of practical recommendations. They stress that "[A] central principle in managing uncertainties is to focus on promoting good development and long-term adaptive capacity while avoiding inflexible decisions that could 'lock in' future climate risk in the long term" (2011: 1).

5.4.2 Governance at the National Level

Policies and institutions together shape the framework conditions within which African populations will adapt to climate variability and change. Institutional and legal frameworks are currently insufficient to deal with environmental degradation and disaster risks in Africa (Sokona and Denton 2001; Beg et al. 2002). While various policies exist that support economic development and environmental management in Africa, effective implementation of policies remains a big challenge (Ifejika Speranza 2010). Poor implementation contributes to inadequate public service delivery and enforcement, thereby hampering economic performance and environmental protection (Tiffen 2003; Ifejika Speranza 2010). To improve implementation, and by extension responses to climate variability and change, concerted efforts at capacity building as well as creating public awareness on the importance of effective implementation and compliance are needed.

In Africa, governance influences responses to climate change particularly through land tenure regimes. Land regimes across SSA play a key role in agricultural production (Kiteme et al. 2008). Depending on the context, formalising land rights so that land can be used to access credit can improve agricultural production and provide tenure security, but customary land tenure may also provide security (Deininger 2003 et al.; Nkonya et al. 2008). However, holders of land under customary tenure are unable to sell or use their land as collateral for formal credit services, therefore limiting their scope to influence climate change impacts. Women, who constitute the majority of the farmers in SSA (IAASTD 2008), often do not have guaranteed access to land. This reduces the range of decisions they can make, such as the proportion or mix of crops to grow, in order to reduce vulnerability to drought. Often land belongs to the family or community, and farmers are unwilling to invest in such cases in structural measures to control erosion or improve soil fertility. These factors will tend to amplify future impacts of climate change.

Another area where Africa is witnessing rapid change relating to land is through recent actions of leasing high-potential agricultural lands (so-called 'land grabbing') in SSA to countries outside Africa. This reduces the land available for agricultural expansion. This practice is raising public concerns and is potentially politically explosive in the future, considering that many of the countries that lease out their land do not produce enough food to feed their populations. Although some of the lands to be leased are so-called 'government lands', there are frequently claims on the land by the local population who may use these lands for farming or grazing. Pluralistic institutions and their effects (the duality of customary and modern statutory laws) in rural Africa, have no doubt contributed to the insecurity of land tenure among African farmers (Ifejika Speranza 2010).

More broadly, governance on climate change relates to governments' capacity to prioritise and focus on climate change as a key issue. In any country this can be a big challenge. A recent analysis of adaptation planning initiatives in the UK provides some useful pointers for planners, showing that water sectors, in particular, have been prioritised, and much adaptation has been government-led and top-down to date relating to big infrastructure, whilst lower down, much adaptation has been autonomous or self-led by individuals and communities (Tompkins et al. 2010). Governments are going through a process of prioritisation on actions at national level through the National Adaptation Programmes of Action (NAPAs) and their implementing bodies, and the Nationally Appropriate Mitigation Action planning processes (NAMAs). These help to prioritise issues, but do not deal with wider underlying issues of governance within African governments. The 11th Meeting of the Africa Partnership Forum in 2008 concluded that despite some strong growth, macro-economic stability and improved political accountability "governance remains, undoubtedly, critical to Africa's renewal as desired by its leaders and people" (APRM 2008: 4).

5.4.3 Regional Cooperation

The magnitude of future impacts of climate change will also depend on the nature and strength of regional governance systems in Africa. Sub-regional organisations such as the Community of Sahel-Saharan States (CEN-SAD), the Economic Community of West African States (ECOWAS) commission, the East African Community, the Intergovernmental Authority for Development (IGAD) and the Southern Africa Development Community (SADC) can work to improve the environmental, socio-economic and political conditions in Africa. Three examples illustrate the positive effects possible from strong regional integration. First, the ECOWAS Market Integration Programme has achieved some progress in the free movement of persons, the abolition of visas and entry permits and most member states respect the protocol on the free movement of persons, giving ECOWAS citizens the right of residence and settlement. This might ease migration from severe climate change affected areas. Second, CEN-SAD started the Great Green Wall Program, which aims at promoting the socio-economic development of the target zones that are exposed to desertification by implementing projects on natural resource conservation and restoration, in addition to promoting economic activities (Sahara and Sahel Observatory 2008). As discussed earlier, the key role of land cover for African climate, as reported in studies of land cover-climate interactions, climate trends and climate change projections highlights the importance of land conservation efforts. Third, the SADC region has focused on cooperation on the water sector. Improved efforts at transboundary river basin management of the Zambezi basin may reduce the impacts of flood on the downstream country of Mozambique, thereby reducing infrastructure damage, economic losses and human mortality.[8] Similarly, the water-poor countries of the SADC region have initiated negotiations for intra-basin water transfer to alleviate the water stress being faced and which climate change will likely exacerbate. These sub-regional organisations are supported by the AU-NEPAD as well as international organisations outside Africa. If these regional organisations incorporate an understanding of the effects of climate change into their planning and if their activities are successful, they will reduce the future impacts of climate change in Africa.

5.4.4 Development and Adaptation Funding

Last, but critically important, is the availability of finance for development and adaptation. Ranger and Garbett-Shiels (2011) and others call for a focus on the basics of development as the starting point for building resilience to climate change amongst communities. Recent shifts in development funding are evident in Africa, with new actors emerging as development partners pursuing a set of new interests (e.g. China, Taiwan, Brazil). With limited resources, many African countries do not allocate adequate finances to respond to existing development challenges. Declines in Official Development Assistance could limit funding for adaptation measures in Africa (World Bank 2007), hence climate funding is becoming increasingly important. An assessment of the implications for Africa of the recent meeting of the Advisory Group on Climate Finance quoted the World Bank estimate that by 2030, $18 to $19 billion per year would be required for Africa to address climate adaptation challenges alone, most of which should go to public grant funding sources (Fankhauser and Ward 2010). Experts claim it will be a huge challenge to mobilise these resources, as well as to ensure that there is capacity for absorption of these finances. Climate finance is a hot topic and a fast-moving field, with the Green Climate Fund potentially playing a major role internationally in making finance accessible. Tracking climate finance pledges and realities is another major challenge (Climate Funds Update 2011). Despite the estimates for future needs, a rough estimation shows that only $150 million have been invested to date (Climate Funds Update, quoted in Fankhauser and Ward 2010).

5.4.5 The EU, Climate Finance and Africa

In addition to being one of the strongest proponents to date of global limits to carbon emissions, the EU has also produced strong policy statements regarding finances and supports emissions trading in the context of the EU Emissions Trading Scheme (ETS) in order to achieve global reductions (e.g. EU Blueprint for the Copenhagen Deal 2009). This requires financing. The EU expects that by 2020, some $100 billion will be needed annually from developed countries to support mitigation and adaptation efforts in developing countries, and has suggested a range of potential financial commitments for the EU of €900 million to €3.9 billion by 2013 (EU 2009).[9] However, mobilising adequate and additional financing for adaptation in the context of a changing climate also depends on the future efforts of a range of international actors beyond the EU, including emerging economies that have displayed less interest in climate funding and private actors. A recent report from the European Commission on climate funding after 2012 emphasises the need to strike a balance between public and private mechanisms for increasing climate financing and to ensure that climate finance and development assistance are well-coordinated and efficiently disbursed (EC 2011).

If the availability of financing for adaptation and development finance should shape prospects for the future response to climate change in Africa, an extension of this is that the quality of the response will also be linked to the nature of programmes funded. The EU is now in the process of integrating climate-screening and climate-proofing fully into its programmes and activities. This has been prioritised at the European level with the creation of a Directorate General for Climate issues (DG-CLIMA) in 2010. In Africa, the development-oriented EU-funded Global Climate Change Alliance (GCCA) is now working in several African countries to mainstream climate change into existing national policies, with over €10 million in approved projects (GCCA 2010).

5.5 Final Considerations – Insights for Development

Africa faces major challenges to deal with climate change amidst a dynamic physical, economic and social background. It has low adaptive capacity to climate change and high vulnerability due to its vast dry regions and poverty. Uncertainties over local and regional impacts of climate change on existing, challenging, development contexts for Africa, together with uncertainties about the dynamics of these contexts create a 'ballooning of uncertainties' that is a challenge for any planner to navigate. Ideas of 'no-regret' options (as used by the World Bank and Asian Development Bank) or various 'triple win' sectoral approaches (e.g. Steer 2010 on agriculture; on disaster risk reduction) to dealing with climate change are beginning to create traction, although realities may well not be so clear-cut. Climate compatible or climate-smart development is an integrated way to address combined issues of adaptation, development and mitigation (Mitchell and Maxwell 2010; Mitchell et al. 2010). Building resilience and adaptive capacity and buffering against extreme events through 'good development' and robust decision processes in the face of uncertainty, supported by clear finance routes, are probably the best ways forward to deal with climate change and its future impacts in Africa.

Notes

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2. Business Day Online.com, 14 November 2010.
3. Compared to other African regions, there is a dearth of articles on climate variability and climate change on Central Africa and on the West Indian Ocean Islands. Most information on these regions has been derived from UNEP 2002.
4. According to the IPCC, "*very likely*" denotes more than 90%, and "*likely*" denotes more that 66%, of the assessed likelihood of an outcome or a result using expert judgement (IPCC 2007a).
5. The IPCC describes a country as "water-stressed if the available freshwater supply relative to water withdrawals acts as an important constraint on development. Withdrawals "exceeding 20% of renewable water supply have been used as an indicator of water stress" (2007b: 883). Arnell (2004) describes water-stressed watersheds as those where runoff is less than 1000m^3/capita/year.
6. Richard Washington, pers. communication.
7. UNDP Climate Change Country Profiles http://country-profiles.geog.ox.ac.uk/
8. For further examples of water cooperation in the SADC region, please consult the SADC Water Sector ICP Collaboration Portal: http://www.icp-confluence-sadc.org/riverbasin/105.
9. EU (2009) http://ec.europa.eu/environment/climat/future_action_com.htm

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6
Systemic Technological Innovation in Africa

Rasigan Maharajh, Alioune Sall and Geci Karuri-Sebina

The vast continent of Africa is indeed a complex geophysical space. The discussion in previous chapters of this book confirms this statement. The evolution of Africa into its contemporary subdivision of 53 countries and one 'non-self governing territory'[1] tends to augment the variations whilst identifying challenges for coordination and cooperation on a trans-continental scale (Maharajh 2008).

It is now globally acknowledged that a "long-term driving force of modern economic growth has been science-based technological advance" (UN Millennium Project 2005). Natural resource-endowed Africa nevertheless continues to be confronted by extreme poverty, widespread hunger and malnutrition, and infectious diseases in its search for equitable global participation underpinned by mutuality, peace and security. The recent global financial crisis, volatile climate change and fluctuating energy prices have exacerbated the region's difficulties in overcoming the legacies of underdevelopment and achieving the Millennium Development Goals (MDGs) (OSAA 2009).

The key reasons for Africa's relegation to conditions of fragility, vulnerability and poverty remain subjects of contested analyses. When the continent is reviewed in comparison with other regions of the global system of production, distribution, consumption and waste management, the enormous differences marked by output measures becomes obvious. This image reinforces the perception of a marginalised territory as the continent hosts the largest number of least developed countries (LDCs) with very low production and income statistics. These negative output measures have a direct relationship with the weak state of infrastructure, financial architectures and poor human development indices. Africa's intra-continental variations have also expanded over time. According to data from 2008, Africa hosted both the country which achieved the fourth fastest rate of change in gross domestic product (GDP) in the world (Angola) and the slowest growing country, Zimbabwe, which at that time experienced a significant contraction of its economy.[2] While the latter has recently begun to stabilise with a government of national unity, the economic growth prospects of the former continue to be influenced by swing in global commodity prices. The rate of change reflected in GDP figures however is only indicative of changes in quantitative output of the formal economy. Positive growth does not necessarily translate into redressing conditions of underdevelopment or increasing economic participation rates through expanding employment or the improving quality of life indicators.

Economic development normatively seeks to improve the well-being of a country's population. Its scope includes the process and policies by which a country improves the economic, political and social well-being of its people in response to their needs and demands. Economic development on the supply side primarily tends to refer to social and technological progress (Lundvall 1992; Nelson 1993). This implies a focus on the processes through which goods and services are produced. Increases in production output can be achieved using the same old methods through widening the scale or improving the productivity of the processes. Africa has not managed either of these possibilities with spectacular results. A prime source of such failure rests in the realm of capability building and competency formation. This implies that economic development is also related to human development, which encompasses, among other things, health and education. In this nexus of economic development, technology is a key factor in improving productivity and efficiency in the utilisation of natural resources and for improving human well-being (UNEP 2006).

This chapter introduces systemic technological innovation as a critical factor and an essential driver of change for Africa's development future towards the year 2030. The consistent argument across this chapter supports the adoption of a systemic structural perspective. The chapter does not provide a de-contextualised caricature of technical progress represented by artefacts. It locates systemic technological innovation within a wider literature on endogenous evolutionary economics and the systems of innovation paradigm. This chapter comprises six main sections. Section 6.1 introduces the chapter and then offers a brief survey of the main theoretical starting points, providing a description of how systemic technological innovation is normatively framed in relation to supporting the continent's broader developmental outcomes. This is achieved through a presentation of the approach to science, technology and innovation (STI) adopted by the New Partnership for Africa's Development (NEPAD) of the African Union (AU). A final part of the introduction reflects on the current performance indicators of STI in Africa.

Section 6.2 considers the challenges of STI in Africa. This section has four parts organised according to the sectors of climate change, energy, information and communications technologies, and water. Building on this description of current trends, Section 6.3 outlines the underlying determinants of STI as a driver of change for Africa's development. Section 6.4 outlines the main uncertainties regarding the future of systemic technological innovation for Africa. Section 6.5 then generates three plausible scenarios resulting from the challenges, determinants and uncertainties identified in the preceding analysis and discusses triggers and transition points for the three STI scenarios. The concluding Section 6.6 then summarises the key issues and offers prospects for integration with other themes addressed in this volume. It is not the objective of this chapter to provide a shopping list of technologies. Rather, by adopting the systems of innovation approach, the contributions of learning, capability development, competence formation and technical change in advancing sustainable economic development and expansion are emphasised in this chapter.

6.1 Systemic Technological Innovation and Development

6.1.1 Technology as a Driver of Change

Technology is defined by the Organisation of Economic Cooperation and Development (OECD) as the state of knowledge concerning ways of converting resources into outputs (OECD 2002). As a procedural concept, technological development may therefore be considered the result of a dynamic selection by alternative ways of thinking and doing, from the accumulated stock of human knowledge. It could involve further sub-processes of studying a contextualised phenomenon, identifying alternative perspectives, testing hypothetical solutions and refining information and data back into knowledge. As such, it is necessary to consider the enabling infrastructure, the stock and flow of information, human and social capabilities and the incentive structure for change. Luc Soete aptly summarises the advances made in the discourse on the relationship between science, technology and development by recognising that "it is no longer the impact of the transfer of such industrial technologies on economic development which is at the centre of the development debate but rather the broader organisational, economic and social embedding of such technologies in a development environment: the way they unleash or block particular specific development and growth opportunities" (Soete 2008: 3).

While it is generally accepted that "technology is both driven by and is a driver of globalisation" (ADB 2003: 208), it is also important to recognise that technologies link to long-term processes of improving economic performance and that "developing new technology to generate new products and processes and, ultimately entirely new markets" is a basic aspect of long-run competitiveness (211). The approach we adopt in this section acknowledges that technology is deeply embedded in a more systemic context, which situates the approach within an innovation systems paradigm. Innovation is the implementation of a new or significantly improved product (good or service) or process, a new marketing method, or a new organisational method in business practices, workplace organisation or external relations

(OECD/Eurostat 2005). It is therefore clear that innovation, as opposed to technology, is the result of a range of activities beyond just research and development (R&D) and science and technology (S&T). Innovation may also encompass other processes such as organisational changes, training, testing, marketing and design (ibid). While the emphasis is essentially on newness, three types of novelty are distinguishable in so far as an innovation can either be new to the firm, new to the market or new to the world (op cit).

The World Economic Forum (WEF) has suggested that "firms in Africa are almost 20 per cent less competitive than firms in the other regions, although considerable variation exists across countries" (WEF 2009: 84). The lower level competitiveness of African enterprises is a matter of ongoing concern. It is generally recognised that it is the result of both structural and cyclical factors. While the business cycle may indeed require improved responses, the structural impediments suggest deeper problems. Joseph Schumpeter is credited with identifying the process of creative destruction as a critical dynamic, which when unleashed has the potential of removing obsolete and inefficient enterprises from the virtuous productive cycle (Schumpeter 1975). It is this endogenous micro-level dynamic that demands the application of technology through innovation and improves the strategic responsiveness of enterprises. The role of the state in ensuring appropriate policies and institutions is another important factor in ensuring the sustainability of the growth path. This situation is improved through democratic processes of participation and transparent governance.

Technological innovation is the consequence of active and deliberate choices being made. Based on the contemporary neo-classical focus on price competitiveness, the unleashing of the *gales of creative destruction* necessitates rethinking the current ratios of labour and capital in production (ibid). This implies an active diversion of labour and capital towards increased R&D. This assumption is manifest in the AU's adoption of the target of one per cent of GDP to be invested in R&D (AU 2003). The logic which this commitment aligns with dictates that more resources devoted to R&D leads to a faster rate of innovations. The increase in innovation would engender a wider expansion of industrial development and contribute to a sustainably higher rate of economic growth. This model embeds the systemic nature of innovation within a wider dynamic of endogenous transformation of the economy. Soete however differentiates three different country contexts which have specific innovation policy challenges associated with each category.

The countries of Africa are generally consigned to the last category within the context of innovation, as shown in Table 6.1. This reemphasises the key role that technology resulting in innovation will have on the growth and development of the continent. Communication forms the principle medium through which ideas are articulated. Once transported into the

Table 6.1 Country Context and Innovation Challenges

Country Context	**Innovation Challenge**
High income	The innovation policy challenge is increasingly directed to questions about the non-sustainability of processes of 'creative destruction' within environments that give premiums to insiders, to security and risk averseness, and to the maintenance of income and wealth
Emerging and developing	More directed towards traditional, 'backing winners', industrial science and technology policies and how to further broaden an emerging national technological expertise in the direction of international competitiveness and specialisation. Such broadening often involves a stronger recognition on the part of policy makers of the importance of engineering and design skills and of accumulating 'experience' rather than just R&D investments.
Least-developed	Often characterised by 'disarticulated' knowledge systems, with islands of relatively isolated, under-funded public research labs, the endogenous innovation policy challenge is most complex of all, but also has the highest chances to contribute directly to development.

Source: Adapted from Soete (2008).

social domain, ideas tend to stimulate cognitive and behavioural processes. Our concern is economic growth and development, which then places a premium on ideas which are imbued with productive knowledge. Such ideas evolve in dialogue and debate, evolving to influence thinking about causal relationships underpinning change. Evolutionary economics may therefore be seen to be concerned with changes resulting from the transition of generic ideas into actualisable knowledge.

6.1.2 The Systems of Innovation Approach

The systems of innovation paradigm is closely related to the work of evolutionary economics. Innovations do not result from simple and linear causalities, but are the result of complex and multiple interactions with a variety of actors and their environment, known as the 'innovation system' (Freeman 1987; Lundvall 1992; Nelson 1993; Edquist 1997). Innovation, it is now asserted, is the result of networking, learning and collaboration among the multiple actors of the innovation system. Figure 6.1 provides a visual representation of the key features of this systemic perspective.

The objective of the system of innovation is to generate improved enterprise-level performance. This improved performance would then expand

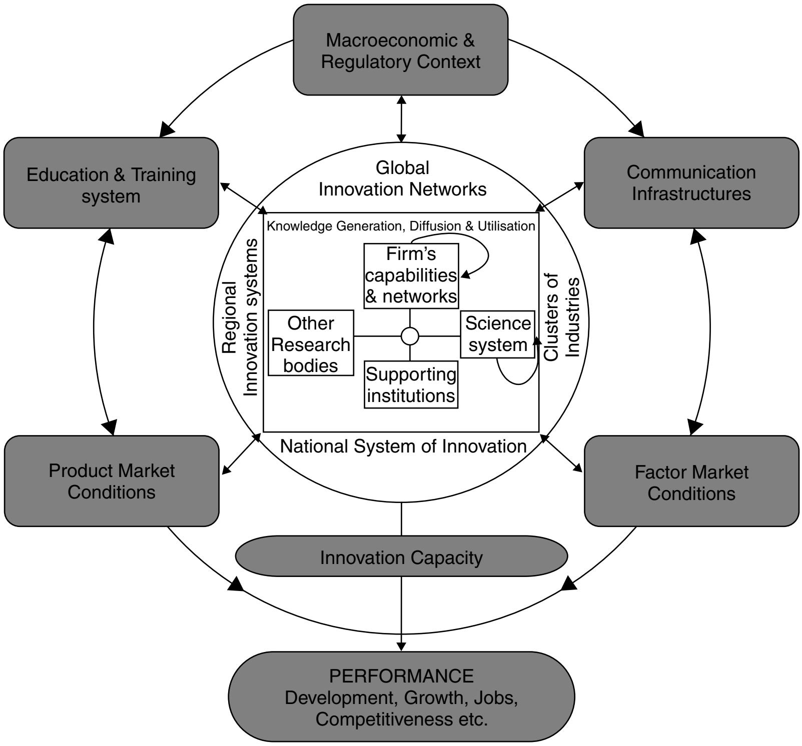

Figure 6.1 The System of Innovation (OECD1999), *Managing National Innovation Systems*, OECD Publishing, http://dx.doi.org/10.1787/9789264189416-en. Permission from the OECD to reproduce this figure is gratefully acknowledged.

development, improve the rate of growth, create more employment and other public goods. The strong technological content (and the role of technological learning and imitation) places emphasis on policies for technology transfer, assimilation and acquisition of foreign technologies. At the same time, research attention has also focused on the role of indigenous efforts to successfully assimilate foreign knowledge and technologies as well as acquire domestic innovative capabilities (Maharajh and Kraemer-Mbula 2010). The outer circle in Figure 6.1 contains the essential framework conditions whereby successful economic growth and development has been shaped. The inner circle provides the key features which will influence Africa's ability to mobilise existing generic ideas, invest in domestic R&D and establish a coherent and sustainable pathway out of combined and uneven development. The details of each of these aspects however exceed the scope of this chapter. Rather, we will now focus on the diffusion of innovation, absorptive capacity and adaptive capacity before concluding with an assessment of the current state of R&D capacity in Africa.

According to the UK's Parliamentary Office of Science and Technology, 'capacity' is not well defined, but can be understood as the ability of individuals, organisations or societies to meet their needs. Developing countries ideally decide their own needs. However, without sufficient knowledge and skills in many areas including S&T, developing countries may find it difficult to do this effectively. Moreover, it is unclear whether the individual countries of Africa themselves see S&T as a priority. Indeed, an existing lack of primary education in many countries is often seen as a more pressing problem than building longer-term S&T capacity (POST 2004).

As Rogers (2003) suggests, different types of decisions underpin the adoption of innovations. These include decisions made by individuals, decisions made collectively within a social system and decisions made by a few individuals in positions of influence or power. As emphasised in this chapter, decision making across the breadth of Africa is neither a simplistic nor straightforward task. With the goal of continental integration not yet in sight, significant reflection may be necessary with respect to generating consensus over long-term aspirations while acknowledging the short-term competition between the plethora of sovereign national entities. The choice of country-level, or national determinations, does therefore seem an appropriate demarcation for consolidating innovative pathways. When framed within the broader ambit of the five AU-defined regional economic communities (RECs), the contradiction between national systems and the quest for integration may be resolved through better appreciating the dynamics underpinning the adoption of innovation. This however calls for systemic reform and the establishment of institutions which promote the enlightened adoption of technologies and innovation to actualise them in practice.

There are multiple stages of the adoption process, moving from initial exposure to an innovation to the finalisation of a decision to use an innovation to its fullest potential. The rate of adoption is defined as the relative speed with which members of a social system adopt an innovation. It is usually measured by the length of time required for a certain percentage of the members of a social system to adopt an innovation (Rogers 2003). Within the rate of adoption there is a point at which an innovation reaches critical mass. This is a point in time within the adoption curve that enough individuals have adopted an innovation in order that the continued adoption of the innovation is self-sustaining. In describing how an innovation reaches critical mass, Rogers outlines several strategies in order to help an innovation reach this stage. These strategies are pertinent to Africa and include the following:

- Having an innovation adopted by a highly respected individual within a social network

- Creating an instinctive desire for a specific innovation
- Injecting an innovation into a group of individuals who would readily use an innovation
- Providing positive reactions and benefits for early adopters of an innovation (op cit)

Absorptive capacity is another important aspect of the innovation process and is generally used as a measure of an organisation's ability to value, assimilate and apply new knowledge (Cohen and Levinthal 1990). Absorptive capacity is a multi-level (individuals, households, enterprise and national level) phenomenon and involves organisational learning, industrial economics, the resource-based view of the enterprises and other dynamic capabilities (ibid). The concepts of receptivity and innovative routines from this area of work are particularly important for this chapter. The former refers to the enterprise's overall ability to be aware of, identify and take effective advantage of technology, whilst the latter is defined as a set of activities that the firm is capable of doing confidently and is the focus of the firm's innovation efforts (ibid).

This is very similar in definition to innovation capability. According to Soete (2008), this is currently seen less in terms of the ability to discover new technological principles, and more in terms of an ability to exploit the effects produced by new combinations and the use of components from the existing stock of knowledge (David and Foray 2002).[3] This alternative model, closely associated with the emergence of numerous knowledge 'service' activities, implies a more routine use of an existing technological base allowing for innovation without the need for particular leaps in science and technology, sometimes referred to as 'innovation without research' (Soete 2008: 5).

A third important sub-concept is that of adaptive capacity. This refers to the capacity of a system to adapt if the environment where the system exists is changing. In our context of innovation and technological change, the adaptive capacity is determined by the

- ability of institutions and networks to learn, and store knowledge and experience;
- creative flexibility in decision making and problem solving; and
- recognition of the existence of power structures that are responsive and consideration of the needs of all stakeholders.

Adaptive capacity offers resilience to rapid change and allows social systems the ability to reconfigure themselves with minimum loss of functioning. This is demonstrated by the stability of social relations, the maintenance of social capital and economic prosperity. Adaptive capacity can be enhanced by learning to live with change and uncertainty, nurturing diversity for resilience, combining different types of knowledge for learning, and creating opportunity for self-organisation towards social-ecological sustainability. All three of these capacities are practical considerations when considering technological change in Africa. They are also by their very nature concepts which bridge the psychological, sociological and political domains. This makes their direct measurement prone to subjectivity. From a systems perspective, the measurement of R&D capacity has been the subject of various accumulative knowledge processes culminating in the OECD's Frascati Manual (OECD 2002; Blankley et al. 2006). The Consolidated Science and Technology Plan of Action of the AU-NEPAD utilises this common metrics framework in its ASTII and will eventually be published as the African Innovation Outlook.

6.1.3 The African Union and New Partnership for Africa's Development Approach to Science, Technology and Innovation

It is globally recognised that technology is a crucial though not the exclusive contributor to innovation. In the inaugural meeting of the African Ministers Council on Science and Technology (AMCOST), Article Three of the Constitutive Act of the AU was reaffirmed. This states that an objective of the AU is to "advance the development of the continent by promoting research in all fields, in particular in science and technology" (AU 2000). AMCOST also underlined that "scientific advances and technological innovations are driving forces for economic growth and sustainable development" and further acknowledged that "the ability of countries to create, diffuse and utilise scientific and technical knowledge is a major determinant of our capacity to take advantage of international trade and effectively compete in the global economy as well as improve the quality of life of people" (AU 2003). Opportunities to engage in collective Africa-wide policy planning with respect to technology have expanded through the establishment of Africa's Consolidated Science and Technology Plan of Action (AU 2005). This plan is embedded within the structures of NEPAD where science and technology is recognised as one of the eight main sectoral programmes.

Africa's Science and Technology Consolidated Plan of Action is organised into the following five programmatic clusters:

1. Biodiversity, biotechnology and indigenous knowledge
2. Energy, water and desertification
3. Material sciences, manufacturing, laser and post-harvest technologies
4. Information and communication technologies and space science and technologies
5. Improving policy conditions and building innovation mechanisms (ibid).

The focus of the programme had until 2010 mainly been directed at water sciences and technology, bio-safety, biosciences, science, technology and innovation (STI) surveys and development of related indicators (AU 2008). According to the UN, progress has been made in implementing the programmes of Africa's Consolidated Science and Technology Plan of Action: the African Biosciences Initiative, a high-level African panel on biotechnology, the African Water Sciences and Technology Network, the African Energy Research and Innovation (AERI) Network, and the African Science, Technology and Innovation Indicators (ASTII) initiative (UN 2009b). The African Biosciences Initiative is being implemented through four regional networks of laboratories and techno-parks, which are involved in carrying out cutting-edge research and development and transferring bioscience technologies to other laboratories. The initiative continues to offer opportunities to African institutions and young scientists with respect to state-of-the-art research and study for postgraduate degrees in life science in African universities. The Southern African Network for Biosciences focuses on validating treatment remedies for people living with HIV/AIDS, while the Biosciences Eastern and Central Africa Network works on the development of biotechnological tools to control bacterial disease in bananas. The West African Biosciences Network engages in the inventory and characterisation of sorghum genetic resources, while the North African Biosciences Network concentrates on the production of elite biofortified northern African barley genotypes (ibid).

The work of the NEPAD African Bio-safety Network of Expertise complements ongoing activities under the African Biosciences Initiative so that technological innovation goes hand in hand with ensuring the safety of humans and the environment. The Water Research Commission of South Africa, subcontracted by the NEPAD secretariat, is providing technical expertise in the preparation of a business plan and the identification of the centres that will constitute the proposed African Water Sciences and Technology Network. In the area of African science, technology and innovation indicators, the NEPAD secretariat is implementing the African Science, Technology and Innovation Indicators (ASTII) initiative. A series of memorandums of understanding and agreements have been signed to advance the development and implementation of the programme. With pilot surveys having now been completed, the prospects for an Africa-wide assessment of the research and development potential of the continent is improving. This will considerably improve the understanding of the current status of the structural features and cyclical dynamics of the nascent system of innovation. It will also over time provide a more nuanced lens through which the knowledge resources of the continent can be harmonised and mobilised. This will improve the prospects of enabling endogenous development and growth dynamics for Africa.

6.1.4 Contemporary Science, Technology and Innovation Performance in Africa

The availability of good quality data on STI in Africa has been an ongoing challenge. The ASTII intends to remedy the situation and provide robust datasets upon which better comparative analyses may be attempted. UNESCO (2009) provides some data for orientation on the basis of Frascati Survey Results (see Table 6.2). Africa performs badly with respect to all the categories listed in the table, though countries such as Morocco, South Africa and Tunisia perform better with respect to the number of researchers as a share of the population and with respect to domestic R&D expenditure as a percentage of GDP. The gender bias is extremely strong with only about 33 per cent of researchers being women (UNESCO 2009). This highlights the massive undeveloped human resources on the continent. When considered against the backdrop of the NEPAD commitment towards 1 per cent of GDP invested in R&D, the low current levels of GDP and the paucity of human resources, Africa's capacity to utilise technology and stimulate innovation systems becomes a greater challenge. In contrast to all other regions of the world, the business sector plays a small part in most countries of Africa. Governments are the most important funding sector and government and higher education institutions, the most important performers of R&D (UNESCO 2009). It is on this set of empirical and theoretical observations and proposals that we now turn our attention to the uncertainties confronting technology and innovation as a key driver of Africa's development.

6.2 Challenges of STI in Africa and Trajectories

The platforms discussed in the previous section resulted from consensus-seeking activities of NEPAD and are therefore imbued with high levels of

Table 6.2 Research and Development Indicators

	Shares of world researchers (%)		Researchers Per Million Inhabitants in 2007 or Nearest Year	Shares of World R&D Expenditure (GERD)		Gross Domestic Expenditure on R&D as a % of GDP in 2007 or Nearest Year
	2002	2007		2002	2007	
Africa	2.3	2.3	169	0.9	0.9	0.4
Germany	4.5	4.0	3,442	7.2	6.1	2.6
South Africa	0.2	0.3	385	0.3	0.4	1.0
India	2.3	2.2	136	1.6	2.2	0.8
Brazil	1.2	1.7	625	1.5	1.6	1.0
China	14.0	20.1	1,071	5.0	9.2	1.5

Source: UNESCO (2009). Derived from official Frascati Survey Results.

inter-state legitimacy. This section highlights key development challenges that African states continue to confront, focusing on the domains of water and sanitation, energy and electricity, information and communication, and climate change. These four areas are used to illustrate the peculiarities of the African condition and technology-related opportunities and challenges.

6.2.1 Water and Sanitation

Africa contains nearly one-third of the major international water basins. About 75 per cent of the African population relies on groundwater as its major source of drinking water, especially in northern and Southern Africa. However, groundwater represents only about 15 per cent of the continent's total renewable water resources (UNEP 2008). In 2007, more than 300 million Africans were estimated to be without access to safe drinking water, while 14 countries on the continent suffered from water scarcity (Dovi 2007). The continent currently hosts the majority of countries in the world with domestic water use falling below the minimum requirement set by the World Health Organisation (Mutume 2004). Recent analyses of progress towards the MDGs for Africa suggest that approximately 23 million people will need to gain access to water and 28 million people access to sanitation facilities on an annual basis. If current trends continue, however, the region will not meet the MDG target on water until 2040 and the one on sanitation until 2076. Up to 250 million Africans could live in water-stressed areas in 2010 (Glenn et al. 2009). Considering that sub-Saharan Africa currently loses 5 per cent of its GDP annually due to the lack of safe water and basic sanitation (ibid), responding to this challenge requires reassessing investment needs upwards especially towards capacity building. Vulnerable populations cannot afford to wait for the ultimate goal of clean, piped water. More R&D, which draws local scientists and technologists into localised studies, will help expand the current capacities in this critical domain. Learning and teaching programmes utilising local knowledge would also ensure relevance and appropriateness of the generated skills. Another challenge relates to improving earth observation techniques and maintaining accurate databases which will improve the capacity of planning agencies.

6.2.2 Energy and Electricity

While almost all people in OECD and transition economies have access to electricity (OECD/IEA 2009), only 72 per cent of people in developing countries do (UNDP-WHO 2009). Recent estimates suggest that about 650 million people in sub-Saharan Africa would have no access to electricity by 2030, and there is a large gap between sub-Saharan Africa and the rest of the world in terms of access to electricity. Table 6.3 displays the intra-continental variation with respect to access to electricity. While North Africa is close to achieving universal coverage, the UN-Energy/Africa (UNEA) estimates that more than half of the population of sub-Saharan Africa would still be

Table 6.3 Aggregate Access to Electricity in Africa in 2008

	Population without electricity in millions	Electrification rate %	Urban electrification rate %	Rural electrification rate %
North Africa	2	98.9	99.6	98.2
Sub-Saharan Africa	587	28.5	57.5	11.9
Africa	589	40.0	66.8	22.7

Source: OECD/IEA (2010) WEO-2009 Electricity Database.

without electricity in the year 2030 (UNEA 2008).[4] To reverse these trends, the Economic Commission for Africa has called for the implementation of well-designed reforms that should target improved access to electricity and other modern energy services essential for fuelling sustainable development and achieving the MDGs (ibid).

About 25 per cent of sub-Saharan Africans have no home access to electricity and spend twice as much per kilowatt-hour as people in other emerging market regions. It has been estimated that the region will need to spend $563 billion over the next 25 years to increase generation capacity by 270 Gigawatts and avoid an energy crisis. The continent's electric demand can potentially be met by proposed dams on the Congo River, opening up the possibility of power exports to Europe. Algeria plans to export 6,000 megawatts of solar-generated power to Europe by 2020. With support from development partners, African leaders have agreed to invest $10 billion annually between 2009 and 2014 in renewable energy (Glenn et al. 2009). Ensuring that these investments attract cooperative partnerships will be necessary to improve current renewable and sustainable energy generation options. The natural resource base of the continent as well as its location should provide a magnet for higher levels of technical proficiency in generating new and sustainable sources of power. With diminishing natural resources across the globe, the competition for Africa's resources has already intensified, particularly in the oil and gas sectors. Only through strategic development and industrial policy will these natural resources contribute to the development of Africa. With this in mind, newly developed energy resources must be sustainable and these energy resources must benefit African societies.

6.2.3 Information and Communication Technologies

While growth in mobile subscribers in Africa between 2003 and 2008 has been twice that of the rest of the world, fixed line growth in the region has been similar to that of the world, and much lower compared to that of mobile cellular subscriptions and internet users (Table 6.4). Analysts such as Sanyang (2009) have argued that globalisation and the information

Table 6.4 ICT Indicators for Africa in 2007

	Population (1000's)	Main Telephone Lines		Mobile Subscribers	
		1000's	Per 100	1000's	Per 100
North Africa	157,070	18,670.9	11.91	83,865.0	53.39
Sub-Saharan	757,880	12,098.3	1.65	138,310.0	18.28
Africa	963,530	35,411.2	3.77	264,475.0	27.48

Source: ITU (2010).

economy present opportunities for Africa but point out that the benefits of an *information age* will not accrue to countries without adequate national information and communication infrastructures (Sanyang 2009).

Table 6.5 provides a summary of the continent's current information and communication technology (ICT) connectivity statistics. Africa clearly lags behind the rest of the world in terms of internet penetration rates. Its growth rate between 2000 and 2009 is nevertheless a spectacular 1,392.4 per cent. Only six African countries have penetration rates greater than 8 per cent. About 31 per cent of the African population has mobile telephones (Glenn et al. 2009). The ICT revolution has largely bypassed the continent however, due to poor infrastructure and other systemic issues largely attributable to the lack of infrastructure. Some 80 per cent of African internet access is via satellite, but new fibre optic cables to cut cost and speed access are planned to link Africa to Europe, the Middle East and Asia (ibid). Massive new capacity is now becoming available in Africa and will multiply the bandwidth available over the next few years.[5]

The world is now replete with positive examples of innovations in technology that increase access to a range of products and services. The main medium through which these transactions have been processed has been ICT. These have generally had the overall impact of reducing costs, increasing efficiencies and helping achieve scalability (OECD 2003), noticeably in providing affordable financial services to the poor. These initiatives are however disparate and have been constrained by bandwidth limitations (Gerster Consulting 2008). The increase in available bandwidth will enable a range of ICT opportunities and will finally allow Africa to participate in the global ICT revolution. An unleashing of capacity at this scale will increase the demand for skilled hardware and software technicians. This will constitute fertile ground for increasing the continents R&D competencies while providing a demand for technology and services which are locally appropriate and relevant.

6.2.4 Climate Change

Climate change is a key driver of technological development, as innovations are needed to adapt to a transforming environment. It is now universally

Table 6.5 Internet Users and Population Statistics for Africa

	Population (2009 Estimate)	Percent of World Population	Internet Users	Penetration (% of Pop.)	Growth of Users, 2000–2009 (%)	Percent of World Users
Total for Africa	991,002,342	14.6	67,371,700	6.8	1,392.4	3.9
Rest of world	5,776,802,866	85.4	1,666,622,041	28.9	367.5	96.1
World total	6,767,805,208	100.0	1,733,993,741	25.6	380.3	100.0

Source: MMG (2010). Internet Usage and Population Statistics for Africa are for September.

recognised that developing countries, and particularly the poor developing countries, would bear between 75 and 80 per cent of the cost of damages owing to climate change (World Bank 2009), and as Chapter 5 in this volume notes, the African continent is especially vulnerable to the effects of climate change. The possible impacts cover a variety of sectors, from agriculture, water, health and food security, to forestry, transport, tourism and energy. The World Bank estimates that the demand for innovation created by the climate challenge will require a research and development investment on the order of $100 to $700 billion a year (World Bank 2009).

Climate change requires a multiplicity of technological solutions. An emergent domain of 'green technology' is being constructed as a new combination drawing from a range of existing and new research fields, including material science, chemistry, engineering, environmental science and genetics and molecular biology (OECD 2010). In the context of Africa, this recombination poses unique threats and significant opportunities for the vast diversities of the continent, especially with respect to its distinctive ecosystem advantages. It is on this note that we now turn our attention to the key determinants for STI as a driver for change in African development, followed by a synthesis of some of the key uncertainties undermining systemic technological innovation in Africa.

6.3 Key Determinants for STI as a Driver of Africa's Development

Technology can have an effect on human development by helping to reduce poverty, expand human capabilities and increase economic growth (UNEP 2006). Technological innovations in public health, food production, energy and communications have been critical in this regard. There is consequently broad acceptance that we are in an age of knowledge where technological innovation is critical to societal development, competitiveness and sustainability. Africa, more so than any other continent on the globe, is intensely affected by sustained and interrelated social, economic and environmental challenges. Given the magnitude and effects of these challenges, typical S&T indicators such as R&D investment levels and numbers of researchers, scientific publications, collaborations and patents absolutely have to be qualified or at least complemented with universal standard of life indicators (particularly in critical areas such as public health and livelihoods).

While technological innovations present important prospects for a better future for civilisation, 'the risks from acceleration and globalisation of S&T are enormous' and it is necessary to exercise caution and foresight in managing the nature of technological change (Glenn et al. 2009). Without such prudence, negative and potentially catastrophic outcomes are also possible. Processes of technological change can lead to diverse outcomes. A shift of knowledge production from West to East, and from North to South could create the possibility of a new, multi-polar 'world order' (Perez 2009), which may in turn establish new agendas and relationships that may positively affect development outcomes in weaker regions in the Global South.

Global technological growth and advancement in directions where Africa has some specific strategic advantage – e.g. relating to bio-prospecting, a low carbon economy, indigenous knowledge systems and unique forms of social capital – also creates new opportunities for Africa to participate, collaborate and innovate on more equal footing. Cooperation and collaboration in S&T, as well as the newer concepts of 'open innovation' (von Hippel 2005; Gault 2010) also appear in the literature as being critical to leveraging and democratising innovation in the Global South. Whilst South-South partnerships have consistently been emphasised as vehicles for cooperation, the challenges of mobility, the spread of African diasporas and the general structure of knowledge practitioner networks have not focused on enhancing development in Africa.

Although it is acknowledged that Africa comprises a range of different countries and sub-regions with distinct circumstances and potentials, two generic issues are highlighted and used as key drivers for scenarios exploring the future relationship between innovation and development in Africa: capability and inclusion.

6.3.1 Capability

The notion of 'capacity' speaks of the know-how to undertake an action. 'Capability' speaks further of the ability to perform actions, which includes the actual inclination and resources to do so. A simple descriptive statement such as the follows: "Africa has 83 engineers for every one million people, compared with 1,000 per million in the more developed world" underscores the deficits that African countries face in this regard (Glenn et al. 2009). Africa's ability to harness its human capital base towards innovation and development will be influenced by a range of innovation capacity and capability-influencing factors including

- Basic education
- A critical mass of specialised S&T skills
- Technology assimilation and adaptation capacity
- Valorising and leveraging unique resources and advantages such as her indigenous knowledge systems (IKS) and biodiversity
- Deliberate and beneficial international scientific collaboration
- Diversification (expansion of products, services and/or markets)
- Increased raw material beneficiation (expansion of value chains)

The African Union's S&T Consolidated Plan of Action is based on three pillars: capacity building, knowledge production and technological innovation. CSIR's 2014 foresight project identified three out of four drivers for Scenarios 2014 as being capacity related (CSIR 2007): having an enabling environment for innovation (policy, resources, infrastructure, investment), managing knowledge relationships and the ability to grow, attract and retain an appropriate knowledge base.

6.3.2 Inclusion

South Africa's National Research and Technology Foresight project concluded that the attainment of a national science and technology vision for "a future where all South Africans would enjoy an improved and sustainable quality of life; participate in a competitive economy by means of satisfying employment; and share in a democratic culture" would require

- the establishment of a system of technological and social innovation;
- the development of a culture which values the advancement of knowledge as an important component of national development; and
- improved support for innovation which is fundamental to sustainable economic growth, employment creation, equity through redress and social development.

The importance of aiming for social equity in Africa is a function of the scale and shape of the continent's demographics. It is projected that by 2050 some of the poorest nations in the world will have tripled in size (NEPAD Business Foundation 2009). Nigeria, Ethiopia, the Democratic Republic of Congo (DRC), Egypt and possibly South Africa are projected to be in the top 20 most populous countries in the world. With respect to shape, Africa has a youthful population, with about 60 per cent of the population under the age of 25 (see Chapter 4). This is a classic youth bulge of the sort that has been associated with social unrest, war and terrorism, which could be compounded by forces of poverty, inequality, mass unemployment and the ethno-political manipulations common to Africa. In this context, it is critical to ensure that development paths are inclusive, both for efficiency as well as humanitarian and security reasons. Systems of innovation have to be relevant and accessible to the broad base of the population, not only by addressing issues of basic need (health, energy, food, water), but also in appealing to the globalised aspirations of youth and communities.

The foresight of leadership in ensuring a focus on relevant and responsive technology and innovation development trajectories is requisite. The post-colonial period has generally not been successful in this respect, with market-led paradigms often prioritising 'big science' and pro-growth innovations to the exclusion of pro-poor local-level enterprise, self-reliance, empowerment and participation (Rogerson 2002). Having posited these (capability and inclusion) as the key determinants, the following section explores some of the critical uncertainties that make it difficult to predict the nature of the influence of technological change on these variables, and on Africa's development in the future.

6.4 Key Uncertainties for STI in Africa

In contrast to the Afro-pessimism that holds in some quarters, Charles Kenny, arguing that "ideas and technologies are the driving forces behind progress" has commented that "the continent is in far better shape than most experts think" (2009). Assuming that he is right, we may want to ask what the main uncertainties are concerning the spread and dissemination of ideas and technologies on the African continent. This section addresses this challenge through four clustered themes.

6.4.1 Investment and Official Development Assistance

Africa hardly attracts investment from within the continent or from foreign investors because of its unfriendly 'investment climate'. Improving the situation in that regard is a major challenge in mobilising resources to foster innovation on the continent. The conventional view stresses the importance for governments to define their priorities and take appropriate measures to improve their investment climates. They consequently have launched, through the NEPAD, and in the framework of African Peer Review Mechanism (APRM), the Investment Climate Facility for Africa (ICF) aiming at providing technical assistance for their enhancement. More than 300 projects have been identified for funding in the 25 subscribing countries, specifically dealing with corporate governance, quality and accountability of public finance management, trade regimes, corruption levels and judiciary systems. All are necessary ingredients for improving productivity and promoting innovation. Also at stake is the question as to whether the coverage offered by the Multilateral Investment Guarantee Agency to foreign investors will be extended to the African private sector or not. It remains a major uncertainty whether the ICF will attract the $550 million from the private sector and the donor community.

African development, including in the sectors of S&T, has to be shaped by Africans themselves. History is full of examples demonstrating that externally formulated or imposed development policies fail. The effectiveness and efficiency of African initiatives and leadership remain crucial for the 'African Renaissance' agenda and will further justify external support. This is, in essence, the main thrust of the NEPAD and AU programmes. Maintaining this external support is however not an easy thing as evidenced by the limited progress to date on the MDGs. Obstacles to their achievement include the 'wait and see' behaviour adopted by some donors and an overwhelming focus on partnership with the industrialised countries of the North, despite calls for a South-South cooperation, which makes sense in a number of areas, such as the 'green revolution' (which was so instrumental for the growth and development of many Asian countries) or the possibility for support to develop higher education in Africa and of pooling up technologies for the production of drugs or irrigation tools.

The attitude of the OECD countries towards an actual partnership for development is closely related to the issue of African leadership. The end of the Cold War has been beneficial for Africa, with the continent no longer serving as a staging area for proxy wars between the dominant superpowers, the United States and the former USSR. The move from a bipolar world to a multi-polar world however brings new challenges. As weak states, dependent on donor contributions, African states have to rely on international platforms, such as the various UN forums or the newly constituted G-20, to influence international policies to advance their interests. In a multi-polar world, in which power relations and national interests evolve quickly, however, understanding recent changes and adapting one's foreign policy accordingly, is a difficult task. Global geo-politics are in flux and this fluidity holds opportunities but it also brings increased uncertainties for African leaders.

6.4.2 Infrastructure, Geo-Spatial Settlements and Education

Sound infrastructure is a critical element of an improved investment climate as it reduces the costs of doing business and facilitates access to markets. Good infrastructure is important for progress in agriculture, plays a major role in trade and regional integration and alleviates the negative impacts of political fragmentation (Sall 2000). The role of infrastructure in promoting human development is equally important, particularly concerning health and education services and facilities for the poor. African ministers of finance have thus identified infrastructure as a top priority for promoting growth. Needs in that sector are overwhelming, as it is estimated that sub-Saharan Africa will have to devote 5 per cent of its GDP to investments in infrastructure and 4 per cent to maintenance between 2005 and 2015 (Sall 2003). But the positive impact of such investments would also be noticeable as by 2015, poverty could be reduced by 2.5 per cent and 20 million people more would be lifted from poverty trap than under normal circumstances (ibid).

The challenge though is two-fold. One is the capacity of the donor community and the private sector to quickly disburse required investments taking into account local, sectoral, regional and national priorities and/or the NEPAD/AU Short Term Plan of Action (which covers energy, transport, ICT, water and sanitation). A second is to promote good practices and learn from them. For that matter, public-private partnerships (PPPs) offer a very pragmatic approach as demonstrated by the improvement of connectivity through coordinated approaches between donors, government and the private sector. Access to ICT in particular has played a major role in that process and is shaping identities and paving the way for greater autonomy of erstwhile dependent communities. Thanks to ICT, heritage and tradition are being critically assessed, particularly those aspects which condone passivity, the abuse of women or unconditional submission to elders in times when young people constitute more than half of the continent's population. In addition, ICT has an impact on competitiveness and productivity, as stated earlier. There are also some indications that it significantly reduces (by half) the cost of remittances by migrant workers (Sall 2003). The development of ICT should not, however, be taken for granted.

The tremendous spread of ICT has been made possible by important investments in infrastructure. However, African governments and the donor community have reduced the share of infrastructure in Official Development Assistance (ODA), while advocating a greater involvement of private sector in infrastructure development. Unfortunately, while the ICT infrastructure has kept attracting some private investments, it is not the case for the energy sector, water provision, sanitation and transport sectors, which all remain under-funded while they are part of any harmonious processing urbanisation. Balancing investments mitigating their concentration on ICT towards under-funded sectors is a major uncertainty.

Urbanisation of Africa and its impact on African culture is a much debated topic and a major challenge for those who hold the view that Africa is the realm of rural communities. The truth is that although only 37 per cent of Africans are currently urban dwellers, around 600 million people will live in cities by 2025 (Sall 2003). But whereas urbanisation is taking place at an unprecedented pace, twice faster than in Asia or Latin America, the productive economy is growing slowly, if not outright stagnating. As a result of this dual process, slums are sprawling and are becoming a breeding ground for crime, with rampant unemployment. However, there is greater recognition today that the urbanisation process, in spite of all the challenges, has been and still is an engine of enhanced creative collectivity.

The contribution that universities in sub-Saharan Africa can make to national development goals through their growing emphasis on interaction with businesses was recently researched. Funded by the International Development Research Centre, the research showed, amongst others, how university–business interaction has already contributed to the continent's economic growth and social development (Kruss et al. 2009). On the basis of these findings, the idea of a 'responsive university' that can act on the demands of industry and meet broader societal needs is gaining increasing recognition. However, significant challenges remain to be addressed for the education systems to be transformed and empowered to implement the necessary reforms to be responsive to the needs of contemporary Africa. Three issues deserve particular attention in that regard.

First, unemployment and particularly youth unemployment is a major challenge to human security. Education systems are a major tool to address the challenges by empowering learners with skills, competencies and knowledge enabling them to adapt to an evolving labour market. Second, there is now a wide consensus that reforming the education and training programmes is key, the emphasis being put towards active and problem-solving oriented learning. Pedagogic tools such as books and online resources should also be made widely available. There are indicators that such reforms if well conducted can yield significant benefits, even in the most challenging areas like conflict-ridden or post-conflict zones. Somalia is a case in point where a literacy campaign coupled with distance learning tools, launched in 2002, benefited more than 10,000 people, of which 70 per cent were women in remote rural areas, thanks to radio programmes (Sall 2003). Third, a number of initiatives have been conceptualised aiming at promoting networks of mutual learning and sharing or adapting pedagogical tools to local realities, or promoting innovative teaching methods. The Association of African Universities, the Association for the Development of Education in Africa and NEPAD are playing a leading role in those efforts. NEPAD, in particular, has developed an ambitious programme of online schools, which aims at providing 600,000 African primary and secondary schools with ICT infrastructure in the next few years. The extent to which the donor community will support this drive is a major uncertainty.

Legacies of poor and deteriorated educational systems are a significant constraint. The benefits of foundational investments being made in improving systems of basic education, and S&T learning will only yield results at scale (i.e. critical mass of skills) on a 15- to 20-year time horizon (Opoku-Owusu 2003). Social attitudes and perceptions, lifestyle preferences and practices – such as tensions between globalised, aspirational futures and more traditional-cultural self-conceptions – also affect both the supply and demand of innovation and innovation capability (Sall 2003).

6.4.3 Integration and Governance

The AU as a regional structure was launched in 2002, succeeding the Organisation of African Unity (OAU) and the African Economic Community

(AEC). Its goal is to promote an "accelerated socio-economic integration of the continent, which will lead to greater unity and solidarity between African countries and peoples". The five regional constituent entities of the AEC continue to exist, and are increasingly becoming important players in the integration and co-ordination efforts of the member states of the AU. The summit of the AU in 2007 reiterated the commitment to establish a United States of Africa, with a Union Government as its ultimate objective. This intention is premised on the desire to enable the creation of a single voice to speak on behalf of the continent in its intention to boost regional integration processes through continental mechanisms, and to accelerate economic and political integration. The summit agreed on the priority to increase efforts with an emphasis on the five regions. At least at a normative level, it is expected that higher levels of integration would have been achieved and culminated in five functional sub-regional common markets in the next two decades (Maharajh 2008). The former UN Secretary-General recently reminded us that "Africa is not homogenous; it is raucously diverse. But its nations are linked by common challenges hampering human development and equitable growth: weak governance and insufficient investment in public goods and services, including infrastructure, affordable energy, health, education, and agricultural productivity" (Annan 2010).

Africa faces a range of existing conditions and limitations which will hamper her technological change-based developmental outcomes. Key among these are the inherited barriers to doing business across the region. Fragmented by colonial boundaries and their consequently diverse political, regulatory and technical frameworks and specifications, cooperation and integration across nation-states is a hurdle that Africa has grappled with and will seemingly continue to do so for at least the next decade. From inconsistent rail gauges to restrictive mobility policies, harmonisation is a prerequisite to enabling effective regional systems of innovation, and the lack thereof is a grave impediment (CSIR 2004). Historical and emergent relations between state, private sector and civil society actors present another set of challenges. From issues of trust to ones of entitlement, cooperation of the sort that optimises effective systems of innovation requires new commitments and forms of engagement. The question of whether African states will be able to create optimal framework conditions for innovation and manage the relationship between the state and society in a manner that unlocks dynamism is closely related to the quality of governance that emerges in countries across the continent.

6.4.4 Agriculture

The differences in productivity between Africa and other regions of the world are visible in many economic sectors and especially in the agricultural sector because it absorbs the majority of the working African population and contributes 30 per cent to Africa's GDP. An increase in agricultural production is hence crucial for the continent's development. According to NEPAD, "the recovery from the crisis will depend on comprehensive policy and programmes that will increase agricultural production, productivity and trade" (AU 2008: 62). In spite of the economic importance of the agricultural sector in sub-Saharan Africa, its agricultural potential is hampered by a variety of bottlenecks, including dwindling investments in rural infrastructure and villages that link local markets to the global economy, in addition to climatic challenges. Arguably, irrigation and post-harvest infrastructures would go a long way to alleviating some of the bottlenecks and sustain agricultural successes concerning the development and dissemination of high-yield maize varieties, horticultural production, dairy production and the improvement of production of cassava and rice in West Africa (IAC 2004). On this last point, the role of research cannot be overlooked in as much as the high-yield rice known as NERICA was developed by scientists of the West Africa Rice Development Association, which is a member of the Consultative Group on International Agricultural Research (CGIAR) (AU 2008).

Currently, agricultural productivity is particularly low on family-owned farms that constitute a majority of productive farms. A major challenge is thus to help them to raise their productivity. For some, this is within the realm of possibilities and they see no antinomy between family-based farming and productivity. Cissokho (2009), for example, even claims that the productivity of family-owned farms will be higher than those of commercial farms. This perspective may be contrasted with an alternative where a significant increase in agricultural productivity can only be obtained by a system of production that is based on a rationality that is different from family-based farms: competitiveness versus security; an economic logic versus a relational logic (Sall 2003). Others believe that the two approaches to productivity can be combined. It is not possible to say with certainty which of these trajectories will be dominant from now to 2030 – the three are already happening (ibid).

However, it is certain that depending on which of the three systems of production will dominate, investments in technology acquisition and use will be more or less intense. Hence a focus on commercial farms and an economic and competitive logic will rely more on technology-focused forms of productivity, whereas a focus on household consumption and security will go hand in hand with minimising investments in technology. Like energy, water will remain a sought after commodity and the development path chosen by African leaders will determine its usage. Industrial, agricultural production will compete with small-scale farmers for scarce water resources. People-centred development would see an emphasis on the latter yet the challenge of sustainability would remain.

6.5 STI Scenarios 2030

Taking the two identified scenario drivers (key determinants) and other variables discussed, this section presents a set of possible trajectories for technology as a driver of change in Africa towards 2030.

It is proposed that the two lower quadrants – characterised by low innovation capability – would lead to a protraction of the status quo where Africa continues to be a net consumer of technology and innovation. In a context where Africa has developed strong innovation capability by 2030, a distinction is made between two possible trajectories – one where the advancements are guided by an inclusive agenda guided by a focus on relevance and broad-based impact, or where technological advancement is achieved exclusively with only a macro-economic focus. The scenarios are not presented as mutually exclusive. In fact, it is quite possible that the various scenarios might play out in combination in different countries or sub-regions. Some speculations are offered in this regard.

6.5.1 Africa, the Passive Consumer

In this scenario, Africa is unable to develop the necessary human capital to actively drive, participate in, or intelligently engage with systems of innovation. Poor education systems leave the continent with inadequate numbers

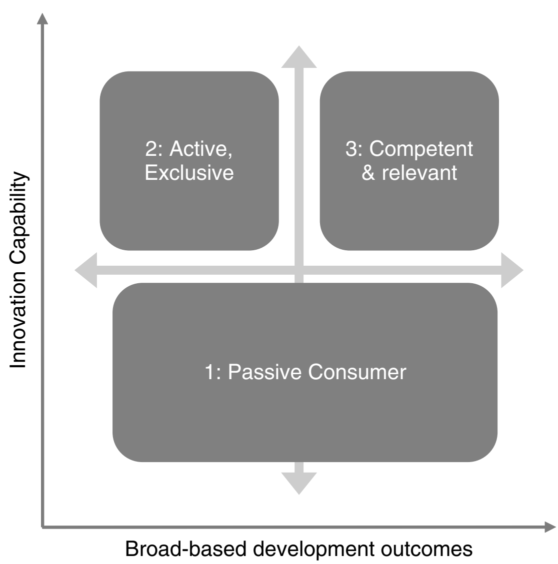

Figure 6.2 Systemic Technological Innovation Scenarios for Africa 2030

of technicians, scientists and engineers, resulting in poor innovation capacity due to an inadequate human resource base. The likely 'better' case in this scenario would be where Africa is a net follower or dependent, awaiting solutions from the North. A worse case would be where the continent becomes a dumping ground for sub-standard and expensive technology by 2030 (e.g. polluting technologies, or technologies delivering poor or detrimental health or education outcomes). Countries most negatively affected in this scenario are the most vulnerable ones already faced with poor educational attainment levels and high levels of poverty or dependence. These are largely in West and Central Africa (Mali, Chad, Niger, Central African Republic, Senegal, Burkina Faso).

6.5.2 Active but Exclusive

African states choose to pursue technology purely on the basis of industrial application or global competitiveness with no focus at all on technology and transfer models relevant to their human development circumstances, e.g. in health or food security. Technological innovation is exogenous, extractive and ultimately exclusive, delivering development outcomes only to a fraction of the population. The logic is that technology-driven macro-economic growth will 'trickle down' to the others eventually. In the best case, inequality results and is high but states are able to find ways to sustain interventionist approaches (variations on the welfare state) to maintain highly unequal societies. In the worst case, the have-nots rebel against the system. There is simmering instability in several states, and security becomes a regional concern. Countries that already have a base for rapid technological advancement as well as significant levels of inequality such as South Africa, Angola, Kenya, Ghana and Zimbabwe are possible contenders for this scenario.

6.5.3 Competent and Relevant

The best overall scenario offered is where the continent focuses its technological advancement role on areas of societal need, and the potential to develop unique areas which address regional challenges but have the additionality of unique comparative advantages in the global market. The innovations deliver economic benefit as a global leader, and at the same time Africa is addressing her own issues. It is a slow path that demands years of investment education and science, and difficult decisions about focus. In the best case, Africa emerges as globally competitive in niche areas and derives direct (for her own use, particularly to address human development concerns) and indirect (secondary market) benefits. In the worst case, Africa finds herself without external markets and has to focus inwards; fortunately, her close-to-a-billion population by 2030 is a viable market.

6.5.4 STI Scenario Triggers and Transitions

The key triggers flagging movement from one scenario to the next for these scenarios are the following:

- *Education*: The positive scenarios all hinge upon building innovation capability, which fundamentally begins with building human capacity. The achievement of broad-based, quality basic education as well as specialised competencies is an essential prerequisite.
- *Human capital retention and attraction*: In the knowledge economy, knowledge skills are sought after and mobile. Even if the region were to improve its capacity to develop skills locally, Africa's net balance in the brain drain – brain gain exchange would be the next critical issue in building regional capacity. This depends then not only on the education systems, but in the economic systems' capacity to effectively absorb and even attract skilled knowledge workers. A net deficit in this regard will weigh the continent down into the lower quadrants.
- *Improved regional communications infrastructure*: The success of NEPAD and other regional infrastructure programmes in accelerated regional logistical (road and port) and ICTs (undersea cable) access will go a long way in enhancing innovation capability. The converse is also true. High costs and impediments to cooperation and technological advancement on the continent will hold Africa back at a time when the rate of global technological change is the greatest ever known.
- *The strategic direction adopted by African governments*: around their technological path and investments. Key variables in this regard include: innovation philosophy (competitive – cooperative, inclusive – exclusive), technological choices (relevance, endogenous – exogenous), levels of R&D investment (both public and private) and focus.

Scenario 1 seems to be the likely trajectory, given the current enabling global environment. Africa has generally continued to be a net consumer of knowledge, technology and products from the Global North, and increasingly from the East as well. The economic and technological dependencies that have underpinned these relations are deep and influential. A multipolar world may create new, more empowering forms of engagement that support the development of South-South technological cooperation, and indeed intra-African innovation cooperation. A more defensive response might counter endogenous African innovation trajectories. Finally, societal values and the foresight of leadership will affect direction. A future-orientated society that values local innovation and has visionary or at least enabling leadership will be a key determinant in moving towards the more positive scenarios.

6.6 Conclusions

Capability and relevance are highlighted as keys to a stable and successful future scenario for the continent. This chapter has argued that an inclusive *system of innovation* approach, which extends well beyond the mere emphasis on technological change is required to enable the progressive transformation of Africa. The ability to adopt and adapt this approach demands the guidance of good leadership and sound partnerships to further enhance the probability of ensuring systemic and widespread outcomes. The key externality which will affect technology and innovation as a key driver shaping African development will be the response of the international community to the call for mobilising research and knowledge competences in addressing developing country problems. Even the former colonial power and current government of the UK recognises that it has no explicit policy on strengthening STI capacity in recipient countries. While many external government departments and research agencies each have their own objectives, very few converge to provide holistic support to enhancing Africa's capabilities to respond to rapid change and embark on developmental trajectories which are grounded in principles of sustainability.

As the world progresses into the twenty-first century, it is vitally important for the continent of Africa to arise from decades of pessimism, exclusion and underdevelopment. The growing legitimacy of new institutions coupled with a demographic advantage of young people connected in the ubiquity of global ICT networks provides prospects for the various countries of the continent to rise beyond territorial constraints and embrace the opportunities for a cohesive integrated future. Technological change, harnessed through the power of systems of innovation, offer such transcendental opportunities. The peoples of Africa will shape the contours of the pathways into the future. Governance structures need to adapt to this newfound confidence and evolve to manage the continent's knowledge resources in pursuit of such progressive ambitions. If they fail in this respect, history will judge the world harshly for failing the cradle of humanity and further encumbering Africa's development.

Notes

1. Western Sahara; see UN (2009a).
2. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. Angola's growth rate was estimated at 13.2 per cent in 2008, while Zimbabwe's was estimated to be 14.1 per cent (World Bank 2010).
3. Schumpeter suggested at least five 'Neue Kombinationen' including: (1) production of new types of goods, or change of properties of existing goods; (2) introduction of a new method of production possibly based on scientific discovery; (3) opening of a new market; (4) use of new sources of raw materials and intermediate goods; and (5) new organisation of production (2004).
4. The UNEA is a UN collaboration mechanism and sub-cluster on energy in support of NEPAD.
5. See http://www.flickr.com/photos/shuttleworth/4699438376/sizes/o/ for an illustration of the bandwidth of undersea cables linking Africa to the rest of the world.

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7

The Future of Internal Political Transformation in African States

Stefan Meyer

This chapter examines how internal political change within African states might influence future development prospects on the African continent. It begins with a brief exploration of the linkages between political development and welfare improvement. Then, recognising that political change can be considered a development outcome in its own right and not simply a variable affecting development outcomes, the chapter discusses some of the most important factors that influence the nature of systems of governance in African countries, namely ethnicity and customary rule. In order to speculate on different ways that the political landscape in Africa could change over the long term, the chapter also identifies key uncertainties related to political development before outlining several descriptions of possible political futures of African states.

Any analysis of the future of African political development needs to be grounded in an appreciation of the political history of the continent. The response of African people and their leaders to European colonisation and to the violence and institutions that were imposed varied as a function of pre-colonial social organisation, socio-geographic preconditions and historical contingencies. At the same time, the character of colonial political organisation across the African continent varied among the colonial powers, as exemplified by Britain's *indirect rule*, the French *administration coloniale* and *'mission civilisatrice'* and the Belgian privatisation of extraction. There were also differences *within* colonial strategies of each empire, as exemplified in either trading-post extraction or settler regimes. These different patterns of political and economic control during the period of colonisation contributed in turn to different patterns of decolonisation. In the three decades from the 1960s to the 1980s, diverse forms of statehood emerged, either oriented as African-socialist or pro-Western regimes, but most of them undemocratic, single-party or military regimes holding up national sovereignty and non-interference as sacrosanct value.

When in the 1990s the Third Wave of democratisation swept over Africa, political opening did happen in a significant number of countries. However, in many cases, undemocratic structures and practices inherited from the colonial and post-independence eras are largely maintained in regimes of 'electoral authoritarianism' and an institutional multiplicity and legal pluralism make rule-based and socially exclusive governance coexist. Nonetheless, Afro-pessimists, who see democratic political development as substantially contrary to African values, are contradicted by the actual working of democratic systems in unlikely circumstances such as Ghana and Mali. Thus, a look back at the past 150 years, first of all, highlights the immense diversity of the institutional legacies and trajectories of the 53 African states.[1]

There are two basic narratives that attempt to explain the lagging behind of African societies to ensure providing welfare and political development to their people. On one side, scholars referring to exogenous factors make the argument that colonialism and successive dependency, dominance and interference disenables the development of industrial take-off and effective public administration because African elites are extroverted (Bayart 1993) and have no need to negotiate with their citizens and because global conditions restrict African opportunities (Daniel et al. 1999). On another side, theorists looking at endogenous factors stress the internal political conditions in Africa, namely the persistence of personalised informal patronage networks under the surface of formally rule-based institutions, some of them ethnically coded (Bayart 1993; Bratton and van den Walle 1997; Hyden 2006; O'Neil 2007). Often this stream of reading African politics has been summarised under the label of 'neopatrimonialism' (cf. Erdmann and Engel 2007; de Sardan 2008; Mkandawire 2001).

Reflecting the respective interpretations of endogenous or exogenous causes, there are different understandings of the wave of liberalisations in the beginning of the 1990s, one focusing on the post-cold war withdrawal of external support by Western or Soviet powers, others focusing on the internal crisis of neo-patrimonial regimes, which necessarily generated economic stagnation and came to an end point in the late 1980s. There have been constant debates between these two positions and it has become clear that no analysis of African polities is possible without combining both factors.

For international development cooperation, this dialectic reflects back to two sets of power relations that are substantially different although intimately linked. The first is between rich states and poor states (Steer et al. 2009). The second is between the elites who govern and their citizens. Accountability in each of these relations – 'mutual' and 'domestic', respectively – has risen as a key concern within the Western community of aid policy makers assembled in the OECD DAC (Meyer and Schulz 2007; Hudson 2009). This complex intersection of the two accountability relations is in the core of current development thinking and practice. Future debate on aid policy is likely to be driven by them. On the academic side, development thinking is thus increasingly consistent with the work of democratisation scholars (IDEA 2009; Lekvall 2009).

The current questioning of accountability in the donor–recipient and the state–citizen relationship has a number of elements. First, development cooperation practitioners increasingly do not shy away from acknowledging the relationship between aid and domestic politics and increasingly adjust their self-perception from being merely technical experts who accompany funding flows to its best possible use towards accepting themselves as being political actors as well (Booth 2008). Secondly, there is growing recognition that aid in itself can do harm by either limiting policy space through imposed conditionalities or by generating aid dependency, which can empower elites and obstruct state–society negotiations around taxation (Moyo 2009). Furthermore, aid is only one part of all public policies of northern states that affect developing countries. Under the heading of 'policy coherence' it has become increasingly clear to development policy makers that in order to succeed with their mandate of reducing poverty it is as important to work 'sidewards' with other ministries as to work 'forwards' with the south.

Thus, the study of political transformation in Africa and its impact on development outcomes is a complex field. The triangle of aid, freedom and welfare involves a number of circular relationships, all of which are contested. Furthermore, when looking at internal political transformation, it is important to underline that the institutional and political pathways of the 53 African countries are very diverse and that ever since colonisation 'internal' political processes have had strong outward linkages that supported elites politically and economically in controlling their countries. Aid has been one element of this.

7.1 Political Development and the Provision of Welfare

This section outlines the conceptual definitions of the politically heavily loaded terms of 'development' and 'democracy' and their interrelations and highlights some of their drawbacks. It provides an overview of the current debate on the linkage between the quality of political organisation within states and development outcomes.

The term 'political transformation' can capture a variety of issues ranging from multiparty democracy, the development of a regulatory system, the capacity to tax and judicial reform. In this chapter, the main focus will be on political development understood in the broad term which has arisen in donor discourse in the 1990s: 'governance'. It seems important to distil two separate dimensions – democratic governance and state effectiveness. Democratic governance refers to the widening of civil liberties and political rights and the establishment of functioning and plural democratic practices and institutions. State effectiveness refers to the capacity of the state to formulate and implement policies, in other words, 'to get things done'. In that context, DFID has developed an applied tool to assess state performance the 'CAR framework' (capability, accountability, responsiveness; see DFID 2007). The World Governance Indicators (WGI) provide a construct that makes 'state effectiveness' measurable across countries (see Kauffmann et al. 2009; cf. Meyer 2009).

Scholars underline the importance of distinguishing between the state and regime types. While a key function of the state is to promote economic growth and deliver development outcomes, the regime type refers to the form of government and the way decisions are made. It is paramount for donors to distinguish between state building and democracy support activities, while bearing in mind their potentially reinforcing or contradicting character (Rocha-Menocal 2007; Fritz and Rocha-Menocal 2007).

Defining democracy has been a highly contested field among academics; however there is consensus on several elements that make up a democratic state. Democracy as 'polyarchy' (Dahl 1989), that is the division of powers, refers to the existence of functioning processes of participation and competition. Other definitions add horizontal and vertical accountability. Horizontal accountability refers to the restraint of government by constitutionally defined state bodies, mainly parliaments, the judiciary and supreme auditing institutions. Vertical accountability refers to the obligation of government to submit to frequent re-elections through the electorate and to justify action taken towards citizens (O'Donnell 1994, 1998). The concept of 'embedded democracy' claims that beyond the electoral regime, a number of factors must exist in order for the system to become and stay democratic such as civil rights, political liberties, horizontal accountability and the effective power to govern, and the existence of civil society and a functioning realm of the public sphere (Merkel 2004). A more expansive definition of democracy – often identified under the banner of 'deepening democracy' – insists that democratic practice has to permeate society and the citizen–state relationship in a more general manner. This approach therefore calls for deliberative spaces in which, beyond the frequent elections, government is exposed to public scrutiny (Gaventa 2006). It also interprets the democratisation of social and economic relations as such as a condition for democratic systems. To sum up, from narrow definitions to the definition of accumulative preconditions for functioning democratic practice, a number of attempts at definition share a process orientation (Tilly 2007). For the purpose of this study, democracy will be defined in a process-oriented sense which ensures certain standards of participation and political competition and is embedded in provisions for political and civil rights and a non-restricted civil society.

Defining development has lately been dominated by the achievement of the Millennium Development Goals (MDGs), thus focusing on basic indicators of social welfare. While this marks an advance over merely measuring economic growth, more controversial issues, such as equity, participation, and dignity, which were included in the Millennium Declaration, could not be included in the MDGs. As with 'democracy', the definition of the term development is highly contested. A too ample take on development, which would include elements of political transformation, risks reducing the analytical value of the term, while simply focusing on outcomes makes it too descriptive. More theoretically founded definitions are provided by scholars who consider that 'development' is a process of 'transformation of society' and comprises a change in the modes of production, which necessarily entails the emergence of new institutions for redistributing wealth (Leftwich 2005; North et al. 2007, 2009). While the latter definitions allow for a more profound debate on the nature of development, and hence the character and modalities that international assistance should pursue, the MDGs offer a simply measurable and consensual framework of actual outcomes. Therefore for reasons of simplicity, this chapter has development outcomes as measured by the MDGs in mind when referring to 'development'.

The debate on how democratic governance and social welfare mutually impact each other is still open, and evidence linking democracy and development in either direction remains inconclusive. One finding, though, stands out, which is that while there are some successful cases of promotion of development by non-democratic regimes, some of these regime types also have the worst record in terms of creating situations of widespread poverty. In contrast, democracies seem to stay more in the middle ground. Rocha-Menocal (2007) has summarised the recent debate and concludes that while there have been a series of attempts to prove or invalidate the positive impacts of democracy on development or the necessity of basic developmental standards as a precondition for a democratic system, none of these claims remains uncontested. Kaufmann et al. (2007, 2009) are among the scholars who claim that the quality of institutions, of which political development is one element, leads to development. A more sceptical interpretation is proposed by Khan (2005. 2006), who argues that democracy will most likely not transform the underlying logic of patron–client relations and thus will make little leeway in the transformation that is needed for societies to take off economically. Similarly, Leftwich (2005) argues that the nature of economic transformation required for a sustainable, redistributive growth path does not necessarily go down well with the political logic of democracy, which is necessarily conservative and consensual, and often blocks radical shifts in modes of production.

To sum up, the relationship between democracy and development is subject to continuing debate. While there is a consensus that development depends heavily on state effectiveness, whether democracy contributes to furthering state effectiveness is more controversial. More and more, it becomes evident that the liberal claim of 'all good things go together', that free markets, rule of law and open societies are mutually reinforcing applies only to industrialised societies that have reached an advanced economic stage and have deepened their democratic culture. In developing countries, there seems to be limited relation, if not sometimes a negative trade-off.

It is important, particularly in the African context, to complement the dimensions of democracy and development with another relevant variable, namely the peacefulness of a society (Mamdani 2002; Nzongola-Ntalaja 2004). This refers to the capacity of a state and the society to resolve its conflicts by non-violent means (Anten 2009; Schmelze and Fischer 2009; Englebert and Tull 2008). On the one hand there is an ongoing debate if political opening could possibly unleash civil war. A variation of this question is to which extent democratisation can happen during or immediately after civil war, the most frequent pattern of violent conflict in Africa (Bekoe 2005). On the other hand, in usually peaceful societies, elections have increasingly led to violent outbreaks including to protracted confrontations, such as in Kenya. Evidence shows that there is only a correlation between *consolidated* democracy and the achievement of non-violent conflict resolution, while there are some scholars who warn that ill-sequenced political opening can serve as a driver for armed conflict (de Zeeuw 2009). Equally, economic development is not a safeguard against the outbreak of social or political violence, as the cases of Côte d'Ivoire and Kenya recently demonstrated. Hence, political transition can be a driver of conflict in burgeoning democracies.

From a donors' perspective, much of the debate referenced above has been summarised under the umbrella of discussions on 'governance', which is increasingly being criticised as a 'feel-good' or 'catch all' concept. It is important to recognise that elements as different as political accountability, human rights, the rule of law, decentralisation, political pluralism, participation, eradication of corruption, transparent and accountable public administration, efficient public management and economic reform are grouped together under the concept. There has been a tendency in donor circles to demand political reform on each of these issues, often oriented around Western-type institutional blueprints. Against these practices, Grindle (2007) calls for a politically informed analysis of the respective state that takes the institutional context of each country into consideration and proposes a concept of 'good enough governance' to foster the appropriate sequencing of reforms and avoid reform overload of already weak administrations (Grindle 2007; Smith 2007).

Recent discussions among African reformers and in the donor community identify a number of (apparently) technical areas of state functioning as key entry points for enhancing the political relation between citizen and state (Hudson 2009; Bräutigam et al. 2008; OECD 2008; DFID 2009). Among these are the following:

- *Taxation*: African states have the lowest tax pressure rates world wide. However, following the commitments of the Monterrey Summit on

Financing for Development, there is an increasing consensus around the notion that taxation is part of state-building, not just a technical issue (Bräutigam et al. 2008; OECD 2008). Critiques from diverse backgrounds hint at the point that domestic resources are better than aid, because they enhance domestic chains of accountability. Furthermore, more and more it is claimed by African experts and political activists that emancipation from aid dependency is an African agenda that will be taken forward by Africans (Moyo 2009). A recent conference of African tax administrators – the International Conference On Taxation, State Building and Capacity Development in Africa 2008 – agreed on a communiqué, which acknowledged the importance of taxation for state-building, underlined the necessity to liberate Africa from aid dependence and committed the participants to the setting up of an African Tax Administration Forum (ATAF), which should serve as a vehicle for enhanced South-South cooperation (see Harris et al. 2009; Moore 2007).

- *Public financial management and oversight by supreme auditing institutions*: This has been an explicit part of the 'aid deal' of the Paris Declaration, providing better aid in return for better domestic systems. Besides the very technical issues of the quality of Public Expenditure and Financial Accountability (PEFA) systems, the issue is increasingly being taken up by internationally networked civil society groups that share lessons about tax vigilante practices (see www.internationalbudget.org).
- *Judicial system and oversight of the security sector*: Access to justice and safety from violence and intimidation has only recently been linked to the poverty reduction agenda. Increasingly, justice reform is regarded as a sector and efforts to reform are moving beyond formal structures to engage with substantial rights and informal barriers to justice.
- *Accountability systems*, understood as an interacting set of state organs, civil society groups and media, have increasingly landed on the agenda of reformers and donors. As opposed to considering formal constitutional provisions only, the tendency is moving towards inquiring how different modes of accountability engage around specific topics and how institutional provisions for oversight and societal practices, be they social mobilisation, the questioning of integrity of public figures in the media or others, could be mutually reinforcing (Hudson 2009).
- *Service provision and modes of social accountability*: Societal groups are becoming more integrated into co-production patterns of social services – that is the sharing of responsibilities between state agents and private actors in providing basic services for the poor – and social mobilisation emerges around issues of education, health care or productive infrastructure (Houtzager et al. 2008).

Citizenship, understood as the endowment of individuals with rights and their capacity and opportunity to participate in public affairs, is emerging as a core analytical concept that links the accountability and responsiveness of states to the public sphere in which political settlement and the legitimacy of the state are constantly being renegotiated. The concept of citizenship gives meaning to the often fuzzy governance notion, when it breaks down terms to a level of the actors both as active citizens (participation) and clients of state services and protection (rights holder). Next to state effectiveness, strengthening inclusive citizenship has become one of the key concerns of scholars and donors (Cornwall and Coelho 2009; Eyben and Ladbury 2006; Castillejo 2007). While state effectiveness is a means to an end, citizenship, which captures both political and social rights, is an end in itself. Progressive African scholars claim that the African Peer Review Mechanism (APRM) attempts to install exactly this: a redefinition of African citizenship by a deliberative process at national level, based on mutually agreed standards at continental level (Jinadu 2007, 2008).

7.2 Political Development in Africa

The nature of the African state has often been described as weak. In line with the above-mentioned extroversion and the prevalence of informal clientelist networks over the formal rule of law, the majority of African states could better be qualified as 'quasi states' (Jackson 1990) that have a juridical, but lack a de facto statehood, in the sense that the state is capable of controlling its territory and serving its citizens by providing services. The sanctity accorded to national sovereignty after decolonisation by the United Nations and the Organization of African States did not translate into the de facto capacity of rulers to control their territory. Low population density and difficult geography has historically contributed to the limited reach of state presence beyond the capital (Herbst 2000). The lack of external threats from neighbouring countries lowered the need for rulers to take on effective control over their territories and bring citizens behind the state as soldiers and taxpayers, as was the case in state-building processes in Europe and other parts of the world (Tilly 1990). Around Africa, nation-building processes, despite some attempts to establish national identities in the decolonisation rhetoric, were not carried through to completion, and sub-national, often ethnically coded identities (some of them extremely local) prevail over a national conception of the people as citizen (Pakenham 1991; Berman et al. 2004; Booth 2009). As a latecomer in state-building, this is the specific condition of African state, the 'nature of the African state', which combines both weak domestic outreach and an external stabilisation of the formal shell of sovereignty. This, again, makes African statehood difficult to compare against universal sets of standards for 'good governance'.

Bearing this call for caution in mind, a number of indicators to measure governance can be presented. They measure the performance of political systems, the degree of freedom, civil liberties as well as government effectiveness. These cross-country indicators provide some sufficient basis for detecting general trends in political development in Africa (see Meyer 2009).

The Freedom House indicator is the most widely used tool to measure political and civil rights. It has been criticised by offering a very narrow definition of what would constitute a liberal polity. However, it is advantageous because it allows for a long-term cross-country comparison. Freedom House data for Africa underscore the thesis of a successive political opening during the 1990s.

As Figure 7.1 suggests, in the last five years, setbacks and gains in political freedom have balanced each other out. Some commentators have noted that the third wave of democratisation in Africa is over and that the challenge now for international actors is rather on consolidating existing democracies than to foster political liberalisation in autocracies (Freedom House 2007; Barkan 2009).

The World Governance Indicators (WGI) are a second source that allows for comprehensive comparison. In order to illustrate the above debate on the linkages between political and civil rights and government effectiveness, Table 7.1 visualises where on potential fields African countries would

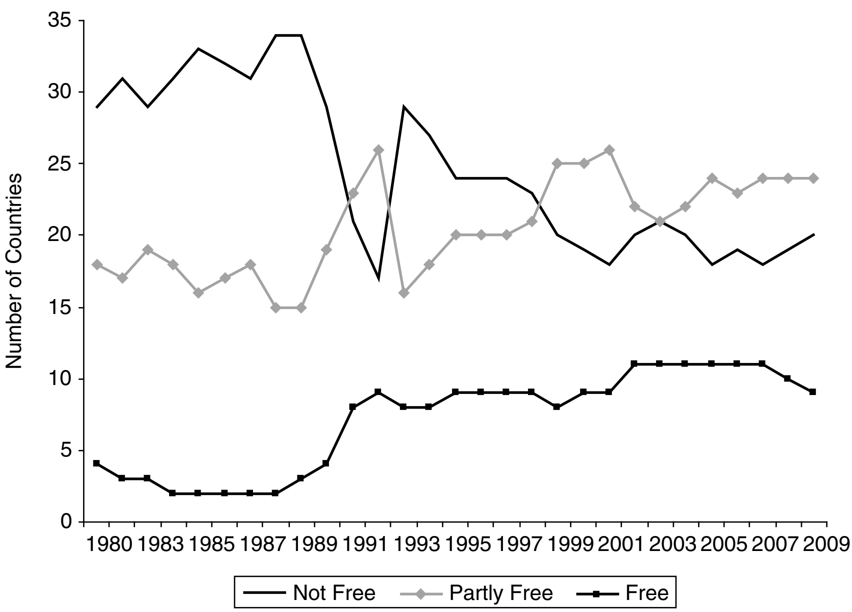

Figure 7.1 Freedom House Rankings for Africa as a Whole (1990–2009)
Source: Freedom House (2010).

be situated. It takes the WGI as a source and compares the improvement or decrease in the yearly ratings of 2008 and 2000. Methodologically the approach taken in this mapping is somewhat questionable as looking at the change levels out the actual performance and the selection of the reference years is somewhat arbitrary. The chart, however, illustrates first of all that democratic governance and state effectiveness are not necessarily linked.

Similarly, an overall country by country analysis of two of the six WGI dimensions – 'voice and accountability' and 'government effectiveness' – conveys a mixed picture of progress in the last ten years. While in some countries progress in political opening and improving state performance was made, particularly in countries affected by conflict such as Côte d'Ivoire and the Central African Republic, government effectiveness and political freedom declined. Again, there seems to be no direct relation between changes in the degree of political liberties and civil rights and those in the effectiveness of government.

This mixed picture for the most recent phase has been reaffirmed by the latest data from the Afrobarometer, a continent-wide opinion survey that recently came out in its fourth edition. The Afrobarometer could only be

Table 7.1 World Governance Indicators: 'Voice and Accountability' and 'Government Effectiveness' 2000–2008

		Voice and Accountability		
		Decreased	**No change**	**Improved**
Government Effectiveness	+	Djibouti, Libya, Ethiopia	South Africa, Nigeria, Mauritius, Niger	Kenya; Congo; Burundi; Zambia; Sierra Leone; Angola; Algeria; Liberia; Rwanda
	0	Tunisia, Gabon, Senegal Central African Republic; Morocco; Madagascar; Equatorial Guinea; Botswana	Burkina Faso; Seychelles; Cameroon; Mali; Namibia	Uganda; Mozambique; DR Congo; Ghana
	–	Chad; Mauritania; Zimbabwe; Eritrea; Egypt	Côte d'Ivoire; Guinea; Malawi; Benin; Gambia; Somalia; Sudan; Guinea-Bissau	Togo; Lesotho; Cape Verde

Source: World Governance Indicators; Comparison between 2008 and 2000. Categories established by dividing and ordering countries in three equal cohorts.

conducted in 19 countries, namely the more democratic regimes in Africa. It excludes North Africa entirely. Methodologically, it is notable that the subjective perception of citizens on the degree of democratic rule ('supply of democracy'), largely matches with the expert opinion related by the Freedom House indicator. The survey constructs a variable of 'supply of democracy' by asking citizens if they think their country is democratic and if they are satisfied with the way the democracy works. 'Demand for democracy' is constructed by asking if citizens are in favour of democratic rule and if they reject authoritarian forms of rule (Bratton and Mattes 2009). Figure 7.2 displays the results.

The horizontal chart displays the degree to which the surveyed regimes are democratic. Most of the countries find themselves in the hybrid category. The vertical dimension displays how much the people care about democracy. Combining these dimensions the chart displays whether regimes are 'consolidated' or not. This is measured by the extent to which demand and supply match. Hence if people do not request democratic rule and regimes are authoritarian, they could be thought of as 'consolidated autocracy' – Madagascar being the example – and vice versa as 'consolidated democracy', with Botswana just missing entry in the upper right square. Graphically, the distance from the diagonal indicates to which degree

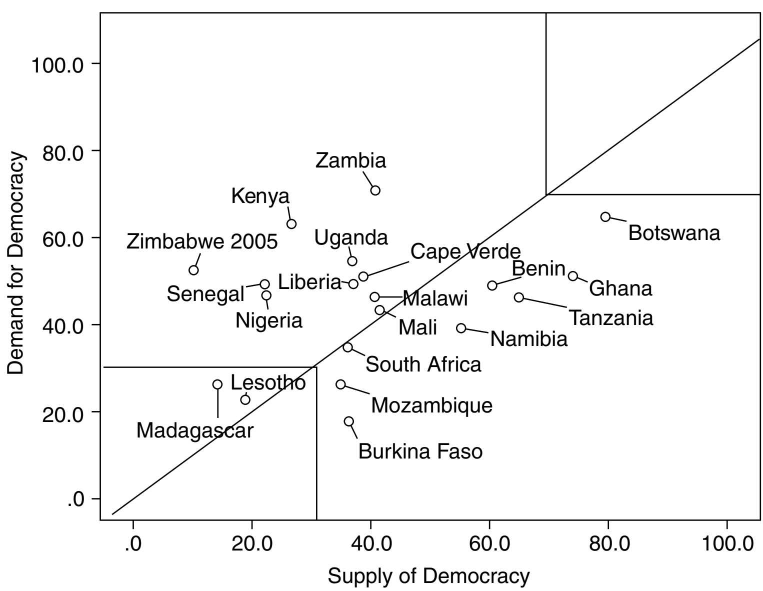

Figure 7.2 The Consolidation of Political Regimes, 19 African Countries (2008)

Source: Bratton and Mattes (2009). The permission from the authors and afrobarometer.org to replicate this graph is gratefully acknowledged.

regimes are consolidated. This can be illustrated by the extremes. In the case of Zimbabwe, low levels of political freedom contrast with high popular demand for democratic opening. In the case of Burkina Faso, although the 'supply' is pretty low, a large majority of citizens do not even seem to bother.

The authors find that demand for democracy on average does not exceed more than 50 per cent. Similarly the 'supply of democracy' situates the majority of African countries in the mid-field of electoral democracies or 'hybrid regimes'. The authors expose a trend in eleven countries where successive inquires were held between 1999 and 2005 that shows declining average rates in both citizens' valuation of democracy and the government's provision of freedom. This however is seen to turn around in 2008.

Hence, for the whole of Africa, one could describe recent political development, formally, after decolonisation and the euphoria with the national project in the 1960s as a successive restriction of political space and civil liberties in the 1970s and 1980s, which contributed to a comprehensive political and economic crisis that made way for political reforms at the beginning of the 1990s. More recently, the continent has been characterised by a flattening of progress and a popular disenchantment with the democratic promise. As a whole, Africa still is the least democratic region of the world, apart from the Middle East.

This very broad-brush overview, however, looks beyond the details at country level. Here, some positive news mixes with political stagnation and reversions to authoritarian rule. Some countries have found stable pathways (Botswana, Cape Verde, Benin), have experienced non-violent, electoral change of government (Sierra Leone, Ghana) or have engaged in deliberations on constitutional reform (Mali). Some countries have made progress in consolidating effective state structures without opening up for political contestation (Uganda, Rwanda), sometimes combined with serious human rights violations of political opposition (Ethiopia). On the negative side, a number of countries are still immersed in civil war, which in itself prevents entering into democratic reform paths (Sudan). New threats, such as Salafist movements from the Sahara to the Horn of Africa and new drug trading routes through West Africa (UNODC 2009), possibly menace state security, which might lead to democratic reversals. Oil is a serious impediment to establishing capable state institutions and minimal standards of democratic practice and very often generates a protracted culture of violence (Nigeria, Chad), often combined with human rights violations and outright vote rigging (Equatorial Guinea). The issue of third-term presidencies and military coups seems to prevail as a challenge, as recent events in Uganda, Niger and Algeria for the former and Mauritania and Guinea for the latter, notwithstanding the attempts of continental standard-setting through the African Union. It is yet to be determined if the recent experiences with power-sharing agreements (Kenya, Zimbabwe) will lead to any results; for now, these arrangements show poor results in any of the possible aspects, except the short-term settling of political violence (Mehler 2008).

7.3 Ethnic Fragmentation and Divided Legitimacy

In order to link the above debate on the interrelation between governance and development with the picture of democratisation in Africa and in order to break it down into more manageable details, the following section lists a number of factors which constitute building blocks or road blocks for more effective states and political opening in Africa. The main argument is that the above formal definitions of democratic rule and state effectiveness cannot be applied to the African context without considering the nature of its societal organisation, which is determined by informality, legal pluralism and ethnicity. According to Hyden (2006), African nation-building is challenged by the two tasks of horizontal integration and vertical penetration. While 'horizontal integration' refers to the capacity of the state and its rulers to bring representatives of all significant groups to get on board a national project and accept its institutions, 'vertical penetration' signifies the extent to which a state can reach out into society, both in the substantial sense to offer itself as the main player in certain issues (e.g. security, justice, services) as well as in the spatial sense to extend its reach into the whole of the state's territory.

Before discussing the domestic challenges of African governance, an important rejoinder should be mentioned. As outlined in the introduction, political development in Africa cannot be explained without examining the involvement of external actors as well. This had been dubbed the African extraversion. Apart from the above mentioned influence of aid and development finance on domestic accountability relations, the latest debates have focused on a number of outside factors of a quite different nature, among which the following stand out: (1) extractive industries, namely oil companies, and their behaviour in propping up elites and undermining public financial accountability (Youngs 2009); (2) the global financial system, in particular tax havens and the possibility of siphoning off funds by corrupt elites (Ndikumana and Boyce 2008); (3) military actors, be it as private security contractors or as official 'over-the-horizon security guarantees', a promise of military intervention if it becomes necessary by Western nations or the UN (Collier 2009); (4) non-traditional donors and new actors, such as China, but also the Arab donors, who display different approaches towards international cooperation and due to their own domestic governance attach less value to issues of democratic opening (Grimm et al. 2009; see also Grimm and He, Chapter 8, in this volume). As these issues are covered in other research projects, the focus here will be on the domestic or continental issues as mentioned above.

7.3.1 Political Actors and Ethnicity

This section focuses on political parties and members of parliament as actors in African politics and relates it to current debates about democracy and ethnicity. It thereby attempts to describe the challenges that African political actors face and the institutional answers they offer in their polities in terms of achieving 'horizontal integration', as mentioned above.

Political parties and parliaments were high on the research agenda immediately after the wave of decolonisation in the 1960s. Up to that time, political parties and national movements had often been confounded. The movement legacy, and its outward orientation towards decolonisation (Ghana, Mali) or liberation (Zimbabwe, Mozambique), has shaped how party systems function and often constrained political pluralism (Hyden 2006). Since the 1970s, in most African countries, political pluralism has been replaced by one-party rule where the state and the political movement organised in party-like structures were confounded. Only recently have political parties as independent actors re-emerged and the internal organisation and external regulation of political parties in Africa is again attracting interest as a consequence.

The delayed discovery of African political parties as a research object seems surprising, as parties are a main vehicle for the formation and articulation of a political will and are meant to formulate societal projects as a whole, as opposed to NGOs and other forms of civil society engagement, for example trade unions or business associations, that often campaign on a single issue basis. African parties in some countries have developed considerable strength and durability, examples being Ghana, Sierra Leone and Senegal as well as Kenya and Tanzania. In some countries, inner-party democracy has advanced, although determining its actual extent is challenging (Randall and Svasand 2002; Lindberg 2006; Erdmann and Basedau 2008).

A main topic for the impact of political parties on state effectiveness and development outcomes is the ways in which they are financed. Political financing is under-regulated in Africa. This constitutes a direct menace to internal democratic procedures within parties. Even more important, the link between party finance and political corruption appears to be one of the main arguments for why the turn from patronage-based to rule-based governance does not occur (Salih et al. 2007; Hamdok 2005; Barkan 2005).

It is widely argued that ethnically coded parties might contribute to political violence and put up barriers for the development of a national concept of citizenship and a political integration of the central state (Berman et al. 2004; Basedau and Stroh 2009). It is however impossible to characterise the whole range of African political parties this way and external observers are often too ready to accept culturalist interpretations. In francophone countries, for instance, ethnically coded mobilisation is less significant (Basedau and Stroh 2009). Countries that have experimented with African socialism may also be less inclined towards ethnicisation (Dickovick 2008). Other countries have constitutionally engineered safeguards against ethnically coded political mobilisation, the outstanding example being Nigeria, which requests candidates to have a regional distribution of votes. However, there are clear examples where ethnic mobilisation along party lines does affect the quality of governance and lead to political violence, one of the main examples being Kenya (Basedau and Stroh 2008).

As with political parties, the workings of African parliaments have only attracted increased interest from scholars and donors in the last decade. And strengthening them has been a minor consideration among donors, which can be explained by the de facto marginal role of parliaments and elected representatives in overseeing the political process. In recent years, however, parliaments have gained more influence in some countries, though executive dominance prevails. Donor attention has largely focused on the working of parliamentary accounts committees, as these committees are engaged in overall public financial management.

Donors have long focused nearly exclusively on civil society actors, neglecting political parties. Often donor funding resulted in an artificial mushrooming of NGOs, most often geared exclusively towards service provision. However, a number of human rights NGOs were only able to do their work with external support. Historically, political parties made little effort to open up to other civil society actors, which was often reinforced by the confusion of the ruling party with the government and the marginalisation of the opposition. Lately, with the generation of greater capacities and professionalisation of some parties and the – very seldom, but ever more likely – fact that elections change the parties in power, parties open up to civil society movements in order to form coalitions on specific issues or to hold office holders to account in a more general manner.

There are a number of other critical issues for democratic consolidation related to political parties in Africa. The role of members of parliament (MPs) differs formally according to each parliamentary system, the type of electoral system and according to the political culture of each country. In systems with direct representation, the lacking spatial consolidation of African polities and the political economy of provincial power bases provide a role for MPs as regional representatives in variations either as local power brokers or as representatives of the central government (Ray 1996; Crawford 2009; Boone 2007). In fact, for most Africans the direct interaction with their member of parliament from their constituency is where they see the prime role, rather than in legislation or oversight. Whether parliaments expand their powers over the executive and advocate for different practices or legal amendments depends on progressive reform coalitions that often cross party lines (Barkan 2005; Salih 2007).

In both parties and parliaments, accountability is potentially hampered when ethnicity prevails over an equitable sense of citizenship. Scholars fond of modernisation theory used to claim that where ethnic mobilisation persists, the transition from big man politics and clientelism to interest-based mobilisation is likely to get stuck and 'pre-modern' affiliations will infest formally democratic procedures. In more recent debates, scholars have attempted to find ways in which ethnicity could possibly turn into a factor that rather reinforces than undermines democratic accountability and the performance of public representatives (Kelsall 2008). In this case, informal accountability relations embedded in community, kinship and ethnicity would work to reinforce formal democratic structures, rather than creating a subversive underground that leave the institutions as hollow shells.

7.3.2 National-Local Linkages and Legal Pluralism

A number of issues stand out in the patterns of current political organisation in Africa. While striving for enhancing constitutionalism within Africa and limiting the informal nature of politics, the main challenge of the central state is to establish legitimate rule over the whole of the territory, which is currently shaped by processes of decentralisation and by the interaction of formal governance systems with structures of so-called traditional rule. Hence, the following section deals with the above-mentioned challenge of vertical penetration. Pursuing decentralisation may be a way of strengthening the state, and finding ways to resolve contradictions between formal governance systems and structures of traditional rule may provide another way, yet these forces also carry the potential to weaken the state.

The rule of law is perceived as a prerequisite for both socio-economic development and the existence of a democratic regime. Constitutionalism and judicial reform in Africa is therefore critical, just as it is lacking in those countries that further drift into situations of fragility. Oversight of the executive by constitutional courts and disputes between the executive and the judiciary were rare features in African polities in the first three decades after independence. Today, observing the existence of the rule of law in Africa presents a mixed picture, although in all countries the action of the executive remains largely unconstrained.

One way to limit central executive power and at the same time ensure an increased outreach of the state beyond the capital is decentralisation and federalism. Together with the wave of democratisation a wave of decentralisation has swept over the African continent. While a lot of these programmes have been driven by donors who implemented blueprint approaches to a number of countries, there are some examples where democratisation processes immediately went along with a devolution of power to sub-national entities, such as in Mali (Sy 2009). On the one hand, there are valid arguments for federal models and decentralised governance, namely the fact that power is brought closer to the people and that decentralised governance structures allow for accommodating ethnic conflict. However, opting for decentralisation produces three main challenges. First, capacity constraints are at the core of African development everywhere, and decentralisation multiplies the service structures that are meant to meet African peoples' needs. From a perspective geared towards states' administrative capacity, central services would come first in a smart sequencing of public administration reform, and a too rapid mushrooming of decentralised delivery structures could possibly lead to entrenched capacity shortages (Schneider 2003; Conyers 2007). Second, the devolution of political power is likely to replicate patronage politics at sub-national level, at a stage where multiple oversight mechanisms at the national level increasingly constrain purely clientelist politics (Platteau and Abraham 2002; Crawford 2009). Third, although African states are often portrayed as ill-conceived political entities due to their colonial genesis, many African states embarked on successful development trajectories by formulating a *national* project (Ghana, Uganda, Mali), while others that failed to do so did not manage to formulate inclusive notions of citizenship within their territories (Nigeria, Democratic Republic of Congo). Decentralisation in states with poorly consolidated citizenship identity is likely to counteract nation-building (Fritz and Rocha-Menocal 2007; Boone 2007).

Hence, the claim that decentralisation will bring the power closer to the people needs to be specified according to the respective country's condition. This becomes particularly relevant when contextualised by the African reality of 'traditional authority'. In most African countries national citizenship is largely irrelevant and statehood does not play any substantial role in the daily life of its citizens. On the contrary, most socio-economic issues, namely access to land, marriage regulation and conflict resolution are dealt with by local informal structures, such as the chieftaincy institution, that are – rather unfortunately – dubbed as 'traditional authorities' (see Ray 1996 for a description of the workings of the state–chieftaincy relationship in Ghana).

The debate about the role of traditional local leaders and their impact on deepening democratic practice has recently moved out of the stalemate between traditionalists who see them as a genuine expression of African direct democracy and modernists who deem an abolition of these institutions as paramount to enter in rule-based governance (UNECA 2007). It is true that the 'reification' of the chieftaincy during the colonial period led to decentralised despotism (Mamdani 1996) and local authorities have played the role as local power-brokers for undemocratic regime stabilisation. This leads to the paradoxical role of paramount chiefs as state agents commissioned to exercise 'traditional' authority.

There are a number of documented examples that illustrate the prevalence of the local over the national project. As Boone (2007) documents, in Côte d'Ivoire, the liberal opening of the late 1980s contravened the project of national integration and has strengthened sub-national power centres. Ethnically ordered local power structures, which were functional in the developmentalist model of the state from the 1960s to the 1980s, have established a competing locus of authority enforcing political control within communities and reordering rural property rights.

In Sierra Leone, aid programmes conceived in the late 1990s informed by the academics who claimed they were at the core of an exclusionary societal model based on a caste-like exploitation of youths tried to circumvent and weaken the chieftaincy (Richards 1995, 2005; Archibald and Richards 2002). Analysing the politics of local citizenship and customary rule in Sierra Leone, Fanthorpe (2001, 2005) critiques the view that the Sierra Leonean institution of chieftaincy is a straightforward mechanism of repression and youth exploitation. At the same time, Fanthorpe acknowledges the inherent injustice and the discriminatory effects of the traditional authorities, but insists that it is the one institution that provides access to services, namely to justice, and increasingly represents a space for requesting greater accountability, in the de facto absence of the central state (Fanthorpe 2001, 2005).

The legal pluralism between state institutions and customary law is especially relevant to the issue of land access for the poor. Based on a study of Ghana and Côte d'Ivoire, Crook et al. (2007) call for a state-led supervision of customary institutions while acknowledging that 'traditional' institutions are flexible, socially embedded and accessible, cautioning that they nevertheless carry dangers in the abuse of power. In some instances, traditional authorities are also linked directly to national politics. The main solution to ensure access to land for the poor seems to be the formal state system of justice, which is however frequently institutionally too weak to ensure an outreach to all citizens (Crook 2005; Crook et al. 2007).

While there is ample critique about the lack of accountability in customary institutions, local relations to communities that are largely structured around 'traditional' – in fact constantly reinvented – chieftaincy structures are potentially an important source of pre-political articulation of interest and decentralised oversight. The vast functions of traditional authorities, which comprise political, judicial and executive functions, most visible in issues of land use, petty crime and marriage, make it necessary to be more explicit about their role and their relation to the respective formal systems. In any case, local actors have to be able to demonstrate how they can fulfil overarching democratic principles of accountability and inclusiveness, though their institutions might not have to be fully integrated into the state's formal system. This applies particularly to gender equity (UNECA 2007; Boone 2003, 2007).

There is no binding link between traditional rule and decentralisation of state power. Decentralisation might lead to an increase of state outreach to peripheral areas and subject unaccountable local rule to centrally agreed standards. At the same time, decentralisation might mean that local power structures replicate their political dominance by capturing decentralised offices. In any case, many decentralisation processes have required a negotiation process between the realms of authority of the formal state and the actual arrangement of traditional institutions (Crawford 2009; Fanthorpe 2005). What remains clear is that principles of legal pluralism are not easily understood by Western actors and much more effort is needed to understand the potential and limitations of local traditional governance systems and identify modes of linking to these 'traditional institutions.'

7.3.3 How ethnicity and legal pluralism affect state effectiveness and democracy

The default position of the majority of political reformers in Africa has for a long time been to assume that ethnicity and 'traditional' authority are pre-modern features, which will die off with the successive establishment of formal bureaucratic structures and democratic practices. Current critical analysis contests both of these claims and insists that practices of ethnic ascriptions – the construction of ethnic identities – and the institutions of chieftaincy and other local authorities are both modern phenomena and will endure.

Current research on African politics therefore attempts to 'go with the grain' and focus rather on questions of how to turn these institutions into forces for greater state effectiveness and democratic accountability (Kelsall 2008). Increasingly, institutional arrangements and constitutional designs are sought that include ethnicity and traditional rulers in a way which transcends their current role, by preserving their closeness to the people and overcoming their democratic shortcomings at the same time. Today, the debate centres on identifying the potential substance that the aspects of ethnicity and customary law could bring into the functioning of just, equitable and effective political systems, given that they are the main forces that socialise citizens into their immediate local surroundings and a battleground for social mobilisation (Berman et al. 2004; UNECA 2007; Booth 2009).

7.4 Main Uncertainties

The identification of the key uncertainties that complicate efforts to determine how political development will unfold across the African continent in the future follows from the discussion of central underlying forces for change outlined above. There are three key uncertainties. One concerns the nature of the demand for political change expressed by central political actors (parties and parliaments), and specifically their dealing with the issues of ethnicity. The second concerns the outcome of efforts to reconcile centralised and local governance structures. A final uncertainty relates to the extent to which regional institutions will provide an impulse for changes in governance at the national level.

As for the first two dimensions, in many African countries statehood, both in its dimensions of effectiveness and legitimacy, remains largely formal without getting substantial at the local level, in the sense that control over territory is merely exercised by the state and the population is left to different modes of sub-national citizenship schemes and informal governance. Ethnicity and customary rule provide the key references for citizens. It seems necessary to inquire in what way these factors could possibly gain or lose relevance within the political system of African states. It is pivotal to describe how these pre-institutional social orders interact with institutions of the modern state such as political parties, parliaments and decentralisation processes in order to determine how state effectiveness and democratic governance will develop in the future. The following section will inquire into possible pathways.

The third uncertainty is linked to this. A key open question concerning the future of political development on the continent relates to the new African regionalism. The transformation of the Organization of African States (OAS) into the African Union (AU) has widely been lauded as a transition from non-intervention to non-indifference (Williams 2007). It has been the explicit goal of the AU to promote peace, security and stability on the continent and to promote democratic principles and institutions, popular participation and good governance. The recent shift in leadership from Konaré to Ping has somewhat brought into question if the value of sovereignty has risen again, in contrast to spreading universal principles of accountable governance. Integrating Africa under a common value base was championed under the leadership of the then presidents of Algeria, Nigeria, Senegal and South Africa into the New Partnership for Africa's Development (NEPAD) initiative in 2002, whose offspring, the African Peer Review Mechanism (APRM), generated enormous expectations for an indigenous solution to governance issues. Now, its impetus seems to be lost somewhat due to the delays in implementation and the too ample nature of the resulting action plans (Fombad 2006; Grudz 2009).

Outside of these processes, the AU architecture is starting to consolidate, responses to security threats as well as joint declarations on governance issues are becoming more coordinated, and means are increasingly allocated to act jointly, albeit slowly. The jury is out if regional attempts of standard setting, as entailed in the 'African Charter for Election, Democracy and Governance', for example, will be able to unlock potential in restricting the executive and empowering domestic pro-democracy actors. The same applies for the APRM. Similarly, sub-regional communities, although formally geared towards economic integration, have instituted some mechanisms of political integration and standard-setting, which show only moderate successes in fostering democratic practices. Out of these ECOWAS and SADC seem to be the most effective with the greatest power to reach binding conclusions.

There is a call for rapid integration into the United States of Africa. This is complemented by efforts to devolve political decision making in countries to sub-national levels. It is to be debated whether the development of a genuine political culture can leapfrog the development of national citizenship identities and national political projects. Devolving powers to regional institutions and democratising supra-national entities requires the development of deepened democratic practice at national level either as a precondition or as a simultaneous process, if mutual cross-infection with democratic culture is to be achieved. On the other hand, the norm-setting character of the AU, most prominently through the APRM could impact on the ways in which ethnicity and traditional authorities are integrated into functioning national polities.

7.5 Possible Future Pathways for Political Development in Africa

As indicated above, the main challenge for the African state in the future is how to manage a dual objective of increasing horizontal integration and vertical penetration (see Hyden 2006). In other words, political settlements have to be worked out between the citizens and the state institutions that are capable of capturing the fractionalisation of African societies and competing legitimacies at the local level. States will have to convince citizens and the elites to gather around a national project and institutions accepted by all (horizontal integration). At the same time, states have to expand their control over territory, offering themselves as 'the only game in town' by both providing the services needed for the security and welfare of the people and gaining the acceptance of the citizens (vertical penetration). This ongoing fundamental project, in which authorities and citizens provide sense to the constitutional settings in which they interact, can empirically crystallise in any kind of political arena, be it decentralisation, electoral reform, access to services, governance of the justice, provision of security or others.

The above discussion on the challenges for the African state – namely in its dimension of state capacity and democratic openness – and the description of the nature of the African state – namely the elements of ethnicity and legal pluralism – can now be summed up with an tentative outlook to the future. Three key generalised trajectories of political transformation are imaginable.

1. Ethnicity and legal pluralism *coexist* with formal state structures and have little impact on democratisation and state effectiveness. In this case the citizenship concept remains hollow, as it is divided between a formally democratic but substantially meaningless national level and a highly socially segregated local level where gender inequality and ethnicity-based exclusion persist. At this level, the major means of production – labour and land – are controlled by local elites. Ethnicity exists as a source of identity, but is neither used to mobilise against the state and its related institutions such as parties or parliaments, nor does it generate new mechanisms of accountability, which could reinforce formal accountability systems.

2. Ethnicity and legal pluralism *enter into competition* with formal state structures, prevent democratic opening and erode state effectiveness. Ethnically coded social mobilisation erodes the state apparatus, often related to political violence. Local power structures link up with the ethnic cause and enable themselves to greater uncontrolled command over people and land in the name of the ethnic group. As the states retreat they are increasingly taking over the functions of service provision and application of justice.
3. Ethnicity and legal pluralism are *increasingly linked* with formal state structures and provide the pre-political substance to enhance democratic governance and contribute to enhancing state effectiveness: Constitutional mechanisms and institutional designs are invented that divide the tasks of formal administration and local authorities, capture ethnic identities as sources of meaning for new accountability mechanisms and link ethnicity and local authorities to the formal state system, its bureaucracy and political representation.

As emphasised above, because African states have different starting points, the future of political transformation will undoubtedly vary across the continent. It is nevertheless possible to speculate on some general prospects for political change within different sub-regions.

- In the Greater Horn of Africa, democratic opening may not even be on the agenda for the next 20 years. Some progress has recently been made in developing state effectiveness, which also includes its repressive capacities, but outreach to peripheral areas remains limited. Customary authorities remain in control of local issues and are largely unaccountable to citizens (Weber 2008; ICG 2009). Ethnicity is abused as an amalgamating ideology for the majority community, but this may lead to the increasing exclusion of certain minorities.
- In Central Africa, state capacity remains weak and democratic governance hollow. The outreach of the state to its territory is limited and unaccountable local authorities largely replace its roles. Ethnicity could turn out to become an increasingly mobilising concept, which could lead to violence und thus debilitate both the administrative capacities as well as the access of citizens to rights and participation.
- In East Africa, local authorities are increasingly being integrated into state structures. However, ethnicity also turns out to be a main centrifugal force, which disintegrates both the political legitimacy of the system as well as the ability of administrative structures to evolve towards better effectiveness. Political parties will polarise amongst ethnic lines and decentralisation could become a major point of disagreement on redistribution of funds and authority.

- Southern Africa has maybe the greatest chances to integrate ethnicity and customary rule in formal state structures and generate a meaningful pre-political input for the creation of a nationwide public and a shared sense of the public realm.
- In West Africa, a variety of patterns of political development are likely to persist. Local authorities and customary rule remains very powerful in all countries, and only some countries find constitutional arrangements and institutional solutions to link formal and neo-traditional structures in order to ensure accountability. In some of these countries, however, innovative roles for multilayer citizenship create new forms of deliberations and checks and balances of office holders. Ethnicity might contribute to enhance these accountability mechanisms. In other countries, however, local authority remains largely authoritarian, reproduces local inequalities and cannot be challenged by the poor. Lack of state effectiveness might lead to reinforced ethnic mobilization, which again creates a vicious cycle of eroding statehood.
- North Africa will remain resistant to democratic opening, whilst state effectiveness will increase. Local authorities continue to lose influence and are aligned with centrally imposed political guidance.

7.6 Conclusion

There is no such thing as *the* African state. The great variety of trajectories described above makes it difficult to predict a common pattern of development for the next twenty years. However, given the task to develop capable state administration and open political processes, all African polities face the challenge of dealing with the substantial characteristics of their societies amongst which this chapter highlighted the issues of ethnicity and legal pluralism at local level. Political transformation, which would lead to more accountable and inclusive modes of governance, has to tackle the challenge of devising political institutions specific to that context, such as political parties, parliaments and federal structures. These are to be able to agglomerate the pre-political realms of the affiliation to kinship and community and the competing local legitimacies and offer interfaces for feeding the deliberations and legitimacies organised in these spheres into the general public sphere and the political institutions that rest on it.

Note

1. On the differences between various types of colonial rule see Pakenham (1991); on the impact of colonial rule on postcolonial governance and its consequences see Mamdani 1996, Aké (1996) and Boone (2003); on African political systems see Hyden (2006), on the impact of African Socialism on ethnic political mobilisation see Dickovick (2008); on liberation movements and their impact on democratisation see Salih (2007).

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8

Emerging Partners and Their Impact on African Development

Sven Grimm and He Wenping

After a slump in attention in the 1990s, Africa is now back on the international agenda. An important reason for the renewed interest in the 'troubled continent' is that it is increasingly sought after as a partner to other developing regions, as it is a major source of raw materials and a potential growth market for goods produced in newly industrialising countries. The economic and political rise of China and India (dubbed 'the Asian drivers' of global change) in particular has contributed to resurgent Western attention in Africa's natural resource wealth. Apart from China and India, other middle-income countries that have emphasised integration into the world economy as an important element in their own economic development strategies (South Africa, Brazil, Malaysia, or South Korea) are also contributing to changing the context in which African development takes place. In this chapter, these states are described as 'non-DAC (Development Assistance Committee) donors'.[1] Despite the global economic downturn, these economies are likely to continue to be important drivers of global demand, and thereby global prices for commodities. However, this is only one dimension of how these actors are transforming the development landscape.

Economic interests often accompany renewed efforts in aid provision in establishing comprehensive 'partnerships' with African countries. One of the characteristics of non-DAC donors is that their 'aid' is not simply understood as a separate and autonomous policy instrument, but is regarded as part of the mix of instruments applied in cooperation that is meant to create 'win-win-situations'. In other words, aid is not necessarily purely altruistic, but part of the broader foreign and economic policy of the respective country, and thus explicitly driven also by (enlightened, long-term) self-interests. This also holds true for 'traditional' DAC donors to varying degrees. Furthermore, the emerging countries are increasingly evoked as a point of reference for developing countries, as model cases that can and should be copied. This represents an indirect effect on African development, but one that should not be underestimated. The argument goes that key lessons from the economic success of emerging countries contradict many of the development prescriptions associated with the influential 'Washington consensus' reform agenda. In other words, it is precisely not a lean state and neo-liberal economic orientation that leads to development. The Asian influence on discussions of how African 'developmental states' (that may not necessarily be democratic) will shape development processes provides one indication of the potential impact of non-DAC donors on the political development of Africa, apart from their economic impact (cf. Fritz and Rocha Menocal 2007).

This chapter examines 'emerging countries' as a driving force in African economic and political development. In order to structure the text, the emerging partners will be divided into three groups: (i) the Asian drivers, (ii) Arab donors and (iii) emerging states within Africa (South Africa and Nigeria). Even though the authors are aware of their potential impact, this chapter will not look into emerging non-state actors such as the increasing activities of philanthropic foundations or specialised funds in order to keep the number of aspects examined manageable.

The chapter will unfold as follows: it first maps out the present picture of non-DAC engagement in Africa. In a second step, it seeks to identify the underlying forces shaping the nature of current non-DAC donor engagement in Africa. Only if we know the drivers can we consider the direction engagement might take. A third section turns to the main uncertainties in the relationship between non-DAC donors and African development, attempting to highlight key future 'unknowns'. Based on these assessments, the chapter then seeks to identify possible trajectories for future developments. They will be presented in three alternative storylines that will describe how the future might plausibly unfold with regard to non-DAC donors' engagement in Africa.

8.1 Emerging Actors in Africa Today

To understand where we might be heading, we first have to assess where we are at the moment. Globally, the picture of aid providers has changed over the last decade or so: there are donor states and recipient states of aid, and an increasing number of states that are both donors *and* recipients. In 2008, around $100 billion of Official Development Assistance (ODA) was provided by 'traditional donors', i.e. donors loosely coordinated in the OECD's Development Assistance Committee (DAC). Non-DAC development partners combined accounted for between $10 to $12 billion. In the 1990s, the share of development assistance by DAC donors had been estimated to account for around 95 per cent of global aid. In 2006, the share of non-DAC donors was estimated to have shifted more towards 10 per cent, thus having effectively doubled over a decade (UN ECOSOC 2008: 10). Figures have to be taken with a pinch of salt as the accounting standards on ODA only apply to DAC donors. Despite large variations in estimates about the absolute levels of aid by 'new donors', two things can be stated: (1) they are still considerably lower than those of 'traditional donors'. And (2) what is interesting about the funds is their growth rates over the last years and the 'nature and symbolic importance of these flows' (Grimm et al. 2009: 17).

Among a broad array of states in the non-DAC donor category – which includes Brazil, Chile, South Africa and Thailand – China and India in particular stick out due to their potential to become world powers and occupy a category of their own. Apart from these heavyweights, some non-DAC donors such as the Arab donors are not new to giving aid, but are coming into the picture again with changes in the aid agenda, namely the growing prominence of security issues. And finally, within Africa, there are some states with the potential to assist neighbouring countries in their development endeavours, namely South Africa (already active) and potentially Nigeria, both key regional players due to the relative size of their economies and their political weight. We shall turn to how each of these three categories of actors is currently engaging in Africa in more detail now before turning to questions about their possible future impact.

8.1.1 Emerging world powers: China and India in Africa

As two emerging powers experiencing rapid economic growth and taking an increasing interest in Africa, China and India have not only inspired comparative studies on the development patterns of the 'Chinese dragon' and the 'Indian elephant' and on their impact on Africa's development, but have also drawn great concern from the traditional donors in Africa such as European donors and the United States.[2] Compared with the DAC donors, the two Asian giants have taken different approaches in making inroads into Africa. And there are also both similarities and differences between these donors with respect to their development cooperation with Africa. Due to the nature of its political system, concepts of values, and relatively high-profile activities in Africa, as well as the more comprehensive nature (in financial and geographical terms) of its engagement, China, rather than India, has drawn tremendous attention from all over the world in recent years. There is still no unanimous view about the new donor's role in Africa's development or in global development cooperation more broadly.

8.1.1.1 China in Africa

Africa has been high on China's diplomatic agenda in recent years. Along with the release of the first White Paper on China's Africa Policy in January 2006 and the first China-Africa Summit of the Forum for China-Africa Cooperation (FOCAC) in early November 2006, which brought more than 40 African heads of state to Beijing, the high-profile activities of China in Africa have included a number of high-level official visits to Africa by President Hu Jintao, Premier Wen Jiabao other cabinet members and the members of the Political Bureau. Trade between China and Africa has soared in the last decade, reaching a record high of $106.8 billion in 2008 from a mere $10.5 billion in 2000, leading China to become one of Africa's most important trading partners after the United States and ahead of most individual EU countries (ACET 2009).

The driving force behind China's Africa policy is not as simple as mere resource-driven practicalities as some Western media have described: it is closely related to China's national characteristics and overall diplomatic strategic pursuits. To put it another way, as Chinese scholars have often argued, developing the Sino-Africa relationship is inseparable from the 'three necessities' of China's diplomacy. That is, developing Sino-Africa relations is conducive to the promotion of China's international position, serves as an important support for China to develop relations with major world powers and is necessary in order to establish new South-South cooperative relations with other developing countries. It is considered necessary to achieve the sustainable development of the Chinese economy, and to oppose 'Taiwanese secessionism' and achieve the reunification of China. These 'three necessities' are three levels of interests that China wants to pursue in Africa (He 2008a).

With increasing national comprehensive power especially via the mature mega state-owned enterprises inspired by the 'going-out strategy' put forward by the Chinese government in the late 1990s, China's trade and investment as well as development assistance in Africa have increased dramatically in recent decades.[3] China's development assistance has played a significant role in strengthening Sino-African ties as a whole.

Started in 1956, China's engagement in African development can be divided into two periods if 'the reform and opening-up' policy started from late 1970s is taken as a line of demarcation. The driving force of China's aid policy has also been transformed from politics to economics, from proletarian internationalism to mutual development (He 2010; Ai 1999; Hyden and Mukundala 1999). From 1956 to the late 1970s, driven by idealism and strengthening political and diplomatic ties with African countries, China issued eight principles governing China's aid to foreign countries, which emphasised internationalism and altruism, and huge aid projects such as the TaZaRa (Tanzania-Zambia Railway) actually went beyond China's financial capability to some extent. From the late 1970s up to now, driven by pragmatism and seeking mutual economic cooperation and common development, the content and the means of China's aid to Africa has become more complex and diversified. Unlike OECD DAC countries, there is no clear definition about 'aid' in China's economic relations with Africa.[4] Contracting projects, technical cooperation, debt write-off, human resources training, medical teams and youth volunteers dispatching, emergency humanitarian aid and multilateral aid are all considered part of the aid package (Box 8.1).

Box 8.1 The Eight Principles Governing China's Foreign Aid

1. The Chinese government provides assistance according to the principles of equality and mutual benefit
2. The Chinese government strictly respects the sovereignty of recipient countries, no strings attached
3. The Chinese government provides economic aid via interest-free or low-interest loans; the time limit of repayment can be delayed when needed
4. The purpose of providing foreign aid is not to make recipient countries dependent on China, but to help recipient countries gradually develop on the track of self-reliance and independent economic development
5. The Chinese government does its best to produce quick effects through small investments in order to allow recipient countries to increase income and accumulate capital
6. The Chinese government provides the best quality equipment and material of its own manufacture at international market prices. If the material and equipment provided are not up to the agreed specifications and quality, the government undertakes to replace them
7. While providing technical assistance, the Chinese government promises to teach recipients to fully master this kind of technology;
8. The experts who are dispatched by the Chinese government to help recipient countries carrying out construction should be paid the same as experts in recipient countries. They are required to not have any special requirement or enjoy any special amenities.

Source: Chen (1999: 242–243).

There is no aggregate annual figure on aid to Africa released by the Chinese government, due to indistinct concept definition, the difficulty of collecting statistics, the lack of an independent aid agency, and perhaps an unwillingness to disclose the figure due to the still relatively quite low amount of aid compared to leading Western development agencies, among other factors. And since the exact level of Chinese expenditure on foreign aid is hard to calculate, the estimates of the size of the Chinese aid annual budget vary considerably from about $1 to $2 billion and even as high as $25 billion (Grimm et al. 2009).

There is also a general figure released by the Chinese government. When Premier Wen Jiabao visited Africa in June 2006, he publicly gave a lump-sum figure, saying that over the past 50 years, China's foreign aid to Africa amounted to RMB 44.4 billion yuan ($ 5.69 billion), accounting for some 30 per cent of the total amount of China's foreign aid. With the aid, China has helped to finish over 800 projects, including textile factories, hydropower stations, stadiums, hospitals and schools, most of them infrastructure projects (He 2008a). Some investments were made repeatedly in the same projects, i.e. including building hospitals or other infrastructure and later refurbishing them (Brautigam 2010). In terms of projects completed and handed over, Ethiopia, Sudan, Tanzania, Zambia, Mali, Egypt and Algeria have been among the top recipient countries on the continent, which shows that Chinese development assistance has been directed to all kinds of African countries, from big to small, from resource-rich to resource-poor and from relatively high-income to low-income countries. At the China-Africa Summit in 2006, China announced an eight-point aid package and promised that it would double the 2006 level of assistance to Africa by 2009: this goal has been met. In the 4th FOCAC meeting in Sharm el-Sheikh, Egypt, in early November 2009, a new package of eight development assistance initiatives was put forward by the Chinese government including building 100 clean energy projects, setting up a special loan of $1 billion for small- and medium-sized African businesses and further opening up China's market to African products (Wen 2009).

Regarding itself as a developing country as well as a country that has suffered from colonialism and imperialism similar to African countries, China does not call itself as 'donor' rather regarding its aid to other developing countries including Africa as a kind of mutual assistance among friends that falls into the category of South-South cooperation. Finally, there are a number of major characteristics of China's development cooperation with Africa that differ from Western approaches, as aid is considered to be provided with no strings attached, there is an emphasis on bilateral aid projects rather than on multilateral initiatives and there is a preference for 'hardware projects' such as physical infrastructure construction over 'software projects' like research and capacity building, to name some examples.[5]

8.1.1.2 India in Africa

Compared with China's large and growing presence in Africa, India has kept a lower profile. In April 2008, India held its first India-Africa Summit in New Delhi, which was billed as 'India's most important diplomatic event in 2008' (Vaswani 2008). The summit focused on chairs of regional organisations and key countries and was attended by 14 African heads of states including from South Africa, Algeria, Uganda, Ghana and Tanzania. Similar to the China-Africa Summit, the India-Africa Summit produced two documents that will pave the way for the future development of India-Africa relations: the New Delhi Declaration and the Framework Agreement on India-Africa Cooperation. During the summit, India promised to increase its credit lines to the African countries to $5 billion, up from $2.15 billion in the five years from 2003 to 2008. It also announced the offer of preferential market access for 34 African countries in the next 5–6 years (Bajpaee 2008; Vaswani 2008).

Similar to China, since India's economy has grown at an amazing 8 per cent per year in the last decade, it has also been facing a shortage of natural resources, especially oil for maintaining its energy supply. India is now the fifth largest energy-consuming country in the world, but its own proven oil reserves account for less than 0.5 per cent of the world total. And it is expected that India, just after the United States and China, will be the third largest energy-consuming country in the world in the year 2030. Energy can thus be expected to be at the forefront of India's strategy in Africa. Presently approximately 70 per cent of India's oil supply is imported. And India's oil giant, the Oil and Natural Gas Corporation (ONGC), has been quite active in Africa, especially in Sudan, Angola and Nigeria. Apart from resource interests, India's engagement in Africa also focuses on exploring markets in other sectors such as agriculture, infrastructure, health, education, science and technology and manufacturing industries. For example, in East African countries such as in Kenya and Uganda, the southern Indian state of Andhra Pradesh has signed preliminary land deals with the two countries and Indian farmers should soon work as entrepreneurs and landowners for improving the agricultural technology and productivity for the host countries (Africa Business Pages n.d.).

Apart from energy and market interests in Africa, and linked to the rapid growth of its international leverage, India has gradually been building its ambitious political goal of 're-branding' its international role. India needs Africa's diplomatic and political support for a number of international issues in the global arena. This includes not only African support for its candidacy for a permanent UN Security Council seat, but also in agriculture talks within the WTO Doha Round of negotiations as well as aspirations to be the representative of the non-aligned movement or even a leader of the developing world. Furthermore, one of India's foreign policy priorities in the twenty-first century is to push the reform process of the institutions of global governance, including in the international financial institutions like the International Monetary Fund (IMF) and the World Bank. Thus, India has looked especially toward South Africa, creating a forum of large developing countries with Brazil, the India-Brazil-South Africa (IBSA) bloc (Haté 2008).

To many observers, the 'China factor' is undoubtedly one of the important driving elements for India's increasing emphasis on Africa. On the one hand, in many respects, India feels that it is lagging far behind China in Africa. For example, even though India-Africa trade has grown rapidly in the last 5 years from \$3.39 billion in 2000 to \$30 billion in 2007, it still remains only half of Sino-African trade (Haté 2008). And India feels uneasy with the growing Chinese presence on the African rim of the Indian Ocean, which it has regarded as part of India's strategic backyard. On the other hand, India also feels that it enjoys some competitive advantages compared with China in Africa, such as its considerable diaspora (there are approximately 2 million people of the Indian diaspora in the Anglophone countries in eastern and Southern Africa), the historical heritage laid down by India's nation-father Mahatma Gandhi when he spent time working against apartheid in South Africa, its reputation as 'the largest democratic country' in the world, its relatively cordial relations with the West as well as its better-suited language skills in Africa – as English is India's official language.

Indian and Chinese strategies in Africa have both common and distinctive policy features. Even though it is described as 'the largest democratic country' in the world, India does not actively promote democracy abroad: it also promotes the principles of 'no strings attached' and 'non-interference' like China in its development cooperation with Africa. And the two Asian giants both attach special importance to Africa's resources and markets for their energy security and sustainable economic development in the future. However, there are at least two main differences among the two countries. First, given the strong role of India's private enterprises in its economy, its private companies are also significant players in its relations with Africa. For example, the Tata Group of India entered into the market of Africa (in Zambia) as early as 1977. Tata Africa Holdings, a subsidiary of the Tata Group, is vying for a controlling stake in South Africa's second telephone network operator worth more than ZAR 4 billion (i.e., around \$540 million). And the Indian pharmaceutical company Cipla provides HIV/AIDS drugs to 1 in 3 patients in Africa (Mahajan-Bansal and Sari 2009; Haté 2008; African Business Pages n.d.).

Second, unlike China's prioritisation of infrastructure construction, India's development assistance focuses more on economic technical cooperation with Africa in fields such as telecommunications, health and education, and the promotion of food security. Early in 2002, the Indian government initiated a development plan called the 'Focus Africa Programme' with a view to further enhance India's trade with Africa. In the form of Market Development Assistance under this programme, the Government of India provides financial assistance to various trade promotion organisations, export promotion councils and apex chambers. In 2004, India launched an initiative called the Techno-Economic Approach for Africa-India Movement (TEAM-9), comprising credit lines worth \$500 million to eight West African countries. In the same year, the Indian government launched another important programme called the Pan-African Network. By investing \$1 billion to improve long-distance medical checks and educational development, the programme plans to connect companies and institutions in 53 African countries through satellites and the internet to companies and institutions in India. Furthermore, India is also investing a huge amount of money in capacity building of the local self-government and the supply systems in African states. During the India-Africa Summit in April 2008, India promised to provide over \$500 million to support programmes in agriculture, education and telecommunication development in Africa (Express News Service 2004; Telecommunications Consultants India Limited n.d.; Bajpaee 2008).

8.1.2 Not new, but not 'Western': Arab donors

A second set of actors has been around for a long time without stirring much attention: Arab states and multilateral Arab institutions. The funds and states were particularly active in the 1970s and early 1980s, but have apparently lost much of their strength over the 1990s. This does not necessarily mean that their influence has been marginal. Arab donors have been active in international cooperation since the 1960s or 1970s. Some states, especially Saudi Arabia, Kuwait, and the United Arab Emirates (UAE), have provided levels of funding exceeding those of many individual DAC donors (Cotterrell and Harmer 2005). These three states have dedicated aid agencies for the administration of (parts of) their international aid. Yet, scholarly attention to Arab states as donors has been limited (for notable exceptions, see Villanger 2007; Neumayer 2003, 2004). The overall aid volumes by Arab donors have been estimated to be 'in the range of USD 2–3 billion a year, mainly from Saudi-Arabia, or no more than 4% of total ODA' (Manning 2006: 374). For other Arab or Middle Eastern donors, figures are difficult to obtain. Some programmes might be substantial – as expected of Qatar, for example – but they are simply not reported. For some Arab states, this might be due to negligible amounts being spent, as in the case of Algeria, Bahrain or Morocco (UN ECOSOC 2008). Spending in African countries represents a smaller proportion of most Arab countries' aid, which generally focus on working within the 'Arab world'.

Arab actors are often suspected of using aid for a foreign policy agenda regarded with suspicion by Western countries and might not be publicly accounted for, as in the cases of Libya or Iran.[6] Even where figures are reported, it is difficult to assess the overall amount of aid comparable to DAC ODA. They might be underestimated, but also include aspects that are not regarded as aid by Western donors, such as official gifts in the form of turn-key Mosques or religious buildings like madrasahs (Islamic schools) built in partner countries. These gifts are regarded with particular suspicion by Western countries. For instance, the institutions for religious teaching funded by Saudi Arabia are often based on Wahabism, a conservative and dogmatic reading of Islam prevailing in Saudi Arabia. Cooperation of this form is thus feared to be feeding Islamic extremism mostly in the Sahelian region and the Muslim East coast, i.e. from Senegal to Sudan and Tanzania, including northern Nigeria (Grimm et al. 2009).[7] Some of the (ideological or religious) effects of Arab cooperation might thus only be felt in the region in the long term. The explosive situation in some parts of Nigeria and historically radical movements in Senegal or other parts of the Sahel is suspected to have been fanned – if not created in the first place – by foreign support to extremist groups in the past.

8.1.3 Partners from Within: African Donors

The section on African 'donors' presumably opens more questions than others with regard to 'donorship'. Given that they operate in their own region, no African country appears willing to put itself on the same footing as external actors. Thus the biggest African development partner within

Africa, South Africa, is adamant in presenting itself as a partner, not as a donor.[8] For South Africa, cooperation with other African countries comes with a historical legacy of the Apartheid state but is nowadays predominantly driven by the African Renaissance idea, i.e. fostering Africa's 'own forces' for improved governance and thus becoming more attractive to foreign investments and thereby stimulating growth.

South Africa's historical legacy is particularly pronounced in its immediate neighbourhood. Its development cooperation also includes trade aspects – with transfer payments within the Southern African Customs Union – and the invitation of staff of other African administrations to training measures, for instance. It is particularly difficult to track funding, as there is no centralised accounting for development financing (SAIIA 2008). The broader cooperation with Africa is meant to be funded predominantly by the African Renaissance Fund (ARF). The fund is located in the Foreign Ministry, labelled the 'Department for International Relations and Cooperation' under the Zuma administration. Within this department, political planning is underway for a South African Development Partnership Agency (SADPA). The agency was already agreed at the ruling party's conference in Polokwane in 2007, but planning has been slow and cumbersome, not least as development needs in South Africa itself are vast and views on the need (and level) of engagement beyond South Africa vary within the current cabinet.

The funds disbursed via the ARF are thus far relatively small in absolute amounts when compared to 'Western' donors. Yet, the increase is steep: while the ARF disbursed €9.3 million in 2006, the aid amounted to €30 million in 2008 (Grimm 2010). The range of projects supported is broad – i.e. it is little focused – and South Africa is explicitly trying to engage in trilateral cooperation, as this in effect provides additional funding for priorities of South African foreign policy. Limited funding and a change of political priorities with the departure of African Renaissance champion Thabo Mbeki might slow the increase, but the conviction of South Africa's economic position being linked to the rest of Africa is deeply rooted in the government party, the African National Congress (ANC).

The role of Nigeria is more a story of untapped potential. The most populous country in Africa with a potentially substantial internal market and rich in oil resources, internal matters are binding most of Nigeria's energies. The country is playing a foreign and security policy role in its own region – by providing troops to regional peacekeeping or peace enforcing missions – but is otherwise mired by severe internal governance shortcomings that hamper its external role. Military engagement is not classified as development cooperation since it follows a different rationale, even if it might contribute to peaceful development. This does not ignore Nigeria's sending of very limited numbers of personnel to other countries.[9] However, Nigeria is not substantially contributing funding or policy guidance in the regional context; it is punching considerably below its weight.

Libya, on the contrary, has often punched above its weight in Africa. Oil wealth has allowed Libya to fund pan-African institutions and thus gain some influence. Yet, its flamboyant leader, Muhamar Gaddafi, has (erratically) advocated too radical a vision for African integration for most African countries to follow Libya unreservedly (Grimm and Katito 2010), and ongoing internal unrest in the country further undercuts its capacity to play a constructive role within the region.

8.2 Underlying Factors for New Actors' Impact on African Development

Having conducted a brief *tour d'horizon* of emerging actors, this section now explores underlying questions related to the future direction of the influence of new actors at three levels of analysis. The first is the international level. How do the new actors change the existing donor landscape? Are there conflicts of different approaches and values or possibilities for cooperation? The second is the continental level. How might new actors impact Africa as a whole and how could Africa respond to their engagement? The third level is the country level. Politically and economically speaking, what is the new actors' potential impact on different types of African countries?

8.2.1 Cooperation and Conflict in the Donor Landscape

For decades, the traditional Western donors were the dominant players in the donor landscape in Africa. However, with increasing development assistance from the emerging Asian (and less so: Arab) countries, there is a second type of donor now. The 'old' group of donors is arguably facing a challenge, yet still remains the main provider of development assistance for most African recipients. At the same time, the 'new' donors are scaling up investments faster than many observers had expected. According to the World Bank, China and India as well as a few oil-rich Gulf countries are providing funding for a number of large-scale infrastructure projects in Africa (World Bank 2008). In terms of construction scale and total investment, these newly arrived financiers have surpassed traditional investors such as OECD members, illustrating the trend in continued growth of South-South cooperation. These investments have improved Africa's infrastructure and have arguably had a positive impact on the overall investment environment, having thereby boosted economic development on the continent (World Bank 2008).

With different approaches and values, such as 'no-strings-attached' or 'non-interference' versus 'conditionality' and demands for minimum standards of governance, the emergence of 'new donors' may cause uneasiness and conflict with 'traditional' donors. 'No-strings-attached' policy has been regarded as one of the fundamental principles of China's development assistance as well as its larger foreign policy. Even though the 'one China policy' and tied aid to the procurement of Chinese goods, services and the use of Chinese labour have been labelled as a kind of 'strings attached' approach by the West, China has never openly or explicitly imposed any political and economic conditions for recipient countries' domestic development policy, such as economic liberalisation or privatisation or establishing a multi-party system and holding elections as most Western donors do – nor has it tried to actively promote the Chinese system. As China and others provide alterative funding sources, 'traditional' donors to Africa have raised concerns and demanded that the new donors, particularly China, should meet higher governance and transparency standards in providing their development assistance. However, the availability of these alternative funding sources potentially diminishes the leverage of the traditional donors in making these demands. In Angola, for example, after China's Exim Bank provided $2 billion loans and credits without any political conditions, the Angolan government turned down a financing agreement with the IMF, which included measures to strengthen transparency in the oil sector (Davies 2007).

Through years of building experience and lesson-learning, the 'traditional' DAC donors have developed a set of norms, rules and procedures that constitute the aspiration for a new aid donor regime. It is interesting to note that historically (and in a number of instances to this date), 'traditional donors' themselves have applied the very aid model they denounce for 'new donors' today, such as tied aid, a focus on infrastructure and a preference for channelling aid via projects rather than through national budgets. For 'traditional donors', the old aid model did not deliver the required results. 'New donors', emphasise the aspects of patronising behaviour and a 'Eurocentric mindset' in criticisms of the traditional aid regime. 'New donors' regard themselves as the members of the developing South and refer to other poorer recipient countries as equal partners, understood as a sign of respect. 'Old' and 'new donors' – with the Paris Declaration – now both reference the idea that recipient countries understand their own national conditions best. Yet 'new donors' come without the past practice and thus arguably have greater credibility. South-South cooperation is treated as altogether different from traditional donor–recipient relations, despite de facto power differences among partners. Unlike the traditional aid relationship that features 'helping others' and thus has elements of strong 'inequality' (including 'conditionality'), South-South cooperation highlights aspects of experience-sharing, and repetitively emphasises development approaches based on equality, respect and mutual benefit. Moreover, by pointing to the failure of the 'old' aid policy during the past half century (regarded as one mode of engagement, not differentiating by reform periods), 'new donors' question the legitimacy of 'traditional donors' to direct others.

To avoid a blame game and potential conflict which surely would not be beneficial for African recipient countries, a two-way street mindset and practice are needed. On the one hand, new donors' aid policy should move to more transparency and should seek collaboration with other donors. Whenever aid or investment projects are in planning, issues of local labour and environment protection measures should be taken into consideration. On the other hand, old donors should seek to understand new donors' aid models more from the angle of history and culture, and could avoid confrontational policies. There might even be scope for mutual learning – also from the 'new' donors. However, it is more practical for the next step of international dialogue to focus on cooperation on specific issues, rather than concepts and principles or trying to change mindsets of each other in the short term. As a DFID Report has pointed out, 'international cooperation also will be a process of learning, but of learning from practical rather than theoretical experience' (DFID 2008).

To some extent, the differences of two aid models also reflect the differences of two philosophies and ways of thinking. For example, in terms of the Chinese way of thinking, there may be more attention to the result than to the means used to achieve the result.[10] For the Western way of thinking, the norms and procedures – and thus the legitimacy of end results – seems at least equally important.

In recent years, an encouraging sign is that we have gradually seen a kind of 'rapprochement' of mindset or perspective about Africa from both new and traditional donors. In terms of the way of understanding Africa, for many years, traditional donors have tended to see Africa as 'a place for charity' rather than as a 'growth market'; new actors, on the contrary, rather see a land of opportunities. Unlike in older documents, 'equality', 'mutual benefit' and 'strategic partnership based on mutual respect' have been emphasised in the EU-Africa Joint Strategy issued at the second EU-Africa Summit in Lisbon at the end of 2007. These words – from a Chinese perspective – are indicating a kind of new mentality. This approach seems to have charmed and boosted the confidence of African leaders.

In order to develop possibilities for future cooperation, the potential comparative advantages of both 'traditional donors' and 'new donors' should be explored further. Since China has been widely regarded as the main flag bearer in the 'new donor' club, China's potential role and its perspective on development cooperation have naturally received more attention. Encouragingly, China claims that it can play a bridging role for establishing harmonious and effective international development cooperation. As a recipient country in the last three decades – a status it maintains – China has accumulated a lot of experience in assuming ownership of development assistance, and has become an important development assistance provider itself. This dual national feature of China, in its own view, has made it crucial for building a link between traditional donors and new donors, and between donors and recipients. Traditional donors, for their part, emphasise accumulated experience with cooperation (with both successes and failure), enabling them to share lessons with and, they feel, soften the learning curve of new donors.

8.2.2 More Alternatives for Africa and Pushing for an 'African Renaissance'

New donors' involvement in Africa has generated more attention to Africa and has offered Africa an alternative in its choice of development partners. According to research carried out through the 'Asian Drivers programme' funded by the Rockefeller Foundation drawing on field studies in 28 African countries, new donors' engagement with African nations are boosting Africa's exports and economic growth, especially in net oil-exporting countries. At the same time, new donors are providing economic opportunities for countries neglected by traditional investors and financers. With new donors' finance, African countries are addressing infrastructure deficits (with a funding gap of at least $20 billion a year); they are lowering the costs of doing business and are facilitating trade. And cheaper goods and services from Chinese firms have yielded welfare gains for African consumers (ACET 2009).

In fact, Africa has been drawing the world's attention in the past decade as the continent's situation gradually improved. The political situation in Africa as a whole has improved towards peace and stability, and the overall African economy also continues to improve despite many challenges. This is admittedly a generalisation, but one often neglected by Western states. Since the middle of the 1990s, we have witnessed the steady recovery and growth of African economic development, increasingly linked with the rapid growth and increasing demand of resources in emerging economies. Without the emerging economies' engagement in Africa, the growth and development journey would be much longer.

More importantly, the economic success story from the new donors, particularly from China, has provided African governments with another model of how to develop their own economy – ideally based on their own priorities. To a great extent, the 'African Renaissance' is a renaissance of a spirit of self-confidence, self-respect and integration (regional and global). China's own development in the past three decades has illustrated that poverty alleviation and economic development can be achieved in a developing country – with international development cooperation playing a supportive role in the process. Thirty years ago, Malawi, Burundi and Burkina Faso were economically ahead of China on a per capita basis. Now, China has become the third largest economy in the world, and 400 million people have been lifted out of poverty. This success has attracted attention from other developing countries, especially from Africa. Hopes are high of drawing lessons from China's experiences to speed up their own development.

In response to the new donors' engagement in Africa, there is increasingly heated debate among African decision-makers and within African societies about how to make use of a historic opportunity, set an 'African Agenda' and build an 'African Consensus', as was attempted with the 'African Renaissance' at the end of apartheid in South Africa. There is now a common awareness that African governments need to better identify their individual and collective needs and then engage with the new donors to ensure that projects are mutually beneficial. The prospects for a unified position, however, despite this strong African ownership awareness, should be seen in the light of continuous discussions about an African policy toward 'the West' (i.e. Europe and the United States as well as the Bretton Woods institutions).[11] They have had few results if assessed against policy implementation instead of the declaratory level.

Emerging actors, however, trigger new – or rather renewed – debates. For example, according to a document compiled by the African Union Commission in Addis Ababa in September 2006:

> Africa needs to be aware of the context in which the Strategic Partnership with China is being developed. It is that of poverty and doubt as to whether Africa will claim the 21st Century [...] The Strategic partnership should address what Africa can do with China as a partner, rather than what China can do for the continent. [...] Africa must face the emerging powers as a *united* continent and strengthen its integration agenda (African Union Commission 2006).

African ownership is thus clearly formulated as a requirement. A collective focus on the continent's needs and resources and some sort of self-rejuvenation in thinking is a key part of the African renaissance. As former South African President Thabo Mbeki said, "Africa must adopt a dynamic approach to our strategic partnership with China, so that we all win in Africa, with Africa, and similarly win in China, with China" (Mbeki 2006).

There is also a slogan of 'looking East' to a greater degree, voiced by some African leaders, not only by Zimbabwe's Robert Mugabe.[12] In Ethiopia, for example, China's development is also considered as a role model. According to an Ethiopian scholar, "a very practical yet profound reason for the appeal of China's model to Ethiopia is its historic achievements in economic reform and national reconstruction and its successful leap from a backward country to an economic power house. Moreover, all of these have been accomplished at an unprecedented pace" (Gamora 2009). Ethiopian Prime Minister Meles Zenawi often appeals for further strengthening cooperation with China to help "reverse the de-industrialisation" of African economies (Afrique en Ligne 2010). Furthermore, the good performance of Chinese and Indian economies and their capacity to diminish the negative impact of the financial crisis has created further motivation of African leaders to look East.

8.2.3 Threat or Opportunity: Differential Impacts across African Countries

The diversity in Africa has meant that the observed impacts of the new donors' engagement in Africa bring both joy and worry, as it is assumed that external actors' engagement has both positive and negative effects. The rise of India and China presents both risks and opportunities for African countries. The increasing external hunger for oil and minerals present short-term opportunities, while there are serious long-term risks related to weak governance standards, which may lead to failures to make use of the windfall and invest in other non-traditional sectors; there could be a growing trade dependency of African states on China and India, for example (Goldstein et al. 2006). Yet, currently, some Chinese scholars appear to feel that China needs Africa more (to keep its domestic growth going) than vice versa (Sautman and Yan 2009).

With regard to the economic dimension, some African scholars maintain that China's economic development presents both tempting opportunities and terrible threats to Africa (Mbeki 2006). Except for leading oil and minerals producers, African countries face considerable trade imbalances with China. Although trade volume between China and Africa has increased from $10 billion in 2000 to over $100 billion in 2008, the trade structure is characterised by China exporting machinery, electronic products, textile and light industry products to Africa and importing oil, timber, mineral products and other raw materials from Africa. This is not unlike the trade patterns of African countries with European and North American states (He 2008b). China's absolute advantage in labour costs and resources has put the textile and light industries in some African countries under immense pressure. In South Africa, for instance, pants made in China only cost $1 including long-distance transportation charge and customs, while the same product locally produced costs ten times as much (Lin 2005). Therefore, the sustained increase of exports from China to the United States and the European Union, the two largest markets for textile products, and the great increase of Chinese exports to African countries where textiles and apparel represent a pillar industry has to a certain extent eroded the international market share of these countries, affecting the development of the textile industry locally and leading to bankruptcies and unemployment.

With regard to the political dimension, differences in political understandings and different concepts and values between China and African countries represent a challenge ahead. In the last two decades the process of political development towards democracy was quite rapid in Africa. Government papers and public opinion frequently refer to democracy and human rights. The development of non-governmental organisations (NGOs) and civil society is also progressing, and Africans often express pride in this fact. This may lead to some apprehension on the part of the Africans about

China's democracy and human rights conditions; some think that China has not paid due attention to the development of democracy and human rights in Africa (Gros 2005). Some Western media have gone even further, claiming that China only pursues selfish interests in conducting economic and trade relations with Africa while neglecting the democracy and human rights conditions of recipient countries. They argue that China's unconditional economic aid has supported mainly the so-called 'rogue states' (such as Sudan, Zimbabwe and Angola) in Africa, and that it is detrimental to the promotion of 'good governance' as well as to the progress of anti-corruption and human rights causes (IRIN News 2006).

Given the number and diversity of African nations, even though it is hard to assess the impacts of China and other new donors' engagement in individual African countries, Alden (2007) has attempted to classify the over 50 African countries into three types of regimes – pariah partnerships, illiberal regimes or weak democracies with commodity-based economies and democracies with diversified economies – and their assessment of China's engagement. According to his analysis, for 'pariah' regimes (such as Sudan, Zimbabwe and Angola), China is a welcome source of stability, a new strategic partner and a provider of development assistance and foreign investment. For illiberal regimes and weak democracies (such as Nigeria and Zambia), China is primarily seen as a strategic partner and a new source of foreign direct investment (FDI), though the local business sector and trade union/civil society may be concerned about the impact on their interests. The relationship with China is more complex for democracies with diversified economies (such as South Africa). On the one hand, China is an important strategic partner and a new source of FDI. On the other hand, China competes with local business interests, threatens trade unions and civil society and challenges NEPAD and South African interests on the continent (Alden 2007). Yet, a survey on perceptions by students across nine African countries found more positive views on China than debates might suggest, with Batswana, Zambians and South Africans generally being the most critical towards Chinese policies (Sautman and Yan 2009).

Chinese scholars argue that good governance and democracy are related to economic development. Therefore, the argument goes, China's active involvement in Africa and its contribution to African economic growth has generally played a positive role in the consolidation of African democratisation. It is hard to imagine how the new round of African democratisation after the end of the Cold War would have proceeded if it had it not been accompanied by economic recovery and growth since the middle of 1990s. There are indications that conflict, chaos, military coups and illegitimate regime changes have their root causes in poverty and imbalanced development.[13] China has not played an active part in spreading – nor preventing – democracy in Africa; it is first and foremost seeking stability in Africa. This includes the stability of countries, irrespective of their political regimes – and consequently also applies for democracies (He 2007).

Nevertheless, since China itself has been undergoing political reform at home, and China's large-scale involvement in Africa is still at an early stage, the long-term effectiveness of its economic contribution for African development on the political field remains to be seen. The long-term political, economic and social influence of new donors on Africa's development at large is also hard to assess, given their different domestic systems and different focuses of their engagement in Africa. The new donors themselves are facing numerous uncertainties and challenges as well, as the following section indicates.

8.3 Main Uncertainties in Exploring the Impact of New Actors

The 'new actors' are by no means the only forces shaping Africa's future, as the other contributions to this volume demonstrate. Yet, new donors may have a more direct influence on particular features of the development landscape, for instance by providing access to development finance, infrastructure development or directly impacting political developments. In light of this, the following section outlines key uncertainties in discussing African development to 2030 from the perspective of 'new actors'. These uncertainties relate the effects of 'new actors' on the activities of 'traditional' actors, the internal challenges that the 'emerging partners' might have to cope with, and the reactions of African actors to their engagement.

8.3.1 The Response of the Traditional Donors

One key uncertainty in the discussion of 'new actors' is how 'traditional donors' will react to the increasing challenge to their position in sub-Saharan Africa in particular. New actors might actually provide a stimulus to accelerate changes in systems of aid management and delivery following from the political commitments made in the Paris Declaration and the Accra Agenda because traditional donors may face added pressure to demonstrate that their investments are making a difference. At the same time, there is a question of whether growing engagement from new actors will prompt a reconsideration of emphases in the OECD donor community on issues like democracy promotion, or whether the response will rather encourage traditional donors to recommit themselves to the promotion of these values through development cooperation. The philosophy of win-win-situations in Chinese cooperation with Africa will have to be proven in practice. Yet, the greater focus on investment and economic relations in concert with aid relations might also influence how OECD-DAC donors formulate their Africa strategies, suggesting that engagement from the new donors can provoke shifting priorities within the traditional DAC community. The debates on the European External Action Service, for instance, already point to changes in the understanding of development cooperation with the aim of poverty reduction within EU external relations (Furness 2010). Future priorities and means of engagement with African partners may evolve among traditional and emerging donors if mutual learning on issues such as climate change and reforms in aid institutions proceeds.

8.3.2 The Internal Dynamics of 'Emerging Partners'

One assumption that underlies discussions of the importance of emerging powers in African development is that they possess great potential for continued economic growth. Yet one can also ask how sustainable growth in the 'emerging partner' countries is in the long term. The socio-economic and political development of China has arguably placed the country on a much more solid foundation than many African countries. However, it is not free of risks and uncertainties itself (Fischer 2009). Sustained engagement by the emerging powers in Africa depends on the availability of political resources, be it a certain political stability and tolerance of potentially costly endeavours on the African continent (why not invest in poor regions domestically?) or the economic wealth to make investments abroad. On the other hand, the need for resources to maintain their own levels of economic growth can be expected to be a strong driver to maintain and even foster links to Africa by China and India as well as others. Yet, how strong the 'African win' in the supposed 'win-win situation' will be remains dependent on Chinese domestic development as much as on African demands.

Sustaining an international agenda as an aid recipient and donor at the same time requires a sense of balance between the internal and external agenda. Being 'poor and powerful' (Schmitz and Messner 2008) is not always an easy situation – particularly with regard to the country's own (demanding) population with, for instance, higher numbers of university graduates than jobs created, increasing gaps in wealth between urban and rural populations, and increasing demands for wage increases (Fischer 2009). The prospect that domestic pressures could lead emerging powers to limit their engagement in other developing countries despite resource demands is not unique to China or India. The aspects of what OECD countries would call development assistance would then be reduced, i.e. the gain from Africa would be purely (short-term) business gains. The political and economic costs are a particular issue to face for South Africa's government with already ongoing social unrest and mischievous attitudes towards African foreigners within South Africa. Giving assistance to neighbouring states in a situation with persistently high domestic demands for improved social services is highly unpopular, also in some circles of the government, and appears to be a reason for protracted debates around the creation of a South African Development Partnership Agency (SADPA). Even if we assume that development cooperation is not a high priority for

South African politics, it is telling that the debate – which has been around since 2007 (Grimm 2010) – has not resulted in any action in South Africa at the time of writing.

8.3.3 Reaction on the African Continent towards the New Partners

Among the emerging actors, as sketched above, are emerging global powers, but also smaller states (Malaysia, South Korea) and non-state actors (the Bill and Melinda Gates Foundation, Rockefeller Foundation, and others; see Lundsgaarde 2010). The setting of African actors is also diverse and different actors within African states are likely to have different attitudes towards new partners. Whenever the engagement of China is used in the political debate, Chinese engagement is seen more critically (as is arguably the case with Zambia, cf. Sautman and Yan 2009). Populist politicians could aspire to make (negative) use of Chinese engagements in their polemics elsewhere in Africa. This, of course, also depends on the actions of Chinese entrepreneurs or state actors in African countries. The current discussion of emerging countries' engagement in Africa highlights positive and negative effects, and issues on which the jury is still out.

Another important uncertainty in understanding the role of emerging countries' in the future thus relates to the manner in which African states themselves define the terms of this engagement to fully exploit the positive effects and limit negative consequences. While China and others might provide inspiration on how to overcome poverty with endogenously determined policies and receive praise for providing investments with limited or no conditions, other aspects of the engagement of new actors are more controversial. In Zambia, the behaviour of individual Chinese entrepreneurs not respecting local standards has already had a negative effect on the overall reputation of China (Sautman and Yan 2009). Other countries might see similarly negative impacts, not unfamiliar to European and other companies engaging in countries with questionable governance records. Leasing of land – discussed in Western media as 'land grabbing' (cf. Vidal 2010) – and investments in agro-industries by companies from emerging markets is another still unclear topic. Madagascar or Ethiopia is a case in point where, for example, Korean, Malaysian or Indian companies have been implicated. The extent to which such land deals produce unfavourable conditions for their populations or alternatively generate positive spillover effects depends on the way that African governments opt to regulate their economies (Braun and Meinzen-Dick 2009). If leaders adopt a preference for quick payoffs without consideration for the long-term consequences of aid and investment deals for their populations, negative aspects of global engagement will tend to be reinforced. This is a similar mechanism to what has been witnessed with the last 40 or so years of external aid by Western countries. Given the relatively short time span for increased engagement by new donors, we cannot yet say whose strategy will prove to be the most or least successful with regard to the new actors though. The capacities in African states to manage new actors might be limited, however, regardless of their aspirations. First, African countries are usually small entities when compared to global actors like China or India. Secondly, the management of 'traditional donors' already uses a lot of their resources – hence the discussion on a better division of labour at country level. And thirdly, the management capacity depends on already existing resources with regard to human capital. This could be a mutually reinforcing effect; generally speaking, the weaker the capacity, the higher the inclination is to accept external assistance irrespective of side effects, but the lower the ability is to formulate recipient-owned strategies and thus to proactively manage incoming external funds.

8.4 Range of Trajectories

When looking at the past and into the key driving forces of the cooperation of 'emerging actors' with Africa, the following three scenario outlines can be drawn. They aspire to take into account as much as possible the variations in possible behaviours of all three actor groups: African states, Western donors and emerging countries as development partners to Africa.

8.4.1 The Slippery Slope: Africa's Missed Opportunity

In this scenario, Africa's elite misses the opportunity that renewed global interest in the continent brings, including growing interest from non-DAC development partners. Eventually, investments from non-DAC countries shift away from Africa.

A speedy recovery from world economic crisis leads to a rise again in world market prices for African raw materials, as demands from China and India increase again, driving African recovery. Development cooperation is a function of foreign trade policy. A move in this direction leads Western donors to increase aid while they continue to link these payments to governance progress. African states understand China and 'the West' as alternative models and pick and choose between aid donors – but without clear directions in their policies. The underlying lessons of how emerging countries achieved their economic growth are not learned in African countries: there are few if any national development strategies with a long-term vision and trial-and-error approaches prevail in the country context. A lack of planning is combined with a lack of reform will in Africa; the motto is rather cashing in. This works up to some level for resource-rich countries, whereas small, resource-poor countries have to follow external demands. Finding common positions at the continental level in this context will become impossible, undermining the existing regional entities. Consequently, there is some growth in resource-rich countries due to the external demand and only very few smaller countries gain as investment destinations.

Yet, the internal security situation in many African states deteriorates as the bulk of the population demands their share of wealth, fuelled by perceptions of external dependence. Internal strife prevents African states from fully benefiting from external funds; little coordination occurs in Africa and security becomes an increasingly sensitive issue for investors. In this scenario, China and India – having further improved their world market competitiveness – search for markets beyond Africa. This is due to the indifference on the African side, but also due to the decreasing importance of African states to the emerging countries, as they continue to make gains in the world market beyond Africa. Diversification of African economies remains stuck: they have only, and not sustainably, diversified their customers, not their produce.

8.4.2 More of the same: stagnation in Africa

'Old' and 'new' development partners are played against each other by African states in a reflex similar to the Cold War. Some positive developments are witnessed and there are success stories. However, these are slowed by strife and insecurity particularly in the landlocked states and states along unsafe shipping routes. Investments and aid from non-DAC development partners contributes to growth and even funds projects that DAC donors refuse to fund. These projects, however, due to the absence of a long-term vision of African states, do not carry most of their expected benefits. Africa sees growth, but not enough to reduce poverty substantially and sustainably. Furthermore, increasing natural disasters result in setbacks in the success cases, too.

Bilateral aid prevails with new actors beyond the DAC while DAC members stagnate in giving multilateral aid around 30 per cent of overall ODA. Cooperation with Africa remains at the current level and Africa is mostly a source for raw materials for both 'old' and 'new' donors. Western countries thus politically downgrade the importance of development in their external relations, while maintaining the level of rhetoric relatively high, increasing the credibility gap over time, thereby internally undermining development policy as a separate policy area. With increasing investment in Africa, new actors (Chinese, Indian, Malaysian and also European) security interests and security-focused engagement on the continent grow. Yet, there is little interest in formulating detailed strategies – let alone doing so *with* recipient countries – as most is driven by securing investments rather than a development agenda as such.

States in Africa have limited capacity and limited will to coordinate donors; rather, quick cashing in on raw material prevails (as with Nigerian elites), instead of using the windfalls for strategic, long-term investments (as lived by Botswana or envisaged by Ghana). As in scenario 1, the lessons of having a step-by-step economic strategy for economic growth is not applied, be it because of lack of understanding, be it because of a lack of planning, implementation and monitoring capacity. African integration does not proceed and weak states thus remain weak. African development plans remain of limited importance to cooperation policy with external actors. The focus on short-term government gains somewhat restrict a strategic engagement with both DAC and non-DAC donors.

In the long term, Africa experiences growth, but not enough to close the gap with other world regions. The few gains are eaten up due to other factors (e.g. impact of climate change). Development policy is downgraded politically without substantial coordination among donors, old and new. Narrow strategic self-interests of external actors prevail.

8.4.3 Coordination Increases and Long-term Planning Improves

In this scenario, Africa becomes a market that attracts increasing attention not only due to the effects of Chinese and Indian investments, but also due to efforts of better continental coordination championed by South Africa. Non-DAC development partners are not able to lift the continent on a growth trajectory by themselves, but jointly with external investors and shifting priorities in the aid system-building on international exchanges of experiences have helped internal reform endeavours in African states and across African regions. The disaster-preparedness of African states increases and the effects of changes in the climate are managed in a more sustainable way, actually further increasing the need for African cooperation. This also helps in the joint management of aid and investment flows.

New actors play a crucial role in overcoming global recession and fill important funding gaps for African states. Their weight continues to increase in Africa, both economically and politically. DAC donors increasingly coordinate their activities in order to reduce the administrative burden on already limited capacities in governments (division of labour, best developed within the EU), and 'new' actors increasingly join discussion rounds with African states and 'old' donors. This starts by sectors and/or countries, rather than at global scale. Sustained economic growth leads to a slow process of catching up – and a change of image of Africa in Western states as some 'boom countries' emerge. Increasingly, the awareness spreads that Western states have to stretch to catch up with Chinese, Indian and other countries' investments in what are soon to become interesting growth markets. In this change of perspective, development policy becomes more 'structural policy' at national level (i.e. a catalyst for change to the better), complemented at a regional and continental level in Africa.

Emerging countries more and more differentiate their approaches and formulate different strategies for policy areas in partner countries, thereby emphasising their comparative advantage for partner countries – and making their own needs and demands more transparent to African states, their populations and other donors. With clearer outlines on who does what and how, the possibility of better harmonisation and even – in some selected cases – trilateral cooperation is created.

African states decide to cooperate more closely, recognising the importance of regional value chains rather than isolated small markets. In parallel, the coordination of their external policies has improved, given negative experiences with donors shifting priorities and the experience of a degree of helplessness when interacting with larger powers. An increasing number of broader visions are formulated by African governments and incremental implementation strategies prevail. NEPAD allows for an increasing degree of mutual learning on what has worked and what has not in Africa. Key developments and national priorities are reported to – if still not coordinated at – the continental level where high-level engagement of smaller African states is supported. Often, a sort of 'tutoring arrangement' emerges within regions: Nigeria, South Africa and Ethiopia as well as (to a lesser degree) Democratic Republic of Congo or others are pushing the relations of their regions with donors. This is not liked by all states in the region, but the common framework of the AU smoothes political troubles and eases cooperation within regions. Most of the coordination, however, takes place at national level in donor coordination rounds with all big donors at national level.

8.5 Conclusion

One of the key lessons from the financial and economic crisis was that emerging economies already have gained considerable weight in the international economy and problem-solving will thus not be possible without them. It can be expected that many of the emerging economies will continue to expand their global role. Policies towards and effects of emerging economies on Africa vary. The temptation to treat the emerging economies as a homogeneous group should thus be withstood despite some common features among these countries.

This chapter has underlined that how African decision makers engage with external actors, be they 'traditional' or 'new' partners will be crucial in determining the future of African development. In this context, we can also discuss the need for a continental strategy to engage with emerging economies. Having one strategy – and thus a common set of interests – however, is highly unlikely, given the diversity of African states' framework conditions (resource distribution, levels of development, access to international trade, land availability, etc.) and consequently the diversity in interests. Even a sub-regional approach will be difficult to achieve, albeit with better changes of an agreement with fewer participants in deliberations. The different possible outcomes sketched above might thus occur in different parts of the continent at the same time, with some countries making use of additional opportunities provided by new external actors impacting on their development, while others will be rather following the 'slippery slope' scenario as external funding draws attention away from domestic reform needs. If this occurs continental approaches would become even more unlikely in the future as differentiation between already diverse African countries would increase. Putting the blame for these effects on external actors, however, is hardly credible; it is up to African governments to formulate the regulatory framework for their development future.

Notes

1. Although not elegant with its negative definition, being 'non-DAC' seems to be the central undisputed characteristic of emerging states as donors. Their practice – just like DAC donors themselves – varies substantially, as does the experience countries beyond the DAC have with development cooperation. China and India have been engaged in South-South cooperation since the 1950s. However both countries, like others, have difficulties with the connotation of the term 'donor', as they see themselves strongly rooted in the developing world, too. Arab donors for their part had their heyday in the 1970s. Hardly any of these 'new' donors is thus new. What is new is the amount of funds provided (cf. Grimm et al. 2009).
2. Several recent studies have examined the role of China and India in Africa. See, for example, Broadman (2007), Goldstein et al. (2006), King (2006), Kragelund (2008), Cheru and Obi (2010).
3. Compared with the 'inviting-in strategy' of bringing foreign companies and their investment into China from the late 1970s onward, the 'going-out strategy' was put forward by the Chinese government and top leaders in late 1990s and was officially written in the Party's document in 2001 which aimed at encouraging Chinese enterprises to go abroad for taking part in the global competition.
4. There are three criteria of the DAC definition of aid: (1) undertaken by the official sector; (2) the main objective is to promote recipient countries' economic and welfare development; (3) has a grant element of at least 25 per cent. According to this definition, some Chinese contracting projects which have been financed by the Chinese Exim Bank (those which have a grant element below 25 per cent) should not be included in this classification.
5. China has provided development assistance in Africa in a strongly bilateral manner since 1956. China has opened embassies in nearly all African countries except the four countries (Burkina Faso, Sao Tome & Principe, Swaziland and Gambia) recognising Taiwan. And with each embassy, there is an agency called the Economic Counsellor's Office set up by the Chinese Ministry of Commerce, which is in charge of implementing the aid projects in the host countries and maintaining contacts with Chinese firms there. From the Chinese perspective, the bilateral mode of engagement has been regarded as more efficient than the multilateral way given that the AU and the NEPAD are relatively new initiatives and African integration is still in flux. Entry points are thus not yet clearly defined for cautious Chinese engagement.
6. Iran (Persia) is not an Arab country. It is filed in this group due to overlapping interests and features, operating in the same region as most Arab donors.
7. Egypt, for its part, follows the policy of cooperation with countries along the River Nile – Egypt's lifeline – going as far south as Rwanda.
8. Parts of the administration, however, are more relaxed about the term 'donor'. The National Treasury, for instance, would not shy away from the term donor as they assess assistance in terms of financial flows. Furthermore, Treasury also has to account for the *results* of public spending, and is consequently asking questions about effectiveness (cf. Grimm 2010).

9. An example of the limited personnel sent to other African countries is a small contingent of less than a dozen nurses sent to Rwanda, identified by the authors in the context of recent field research there.
10. The famous saying of "no matter white cat or black cat, it will be a good cat as long as it catches the mouse" from the late leader Deng Xiaoping has become a maxim in modern China.
11. There are no specific strategies of how to engage with the United States. For Europe, there is a Joint Africa-EU Strategy, but no specific African document on what to achieve with it or how to drive the relationship from a purely African perspective.
12. Zimbabwe President Robert Mugabe in a speech at the 25th anniversary of Zimbabwean independence in May 2005 said: "We have turned east where the sun rises, and given our backs to the west, where the sun sets". He was facing mounting external pressure and internal challenges at that time.
13. This is not an uncontested view. However the potential link between the two – and the risk that poverty subsequently poses for European security – is also highlighted in the European Security Strategy of 2003.

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9

The Future of Africa's Development and Global Governance

Garth le Pere and Francis Ikome

Since the 1990s, Africa has faced a rapidly changing global environment with systemic dimensions that have major implications for the future of Africa's development. But these changes are also part of an era of greater global structural vulnerability, posing a complex matrix of challenges for the continent where the spectre of global marginalisation always looms large. Steering mechanisms of global governance take on added meaning in the African context as these evolve "through the sponsorship of states, through the efforts of actors other than states at the transnational or subnational levels, or through states and other types of actors jointly sponsoring the formation of rule systems" (Rosenau 2009: 15). The erratic workings, inadequacies, and flaws of institutionalised structures, rule systems and norms of global governance conspire to bring Africa to a critical juncture. This is compounded by the fact that global governance is devoid of any grand logic, made up as it is of an anarchic and borderless web of interactions by formal and informal institutions, states, markets, and citizens. This multiplication of spheres of authority gives global governance its myriad of control mechanisms that derive from "different histories, goals, structures and processes" (Ibid: 9–10).

The global financial crisis has brought into stark relief the magnitude and scope of the challenges that the continent has to confront. At a time when positive strides were being registered in indices of growth and improved governance, the effects of the global meltdown have reversed previous gains and point to the need to craft judicious responses, both by African states and relevant international actors. The impacts could exacerbate the historical stagnation in economic expansion, which has had profound effects on social welfare and African livelihoods. The absence of mutually reinforcing impulses of economic growth and structural change renders the social landscape equally blighted, with persistent symptoms reproducing themselves in ways that subject many Africans to a Hobbesian future where life tends to be nasty, brutish, and short. Africans continue to struggle with access to basic health care, nutrition, sanitation, primary education and other services. This pattern is compounded by the HIV/AIDS pandemic, militarised and gender violence, and destructive conflicts.

There are thus both threats and opportunities for Africa in how it shapes its responses to and participates in global governance, crucially as this relates to hegemonic structures that are widely held responsible for consigning developing countries to poverty, environmental degradation, and underdevelopment. In this reading, global governance provides the socio-political infrastructure and liberal value base for economic globalisation, and implicitly is held responsible for recurrent crises in the global commons and exploitation of the South (Soederberg 2006). However, the growing systemic importance of emerging powers such as China, Brazil, India, and others could herald the equivalent of a Polanyian counter-movement or an embryonic counter-hegemonic bloc that moves global governance in a more equitable and participatory direction (Friedrichs 2009). In this sense, the deregulation associated with economic globalisation and the interests of the G-8 has been challenged by social and political re-regulation for which the G-20 provides a new steering mechanism. Africa's interface with the G-20 will take on added significance in shaping the tenets of the evolving global governance system. These considerations form part of the contours of a fast changing political landscape that will influence how global governance could continue being a metaphor for inequality, exclusion, and dominance (the hegemonic dimension); or how it could provide the impulses for development, growth, and empowerment of people (the emancipatory dimension). It is in the latter sense that African countries can play a significant role since "[m]any global governance processes are, in fact, not very promising without the participation of African actors" (Messner 2007: 119).

This chapter explores the relevant dimensions of the complex dialectic that frames the interlinkages between modalities of global governance and their impact on Africa's development. This is pursued by firstly locating Africa's development challenges in the context of growth and employment, the effects of climate change, social development, and the capacities of African states to address deficits in delivery and governance. The next section discusses select issues in global governance and Africa's international political economy. Here the focus is on two areas that have profoundly shaped the continents interface with global governance, namely, problems of external debt and finance and international trade. These sections then inform discussions of both critical uncertainties and trajectories to the future before the chapter concludes with some observations relating to domestic and international dynamics and governance challenges.

9.1 Confronting Africa's Development Challenges

Among many others, there are four main challenges that will define Africa's economic growth prospects for the twenty-first century. In this section, we will examine the challenges of growth and employment, climate change, social development, and good governance. In each of these areas, attempts have been made to address imbalances and inequalities through participatory global governance processes and through particular steering mechanisms at the global level. The promise of reforming institutional architectures to enhance the scope for global action has encouraged a greater assertiveness among developing countries. This has been evident in international trade negotiations where the Africa Group and African countries in the G-90 axis of least developing countries have insisted that the developmental letter and spirit of the Doha undertakings be observed and implemented. As far as UN reform is concerned, African countries have adopted a high level of ambition in the 'Ezulwini Consensus' to press for two permanent African seats on the Security Council. In the World Bank and International Monetary Fund (IMF), African countries have staked claims for greater voice, participation, and representation in decision-making. And almost two decades of UN summitry have produced global compacts that have resulted in growing solidarity between the North and South to address historical asymmetries associated with access to resources, wealth, and power. The high-level commitments made by the G-8 culminating in the Kananaskis Africa Action Plan in 2002, for example, aim at assisting Africa to meet its daunting range of development challenges.[1] With the New Partnership for Africa's Development (NEPAD) and the Millennium Development Goals (MDGs) providing further momentum, the G-8 launched its Africa Partnership Forum (APF) at its 2003 Evian summit. The APF is the formal mechanism through which the G-8 and other multilateral institutions can coordinate with each other and African partners to meet NEPAD benchmarks and MDG targets. This has been extended to include all Organisation for Economic Cooperation and Development (OECD) countries that provide substantial development assistance to Africa.

While the Action Plan provided a useful centre of gravity for focusing and driving collective action, it had to contend with multiple initiatives of interlinked, overlapping, and competing mechanisms and agendas, including the UN's Millennium Project, the UK's Commission for Africa, revised poverty reduction and debt relief frameworks in the IMF and World Bank, the Global Fund to Fight AIDS, the noisy trade and development diplomacy in the WTO, and other international summit commitments such as the World Summit on Sustainable Development (WSSD) Declaration, the Bali Action Plan on Climate Change, the Monterrey Consensus, the Doha Declaration, and Paris Declaration. Specialised Western donor agencies such as the UK's Department of International Development (DFID), America's USAID and Norway's NORAD have their own institutionalised Africa partnership programmes. Bilateral trade and cooperation frameworks such as with the European Union (EU), the United States, and China add to the diversity of approaches towards Africa. Global civil society and social movements have inserted their own 'global justice' agendas and concerns that directly or indirectly affect Africa. A few examples will suffice. Since the adoption of the MDG targets, CIVICUS, a global network of NGOs and civil society formations, have focused international attention on their importance for African countries. The African Forum and Network for Debt and Development has been spearheading a global advocacy initiative for a UN-centred debt arbitration mechanism. The Global Call to Action Against Poverty sought to mobilise 150 million people in 72 countries (Kumar 2010). And the climate change summit in Copenhagen in 2009 brought a range of transnational networks together (centred around the NGO-COP15 Dialogue and the Climate Action Network) to highlight the importance of adaptation and mitigation strategies for African countries. This assisted African countries to advance their common position and to project significant global influence in future debates on a post-Kyoto framework. This is the 'cacophony' that makes global governance long on process and short on impact such that by the G-8's Heiligendamm summit in 2007, there was an attrition of measurable progress on Africa. For instance, it is perplexing that while the African Union (AU) has put in place an African Food Basket Initiative to promote food self-sufficiency, it is not yet clear that the continent will be one of the main beneficiaries of the G-8's $22 billion pledge towards a Food Security Initiative made at l'Aquila in 2009.

In September 2009 in Pittsburgh, the G-20 leadership assumed a more prominent role in global governance by becoming the primary forum for economic cooperation in what appears to be a de facto division of labour where the G-8 will bear the primary responsibility for steering global peace and security matters (Cargill 2010). Since emerging from the detritus of the Asian financial crisis in 1997 and encompassing major emerging and regional powers, the G-20 has grown in the scope of its mandate and authority. As Cargill asserts, "with the global financial crisis of 2008–09, it became obvious that the old Western economic establishment of the G8 could no longer claim control or ascendancy over the international system and needed to engage more fully with the emerging powers in the G20" (2010: 2). With South Africa as the only African member, its government has expressed itself firmly and unequivocally on the necessity for the G-20 to adopt a purposive Africa-focused agenda that draws significantly on what the G-8 has managed to put in place (Manuel 2009). This takes on added significance as the G-20 appears to be wrestling rather ambivalently with what kinds of specific commitments it can make related to Africa. Nevertheless, it remains to be seen whether this will open a new chapter not only in the way power and wealth are distributed globally but for forging a closer delivery nexus on Africa on the basis of the G-20 using the APF as a conduit.

9.1.1 Growth and Employment

In spite of the criticisms that have been levelled against structural adjustment programmes (SAPs) over the years, they have helped to correct some of the major macroeconomic dysfunctions that constrained the growth of a majority of African economies during a greater part of the 1970s and 1980s (Ndulu and O'Connell 1999). This together with the relatively favourable external environment heralded by the end of the Cold War and the emergence of the new economic power centres of China, India, and Brazil, which have shown great interest in Africa's abundant natural resources and other sectors, enabled the continent to register almost half a decade of consistent economic growth (Table 9.1), averaging 5 per cent for a majority of African countries between 2003 and 2007 (ADB/OECD 2009). Although these years of consistent economic growth failed to promote employment and reduce poverty, partly because of low factor accumulation in physical and human capital and low productivity growth, they nevertheless brightened Africa's overall development prospects (ECA 2008).

However, the onset of the global financial and economic crisis in 2008 diminished this growth and associated gains. The continent's growth is now expected to be less than half of the projections before the onset of the crisis, though the ADB expects Africa to rebound to a healthy 5.2 per cent for 2011 fuelled mainly by consumer expenditure. Declining commodity prices and falling demand from OECD countries are already affecting African countries' national budgets (ADB/OECD 2009). Against this background, some pessimists have contended that if the global economic turmoil persists over the medium term, the continent could register as many as 700,000 more infant mortalities each year and could see over 90 million more people thrown back into the scourges of poverty (African Business 2009). The prospects of social unrest arising partly from massive job losses and rising food and fuel prices are very real, as recently manifested in South Africa.

Conversely, optimists have noted that although the causes of the global economic crisis are beyond the control of the continent and while the crisis is expected to have a long-term impact on African economies, the continent is better positioned to absorb shocks than it has been in previous global economic downturns. Also, Africa's consumption base has expanded dramatically, with a compound annual growth rate of almost 13 per cent (Jackson 2010). The footprint of emerging markets in the continent as trade

Table 9.1 Average Growth Rates of African Regions

Region	1996–2002	2003	2004	2005	2006
Central Africa	3.9	5.0	14.4	4.1	5.5
East Africa	4.1	2.3	6.8	5.2	5.1
North Africa	4.3	5.1	4.6	4.8	5.2
Southern Africa	3.1	2.6	4.0	4.6	5.2
West Africa	3.6	7.0	3.4	4.9	4.8
Total	3.8	4.4	5.1	4.7	5.2

Source: ADB/OECD (2009).

and development partners, particularly China, has also reduced the continent's extreme vulnerability to the changing economic fortunes of traditional partner countries of the OECD (African Development Bank 2009; ECA 2008). Africa's trade with China was estimated to be over $100 billion in 2008, while that with India was close to $40 billion during the same period, although it was mostly with mineral resource-rich African countries (le Pere 2010).

Encouraging as growth before the onset of the global financial crisis had been, it was not accompanied by a significant expansion of employment creation. Firstly, growth rates of 5.8 per cent per annum have fallen short of the 7 per cent widely considered to be the minimum rate for reducing poverty and improving human conditions. This growth remains vulnerable to volatility in the commodity export sector as we have seen. Secondly, the concentration of growth in the capital-intensive extractive sector results in low labour absorption; moreover, the extractive sector is largely an enclave with few backward and forward linkages to the rest of the economy and with little value addition. And lastly, income inequality is rising because of the low employment response to growth, made worse by rising inequality in the distribution of opportunities and expansive growth in patterns of urbanisation. This has direct consequences for Africa's youth bulge where young adults (aged 15 to 29) make up more than 40 per cent of sub-Saharan Africa's 770 million people. Rising food and energy prices and complications arising from climate change add to Africa's growth and employment challenges.

This discussion indicates the importance of macroeconomic stability and mobilisation of domestic resources as a prerequisite for growth and employment. The measures taken by the G-20, World Bank, and IMF as well as the African Development Bank to provide innovative and efficient countercyclical support to help African countries through the financial crisis point to the need to better manage the stop-and-go cycles and supply-side deficits that have impeded private sector growth and industrial diversification, and raised welfare costs. As early as the 1990s, the challenge was recognised by the UN's New Agenda for Development in Africa (NADAF), which paid particular attention to human development, economic growth, and employment. It also emphasised access to basic services and the integration of more women into job markets and development processes. However, NADAF's noble intentions foundered on the shoals of competitive rivalries with the UN Economic Commission for Africa, the African Development Bank, and the World Bank. Even Boutros-Ghali's launch of the UN System-wide Special Initiative on Africa (UNSIA) did little to improve coordination among UN agencies, the Bretton Woods Institutions, and other development partners (Kankwenda 2009). This is again indicative of the fact that global governance has many institutional vectors but few centres of gravity. This permissive multiplication of roles and actors creates a drag coefficient hindering progress and harmonisation and complementarity of effort in areas that are critical for Africa's development.

9.1.2 Climate Change

In January 2007, the Ordinary Session of the African Union's heads of state and government issued a call to African countries, regional economic communities, and Africa's development partners to support climate change adaptation and mitigation strategies and integrate these into development and poverty reduction plans (Rukato 2010). Climate change poses distinct threats to Africa in achieving the MDGs, improving growth and employment, and promoting peace and security. There is thus a compelling urgency to address climate change-induced challenges, crucially in food security, housing and settlement patterns, and financing for mitigation and adaptation. The continent contributes only about 3.8 per cent of total greenhouse gas emissions yet its low adaptive capacity accentuates its vulnerability. Many African countries are located in areas that already are experiencing warmer temperatures and erratic climatic patterns that result in rain variability and other climatic hazards have accelerated soil erosion and desertification (see Chapter 5). The continent remains ill-equipped to respond to the direct and indirect effects of climate change because of endemic poverty, poor economic and social infrastructure, low- and high-intensity conflicts, limited human and institutional capacity, inadequate technologies, and financial resources.

The major impacts of climate change on Africa's developmental prospects include increasing water stress and water-related conflict, reduced agricultural output and increasing food insecurity, rising sea levels in coastal areas, the expanding range and prevalence of vector-borne diseases, and population migration and conflict (Low 2005; ECA 2007). If not confronted head on, the current and projected impacts of climate change could represent a set of development traps that will further enmesh African countries in an already crippling downward cycle of poverty, disease, and conflict. This is why the post-Kyoto negotiations are so important for Africa. As part of the UN Framework Convention on Climate Change and mandated by the Bali Action Plan, these negotiations will address what happens after the expiry of the first 'commitment period' of the Kyoto Protocol in 2012. While significantly diluted, the Copenhagen Accord did provide for $30 billion for African and developing countries to finance adaptation and mitigation to reduce emissions, rising to $100 billion by 2020 (UNFCCC 2009).

9.1.3 Emerging Social Issues

Social development in Africa is critically linked to policies that facilitate access of the poor to human, physical, and financial assets to improve their earning capacity. Shortcomings in this area are aptly demonstrated in two instances, namely, poverty reduction and combating HIV/AIDS, which intersect with a raft of other social challenges.

It is an alarming fact that a large number of African countries will not be able to meet the first MDG of halving poverty by the target date (Rukato 2010). Poverty strategies have typically focused on the economic and social spheres but evidence suggests that addressing the legal empowerment of the poor could be a powerful antidote and weapon in the fight against poverty (De Soto 2000). There are too many African countries where laws, institutions, and policies deny large segments of the population opportunities to participate on equal terms. The legal underpinnings of entrepreneurship, employment, and market interaction are often assumed in economic and development theory. So are contracts and property rights while what occurs in the informal sector is often hardly taken into account. In Africa, however, the poor live in the shadows of the law, far from its protective mantle and the opportunities it offers. They are often subject to informal local norms, institutions, and practices. Where they come into contact with the law, it is usually an oppressive experience characterised by discrimination, intimidation, corruption, and often violence. NEPAD's preconditions for development thus place a premium on promoting participatory mechanisms to enhance citizen participation. This has found echoes in the major social charters that have emerged out of the UN's social and development summitry, especially the WSSD processes.

The plight of the poor is not made easier by their lack of access to education, public services, and infrastructure. It is not so much the absence of work or assets that is an albatross around the necks of the poor: it is rather that their assets and work are insecure, unprotected, and of low productivity. Other vulnerabilities crowd in poor communities, but especially women have little political voice or human rights. By contrast, when the poor are legally empowered, it expands the fiscal space for government as more poor people seek opportunities in formal employment (Brautigam 1996). More and more people develop a stake in the social order, and with income security come greater savings, investment, and property acquisition. Mechanisms of social protection and labour rights encourage private sector development, competition, and productivity. The rule of law in Africa is poorly articulated because ruling elites do not view it as a driver of progress or capable of unleashing creative forces of prosperity. Legal empowerment that rolls back the frontiers of poverty requires deep-rooted change in African society where there are currently serious deficits in constitutional and legislative frameworks, law enforcement, governance, and public administration (Appleton and Mackinnon 1996). It is not surprising, therefore, that a host of G-8, African as well as World Bank and IMF efforts have encouraged democratic and legal improvements and governance reforms, leading to the spread of constitutional reform and overhauling judicial systems. This comes alongside pressures for African countries to improve their regulatory and business environments, and remove institutional obstacles to trade.

The HIV/AIDS pandemic rages across Africa with destructive effects. According to UNAIDS, close to 30 million people in Africa are living with HIV, and there were 1.7 million new infections in 2007 alone. The economic impact of the pandemic in Africa is estimated at between 1 and 1.5 per cent of GDP growth (Drummond and Kelly 2006). The longer-term impact is even more serious given intergenerational losses of human capital, resulting from lower educational achievement and impoverishment of affected households. Scaling up of prevention, care, and treatment is urgently required to produce better epidemiological outcomes and to prevent significant deterioration.

UNAIDS has presented three scenarios that provide comparative estimates of expenditure on HIV/AIDS and new infections in Africa from 2003 to 2025. In alternative scenarios, between $70 and $195 billion would be needed to finance HIV/AIDS interventions over this time horizon (UNAIDS 2005). The magnitude of long-term financing and the severity of the pandemic across Africa relates to global governance on several fronts. The UN started its programme for HIV/AIDS in 1996, followed by a Global Fund to Fight HIV/AIDS in 2001 with a $10 billion budget. While in the 1980s most African governments were in denial about the existence of HIV/AIDS, the trends clearly demonstrated that it would precipitate a public health and social crisis. For this reason, UNAIDS brought the capacities of ten UN agencies together around a common agenda. In January 2000, the UN Security Council adopted Resolution 1308, which formalised HIV/AIDS as a threat to international peace and security. In the same year, MDG targets were set to reduce prevalence levels. In April 2001, African leaders produced the Abuja Declaration and Plan of Action, which recognised HIV/AIDS as an emergency that had to be addressed with utmost urgency. Then representing the most far-reaching initiative by a single country, the United States committed $15 billion over five years in 2003 through the President's Emergency Plan for AIDS Relief (PEPFAR). In July 2008, this was renewed for another five years with a $48 billion pledge. All these initiatives have come together in a single stream to form the most enduring set of advocacy and strategic interventions to combat the pandemic, demonstrating the possibilities inherent in global governance (Iliffe 2006).

9.1.4 Good Governance and Capable States

Addressing the three challenges above will require capable and democratic states. Empirical evidence shows a causal link between good governance and economic outcomes (Ake 1996; Engelbrecht 2000). Institutional and bureaucratic quality in general favour economic growth by securing property rights, checking corruption, promoting and protecting individual and group rights and freedoms, and generally restraining government's discretionary power. Conversely, the absence of transparent and predictable institutional frameworks could give rise to rent-seeking and corrupt practices. These diminish public confidence, distort the operation of economic activity, weaken political stability and thereby hamper economic growth and development. In the area of economic and corporate governance, weak African state institutions have encouraged corruption, poor service delivery, the lack of integrity of monetary and financial systems and poor regulatory frameworks, including ineffective accounting and auditing systems (Ikome 2007). Similarly, in the area of political governance, the promotion of democratic processes of political representation produces economic policy outcomes which are more 'elastic', capable of absorbing external shocks more effectively and contributing to sustainable growth (Ndulu and O'Connell 1999; Rodrik 1999).

The most useful indicator of state capacity is actual performance of the state in service delivery and in this regard many African states fail dismally (Chabal 2009). In this regard, the Economic Commission for Africa identified fourteen leading obstacles to good governance and state delivery in Africa. Rank ordered, these obstacles include: corruption, tax regulation/high taxes, bad infrastructure, inflation, crime and theft, uncertainty on costs and regulation, regulations on foreign trade, policy instability, labour relations, foreign currency regulations, safety and environmental regulations, regulations for starting a business, price controls, and terrorism (ECA 2008).

For several years, African states and their international partners have been locked in debate over the sources of the continent's failure to register sustainable growth, with the former emphasising external factors and the latter stressing internal factors. By the 1990s this divide had narrowed considerably and African leaders acknowledged that governance was a major, though not the exclusive source of the continent's inability to develop (Ikome 2007). As a result, NEPAD identified the entrenchment of good governance principles and practices as pre-conditions for Africa's development. NEPAD's three pronged strategy consists of: preconditions for development that include peace, security, democracy, and political, economic, and corporate governance; priority sectors with a focus on infrastructure and human development, poverty reduction, and diversification of production; and mobilising resources which covers debt relief, domestic private savings, and increased aid and foreign investment. More significantly, the African Peer Review Mechanism (APRM), arguably the most innovative component of the NEPAD, provides a framework through which African leaders can hold each other accountable for their commitment to uphold norms of good political and economic governance, in exchange for higher resource flows from external partners in the form of aid, investment, debt relief, and greater market access (Ikome 2007). To date 30 countries have signed up for peer review, indicating their willingness to subscribe to the initiative's transparency and accountability principles and corrective interventions.

9.2 Select Issues in Global Governance and Africa's International Political Economy

Africa presents an urgent development challenge in the global economy and demands for the types of global governance that can assist with addressing its deficits. Its excessive reliance on natural resources as a source of export earnings, fiscal revenues, and national income has led to a higher exposure to shocks in commodity prices and greater macroeconomic volatility. The combination of social inequality and unstable political systems has rendered difficult the adoption of adequate economic and public policies. This is exacerbated by political fragmentation and a lack of consensus-oriented processes. Crucially, the policy management and ownership of African countries' national development strategies continue to be defined and constrained by externally motivated forces. However, into this matrix must be factored Africa's own internal shortcomings with regard to institutions, governance, and democracy. Broadly speaking, Africa's development requires a blend of four types of financial resources flows: official development assistance, private investment (FDI), domestic savings, and debt relief (DBSA and NEPAD 2003). Of these, the two most important key external drivers which have and which will continue to shape Africa's economic development are external financing (through ODA and FDI) and debt; and the shape and form of its international trade to which we now turn.

9.2.1 External Financing and Debt

Many policy makers recognise the need for a substantial inflow of external resources to fill the savings and foreign exchange gaps associated with rapid rates of capital accumulation and growth needed to lift living standards. In sub-Saharan Africa in particular, income levels are too low to generate adequate domestic resources for the attainment of even modest rates of investments and growth. Moreover, since private capital inflows, particularly FDI, lag behind rather than lead growth in Africa, the task of filling the resource gap inevitably falls on official financing and debt relief (UNCTAD 2000). Against this background, the composition and operational modalities of global international financial institutions, such as the IMF and the World Bank, particularly with regard to their un-representativeness and lack of transparency has implications for the countries' development. For example, while much of the business of the IMF and World Bank has concentrated on developing countries, particularly those in Africa, these countries are the least represented in the management boards and other important organs of these institutions.

Poverty reduction continues to be one of the greatest challenges facing the African continent, where more than 70 per cent of the population lives on less than $2 a day. This places significant social welfare demands on African states that often cannot be met because of weak state institutions and limited budgets (Ruiters 2008). Poverty reduction has therefore remained an important element in the continent's dialogue with the rest of the international community over the years. The demise of the Cold War in the 1990s provided a more conducive environment for meaningful dialogue between the Global North and the Global South, facilitating the emergence of global consensus on development cooperation, encapsulated in three major declarations: the Millennium Declaration, particularly the MDGs with a timeframe of 2015; the Monterrey Consensus that set financing targets for development until 2015; and the Paris Declaration that defined aid delivery modes, donor harmonisation, and alignment with a timeframe of 2010. These declarations affirmed the important role of ODA as a catalyst for development and as a complementary source of funding to other resources such as domestic savings, productive investment, trade, and international capital flows.

Since the Monterrey Consensus, global aid to developing countries has been rising, with total net ODA from OECD-DAC registering a 15.7 per cent rise to $119.76 billion in 2008, the highest dollar figure ever recorded. Importantly, however, Africa's share of aid fell by $5.5 billion (17 per cent) to $26 billion, which is one-fifth of the 2008 global aid total, although bilateral aid to sub-Saharan Africa rose by 10 per cent in real terms, reaching a peak of $40 billion in 2006 (African Business 2009).

In 2005, donors committed to increase their aid at the Gleneagles G-8 and UN Millennium Plus 5 Summits. The pledges made at these summits, alongside earlier commitments, were to see an increase of ODA from $80 billion in 2004 to $130 billion in 2010 to help poor countries progress towards the MDGs. Within this framework, aid to SSA was to double to $50 billion or $85 per person by 2010 (Tempest 2005). However, both donors and recipients have acknowledged that the Gleneagles pledges are now clearly out of reach, particularly against the background of the global economic crisis. Even prior to the onset of the crisis, the donor community had fallen behind on their aid pledges by over $39 billion. With the exception of the United States and Britain that still stand a chance of reaching the target of doubling of aid budgets, other DAC member countries, notably Austria, France, and Italy are falling well short of their pledges (Ajayi 2006). There are growing fears that some recession-hit OECD countries will further cut their aid budgets despite reassurances that they will honour their pledges, even in the face of the crisis. Moreover, it appears that the G-8 will be eclipsed by the G-20 in shaping the future contours of global governance and the Africa agenda.

This was already evident at the Canadian Muskoka summit in June 2010, followed by the G-20 summit co-chaired with South Korea thereafter. While the G-20 might have momentum behind it, questions remain about how it will maintain the international focus on Africa that became such a hallmark of G-8 gatherings since the Genoa summit in 2001. South Africa has a critical role to play in this regard. Whatever the G-20's response, this could be complicated by other regional frameworks around which there seems to be little horizontal coordination such the EU-Africa Strategic Partnership and the Forum on China-Africa Cooperation (FOCAC). The broadening of EU-Africa cooperation is framed by a set of priorities that have emerged in the context of strategic summitry and is predicated on "going beyond development cooperation, beyond Africa, beyond fragmentation and beyond institutions" (COM 2007).The priority areas of cooperation converge around integrating Africa into the global economy on the basis of trade, private sector development, industrial infrastructure, research and technology, and debt relief; there is also an emphasis on the promotion of human rights, good governance, the rule of law, and support for peace-building. The partnership, initiated in 2005, anticipates that African states, regional, and sub-regional bodies will have the primary responsibility for their political future and development while the EU will continue to provide support in the above areas but also including better policy and financial instruments to support regional and continental integration, energy security, and dealing with the climate challenge.

While the EU's framework remains tied to its programming modalities and conditions, the FOCAC provides a detailed road map for political, economic, social, and cultural cooperation and an *à la carte* menu with 18 different offerings of assistance with hardly any strings attached other than African countries observing the 'one China' policy (Shelton and Paruk 2008). Over the life of three summits, starting in 2003, an expanded programme for trade, investment, and development assistance has been elaborated. The obvious problem with these frameworks is the extent to which they complement each other as vehicles for development finance. The EU and its member states combined are the largest providers of development finance but the lack of coherence and coordination in its interventions have limited the EU's effectiveness in the fluid and volatile African environment. The EU's rhetorical commitment to 'partnership' has been tested in the crucible of expectations and capacities: the demands of Africa often collide with the EU's ability to meet them (Mayer 2008).

Unfortunately, many sub-Saharan African countries remain heavily aid dependent (see Chapter 3). Aid dependency in Africa may deepen as export and fiscal revenues decline because of the global economic downturn. Uncertainties about aid flows, along with tighter financing conditionalities, may put further pressures on SSA countries' budgetary resources. However, it is hoped that the diversification of the composition of Africa's donors in recent years, particularly with China's emergence as both a donor and an investor in the continent, will mitigate the impact of the imminent downscaling of aid flows from traditional Western donors (African Business 2009). Various debt relief and debt cancelation initiatives are also expected to release resources for Africa's development, despite the shortcomings outlined below.

Decades of near chronic financial deficits compelled African governments to embark on heavy borrowing from both multilateral and bilateral creditors, resulting in the accumulation of huge stocks of debt, most of it owed to official creditors. Africa's debt overhang was worsened by payment defaults and accumulated arrears which, by 1996, had reached over $64 billion, amounting to more than one-quarter of the continent's total debt. Moreover, two-thirds of Africa's debt since 1988 has been due to accrued arrears (see Table 9.2; UNCTAD 1998/99).

Although the continent's debt crisis was originally the result of broader economic malaise, namely, a generation of misguided economic policies, it rapidly transformed into a deep source of continuous economic distress (Gordon 1993). By absorbing crucially needed foreign exchange in debt service payments, Africa's debt overhang has served as a deterrent to public investment in physical and human infrastructure as well as growth-enhancing spending on critical sectors of the economy, including health and education. It has also been a source of erosion of policy credibility and considerable uncertainty for both domestic and foreign investors and contributed to a contraction of investments (Krugman 1988; Gordon 1993; Birdsall and Williamson 2002). Finally, it has complicated African countries' ability to secure new loans from both private and public sources and has generally rendered budgetary management more intractable (Gordon 1993).

In spite of UNCTAD's repeated urging that significant debt reduction was needed to restore growth and reduce the debt ratio to sustainable levels, creditors remained reluctant to embrace any significant debt forgiveness for the continent (UNCTAD 1998/99). The international community's

Table 9.2 Profile of Sub-Saharan Africa's External Debt

Africa excluding North Africa (SSA)	**Before Monterrey (1998–2001)**	**After Monterrey (2002–2005)**	**2006**	**2007**
Total amount of debt (in billion dollars)	217.4	240.4	202.1	200.9
Total amount of debt (as % of exports)	229	159	79	74
Total amount of debt (as % of GDP)	64	48	28.1	24.4
Total amount of debt service (in billion dollars)	16.5	17.6	22.9	23.6
Total amount of debt service (as % of GDP)	4.925	3.625	3.2	2.9
Total amount of debt service, interests (in billion dollars)	6.375	5.525	5.8	6.8
Total amount of debt service, interests (as % of GDP)	1.925	1.15	0.8	0.8

Source: IMF (2007a) in ECA (2008).

favoured approach was to rely mainly on rescheduling through the 1980s, however the ever-declining proportion of debt service being repaid even after rescheduling indicated the lack of prudence in rescheduling as a debt management method (Gordon 1993).

By the mid-1990s, the World Bank and the IMF realised that it was impossible to resolve the debt crisis without allowing for cancellation of significant portions of these debts, including those owed to multilateral institutions. This led to the launching of the Highly Indebted Poor Countries (HIPC) initiative in 1996, later complemented by the Enhanced-HIPC initiative in 1999. The HIPC initiative was designed to reach a sustainable debt position that would allow for growth and development in poor debtor countries. It has been embraced as the most progressive of all the debt management initiatives adopted over the years. However, African governments have criticised it for being too restrictive in its eligibility criteria and the technical basis for determining such eligibility as being too onerous. There are also questions about the adequacy of the debt reduction to be granted and the speed with which countries in need would actually benefit from relief (Machipisa 2009).

In light of the weaknesses identified with the HIPC initiative and the desire to meet the commitments contained in the Monterrey Consensus, industrialised countries launched the Initiative for the Reduction of Multilateral Debts (IRMD) during the G-8 Summit Meeting in Gleneagles in 2005. The initiative was designed to cancel all debts owed by poor, highly indebted countries to the IMF, the International Development Association, and the African Development Bank. Although it is difficult to establish this initiative's full impact, it would seem that Africa's debt burden has been considerably reduced in the past few years, being indeed the one area of the Monterrey consensus where the international community has made the most progress. However, the substantial debt reductions registered on the continent have not translated into a net transfer of resources, partly because in most cases debt cancelation has been used to replace other sources of aid to the continent rather than supplementing them (ECA 2008).

FDI is an important source of private capital for developing countries, including those in Africa. It has the potential to increase national incomes and promote economic growth through the creation of employment opportunities, enhancing skills development, facilitating the transfer of technology and access to foreign markets, and enhancing the productivity and competitiveness of local firms (Ajayi 2006). Indeed, FDI is seen not only as a stimulus of capital formation, but also as an enhancer of the quality of capital stock (Gorg and Greenaway 2006). In the case of Africa, FDI is potentially capable of addressing two of the continent's major investment-related problems, namely, the savings gap and the shortage of technology and skills (UNCTAD 2005a). Unfortunately, however, Africa has historically never been the most popular destination for FDI, the bulk of which has continued to be directed towards countries of the OECD and other developing regions. Paradoxically, the percentage of FDI to Africa as a percentage of gross domestic product is higher than in most developing countries (Ajayi 2006). Moreover, available evidence shows that profitability and returns from FDI are higher in Africa than for any other region of the world, not just for resource-based investments but also for those in the manufacturing and tertiary sectors (Ajayi 2006).

Notwithstanding the higher profitability of African-based FDI, the continent's share of global FDI has hardly shown any significant upward growth, not even during the FDI boom years that began in the 1980s through to the early 2000s. During much of this period, while the world's average of FDI grew astronomically, Africa's average remained very meagre. Moreover, not only have FDI flows to the continent constantly fluctuated, the continent has also attracted shares of FDI far lower than the averages for other regions of the developing world, including Latin America, the Caribbean, Asia, and Oceania (Ajayi 2006).

Some of the reasons advanced for Africa's unattractiveness to foreign investors include the huge information deficit with regard to reliability, timeliness, and limited numbers of domestic investors, and perceptions of Africa as a riskier investment environment than other developing regions. Of all the impediments to FDI in Africa, negative perceptions appear to have been the strongest factor. In the eyes of many potential investors, Africa has for several years, "been seen as not worth the risk, even offering twice the returns" (DBSA and NEPAD 2003: 110). Some of the most prized considerations for investors, such as political and economic stability, transparent

Table 9.3 Share of FDI for Developing Countries (%)

Region	**1993–98 (Annual average)**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**
Africa	5.11	5.12	3.79	9.18	8.36	10.82	7.76
Latin America and the Caribbean	34.49	46.71	38.51	40.91	32.48	28.20	28.95
Asia and Oceania	60.40	48.17	57.66	49.91	59.16	60.97	63.25
Asia	60.04	48.00	57.54	49.86	59.16	60.91	63.2
West Asia	2.52	0.82	1.50	3.26	3.67	3.91	4.20
East Asia	37.15	33.25	45.89	36.13	43.28	43.36	45.03
China	27.72	17.33	16.07	21.53	33.89	32.17	25.9
South Asia	2.09	1.33	1.22	1.88	2.89	3.19	3.00
South-East Asia	18.21	12.60	8.93	8.63	9.32	10.46	11.02
Oceania	0.29	0.17	0.12	0.05	0.00	0.06	0.04
South-East Europe and CIS	4.75	4.52	3.59	5.42	8.23	14.49	14.97
South East Europe	1.15	1.59	1.42	2.07	2.44	5.05	4.63
CIS	3.60	2.92	2.17	3.35	5.79	9.44	10.33

Source: UNCTAD (2005b).

regulatory and corporate governance regimes, reasonable market size and easy market access, have been in short supply on the continent. These negative perceptions feed an exaggerated 'Afro-pessimism' and have amounted to sweeping generalisations about the continent, obscuring the continent's diversity in economic performance and the huge opportunities that some countries offer. In fact, the tendency to look at Africa as a single investment destination, rather than an aggregate of different countries with differing economic and political environments has been very misleading (UNCTAD 1998/99).

African governments have been aware of these negative perceptions and have in recent years evolved national and regional policy frameworks to address them. One of the most important regional frameworks in this regard has been NEPAD, which not only identified foreign investment as a crucial source of development financing but also clearly articulated steps that need to be taken, including governance reforms, to attract greater investment flows to the continent (Rukato 2010). The institutionalisation of good governance and the entrenchment of a culture of peace and security and regional integration have also received greater attention at the AU level in recognition of the need to broaden Africa's economic space to make it more attractive to both domestic and foreign investors. For these efforts to yield the expected results, Africa's external partners, especially the EU and OECD countries have to support them by reviving the dwindling political and material support for NEPAD and Africa's broader integration agenda. The EU could also help to correct distortions of the continent's image by encouraging prospective investors. There is a critical need to focus multilateral support for transport, telecommunications, and financial services to help improve Africa's investment climate. The NEPAD-OECD Africa Investment Initiative, underpinned by the OECD's Policy Framework for Investment, aims to mobilise private investment for poverty reduction, job creation, and sustainable development and is meant to support African countries to design, advance and implement a reform agenda that improves their investment climates and the continent's image as an investment destination. The NEPAD-OECD initiative has recently been complemented by Africa's Investment Climate Facility to promote partnerships between private companies, development partners, and receptive governments.

Until the onset of the global economic downturn, net FDI flows to Africa witnessed considerable growth, partly as a result of the prices of raw materials and improvements in macro-economic stability (McKinsey 2010) and the general growth in the global economy driven by emerging markets. FDI flows grew from an average of \$11.9 billion in the period before the adoption of the Monterrey Consensus, to an average of \$18.1 billion in the post-Monterrey period. Although the increase in FDI to Africa coincided with the adoption of the Monterrey Consensus, there is no evidence that it is the product of the donor community's efforts to meet their commitments under this initiative. An alternative explanation would ascribe growth to encouraging efforts and strategies undertaken by a majority of African governments themselves to attract FDI. However, this does not appear to be the case because the donor community's support of these efforts has been judged as being largely insignificant (ECA 2008). Against this background, the dividends of foreign investments in Africa in terms of growth acceleration, technology transfer, employment, and poverty reduction have been rather mixed (Ajayi 2006).

9.2.2 International Trade

More than any other developing region, Africa's heavy dependence on primary commodities as a source of export earnings has meant that the continent remains vulnerable to market vagaries and weather conditions. Price volatility, arising mainly from supply shocks and the secular decline in real commodity prices, and attendant losses in terms of trade have exacted heavy costs. While about 70 per cent of developing country exports are manufactures, Africa has hardly benefited from this boom. Africa's share of world merchandise exports fell from 6.3 per cent in 1980 to 2.5 per cent in 2000 in value terms. By 2006, this situation had hardly changed. Its share of total developing country merchandise exports fell to almost 8 per cent in 2000, dropping further to 5.9 per cent in 2006, nearly a third of its value in 1980, while the share of world manufactured exports remained a little below 1 per cent. By contrast, Latin America's share of manufactures has risen from 1.9 to 4.6 per cent of global exports (UNCTAD 2008). Africa has also fallen behind other regions of the world in exports of non-fuel primary commodities.

The general trend suggests that most African countries have been losing market share in commodity exports to other developing countries, while at the same time they have been unable to diversify into manufactured exports. Africa's difficulties in maintaining market share for its traditional commodities derive from its inability to overcome structural constraints and to modernise its agricultural sector, combined with the high transaction costs of trading. Failure to increase productivity in agriculture has meant a loss of competitive advantage in producing cocoa, tea, and coffee to more competitive producers in Latin America and Asia (Delgado 1996). The loss of market share in cotton and sugar is largely due to high subsidies and domestic support for less competitive producers in the United States and Europe. Overall, Africa's trade performance reflects its inability to source cheaper finance, efficient transport and logistics networks, and increased capital resources and skills, all of which play an important role in international trade (Mbekeani 2005). The private sector in many African countries is weak and incapable of competing in global markets. Poor information technology and financial services infrastructure, lack of institutional capacity, and cumbersome and often corrupt customs formalities also greatly increase transaction costs.

Africa's trade burden is compounded by problems of market access. After the Uruguay Round of trade negotiations, African governments were faced with more onerous multilateral obligations yet gained little in market access (Bullard and Chanyapate 2005). Moreover, the commodity preferences and quota benefits which African countries enjoyed under some schemes such as the EU's Lomé and Cotonou frameworks have been substantially eroded because of the WTO obligation for trade compatibility and reciprocity, even though the latter can be asymmetric in timing and content.

The EU obtained a waiver in terms of Article 1 of the GATT to continue the preferential regime until December 2007 after the expiry of Lomé IV in 2000 and the conclusion of the successor agreement under Cotonou. However, starting in 2008, Economic Partnership Agreements (EPAs) have come into force which are reciprocal and WTO-compatible. EPAs cover substantially all trade and are to be implemented within 10–12 years. The EPA logic is that liberalising all trade between the EU and Africa, combined with wider and closer economic cooperation and support for social development, will lead to economic growth and poverty reduction. EPAs have become contentious because African countries face the prospect of a drop in tariff revenue, which will be difficult to offset by diversifying fiscal revenue. Ironically, while the EU's strategic partnership posits a different kind of relationship, its trade and economic cooperation still needs to transform the basis of Africa's integration into the global economy in ways that facilitate poverty eradication and sustainable development (ECDPM 2006). By contrast, the United States' Africa Growth and Opportunity Act (AGOA) offers preferential access to its market and by 2008, 40 countries were eligible. But trade preferences are not an unmitigated blessing: many countries that could have benefited from AGOA's clothing and textile regime have nevertheless been bound by its restrictive rules of origin, and the main beneficiaries have been countries with oil reserves; the United States now imports more oil from Africa (22 per cent) than it does from the Middle East (17 per cent). Countries like South Africa with significant beneficiation and manufacturing capacity have also benefited.

But it is particularly the Doha Round, which started in late 2001 with its emphasis on development outcomes, that has not delivered any benefits in terms of special and differential treatment for African countries, especially in improving their capacity to trade and addressing some of their serious supply-side constraints. The Africa Group, supported by both the G-20 of emerging economies and the G-90 of least developing countries in the WTO, have made a case for greater 'policy and development space' in agreements, especially as these relate to Uruguay Round obligations on intellectual property, investment, and services. The central thrust of these obligations is market liberalisation and unmediated integration into the global economy, which African countries view as antithetical to their own development objectives and which further restrict their rights to engender policies that favour their own growth and industrial upgrading (Wade 2005).

The Doha Round was very important for Africa's 35 least developed countries and their particular needs and interests, especially given their weak position in the Uruguay Round. Because of the uneven distribution of production and trade capacities, African countries lost out from global trade liberalisation in absolute and relative terms. This was because they could not offer much in the complex, cross-cutting negotiations on reciprocal tariff reductions and other mutual concessions agreed on by developed countries. The Doha Round was thus seen as introducing measures that would address the imbalances of the Uruguay Round by ensuring that outcomes would be developmental and thus favour African and least developed countries through better market access by liberalising agriculture, services, and reducing tariff and non-tariff barriers on industrial goods. Rule making would also be simplified to assist developing country participation in negotiations in key areas such as anti-dumping, subsidies and countervailing measures, regional trade agreements, and dispute settlement. The Round also devoted attention to the issues of technical assistance and capacity building but importantly for African countries, the Doha platform provided the basis for more enforceable provisions on special and differential treatment that departs from the previous 'best endeavour' voluntarism. In addition, the 'development package' would also include better export treatment for cotton producers and aid-for-trade.

Despite ministerial meetings over nine years to move the round forward, little substantive progress has been made, raising fears that the Doha Round had collapsed (Narlikar and Wilkenson 2004). The most contentious dispute bringing the round to this crisis point is agriculture liberalisation and how this can be traded off for market access for industrial goods. This issue has drawn the battlelines between the North and South in the WTO. Pernicious protectionism in developed country markets has impeded Africa's export growth potential. Total subsidies amount to more than half of developed country imports from developing countries and about ten times their concessional aid (Supper 2001). In the context of sub-Saharan Africa, annual OECD transfers to agriculture and highly protected industries (about $470 billion annually) are equivalent to 241 per cent of the region's combined GDP. African countries confront other distortions in the form of tariff peaks and quotas, anti-dumping, and countervailing duties imposed on imports. Then there are unjustified sanitary and phytosanitary import restrictions, production, and investment subsidies for both agricultural and industrial production and anti-competitive practices by multinational companies that also have adverse effects on African countries' market penetration potential (Bullard and Chanyapate 2005). As Sen and Drèze (1989) have observed, the disparities between rich and poor countries must be understood in the context of the dual presence of abject misery and unprecedented prosperity in the world. The failures in the Doha Round certainly reinforce this notion.

9.3 Critical Uncertainties

The uncertainties that arise from this chapter derive from the fluid, elastic, and contingent nature of global governance. Critical in this regard is the legitimacy of global governance structures and processes. As Messner (2007) rightfully cautions, "[e]xclusive global governance concepts, concepts that trust only in the participation of the strong actors, overlook the basic importance of legitimation as a political resource" (119–120). Dramatic changes in the global environment have raised the stakes in how African countries manage their domestic development challenges. This is because, as Rodrik has argued, "[i]ntegration is the result, not the cause of economic and social development" (2001: 56). While greater integration of world markets has expanded opportunities, the costs of policy failures and structural weaknesses have been magnified. Africa has the 'advantage of backwardness' to benefit from markets, resources, and technologies for its own development but only if governments can implement key policies and programmes. Otherwise African countries will remain vulnerable to the vagaries of international forces over which they have little control.

The critical uncertainties which follow can be framed against the backdrop of major systemic changes. Firstly, the trading environment has evolved in a more liberal direction, with extensive reductions in tariffs and quantitative restrictions on the movement of goods and services. The growth in trade co-exists with protectionism and the marginalisation of poor countries. Secondly, the growth of international capital markets has resulted in removing restrictions on financial flows. This mobility of funds also increases the volatility of financial markets, as recurrent crises bear testimony. Thirdly, there have been shifts in thinking about development assistance and finance, raising questions about their effectiveness in spurring growth or alleviating poverty. Hence the decline in Western aid to Africa generally. Fourthly, the technological revolution has demonstrated its potential to raise productivity but access turns on the quality of human capital in the domestic economy, an area where African countries have severe deficits. And finally, climate change is the world's most critical environmental problem and will have especially deleterious consequences for Africa.

The first critical uncertainty relates to the future of international organisations and global governance that have a direct impact on Africa. The scale of the challenges requires the mobilisation of resources and the legitimacy and authority to enact and enforce agreements. This uncertainty is compounded by problematic features such as high transaction costs, difficult and highly politicised decision-making procedures, divergences between goals and motivations, and differences between organisational cultures and styles. There is also the normative preoccupation, mainly by global civil society, with democratic accountability in global governance, which is observed more in the breach. The diffuse nature of global governance is such that there are too many voices that claim to speak for or on behalf of Africa, drowning out those from Africa which ought to be heard. The spectrum in the former includes the UN and its agencies, the EU, the G-8, the G-77, the Bretton Woods institutions, the World Economic Forum, and the World Social Forum, to name but a few. Matters are not helped by the institutional fragility and embryonic nature of the AU, which is such that the organisation still lacks agency to advance the collective interests of Africa in global forums. While Africa's geo-political position has certainly improved in the wake of heightened commodity demand, it still occupies a position of 'structural irrelevance' in a global context of turbulence, flux, fragmentation, and disequilibrium. This 'structural irrelevance' will only be reinforced if key agreements on trade, development finance, debt, democracy and governance, and climate change are not reached in a manner that more sensitively takes African concerns into account. The effects of this uncertainty could be mitigated if the AU implements key structural changes arising from its summit in Ghana in 2008 to transform its operational and administrative machinery from a Commission to an Authority with competences to represent and negotiate on behalf of the entire continent in strategic areas of trade, peace and security, and development cooperation (Ikome 2010).

The second critical uncertainty relates to what Rosenau and Durfee call the emergence of "a complex multi-centric world of diverse actors…replete with structures, processes, and decision rules of its own" (1999: 40). This multi-centric world intersects with one that is state-centric, hence the density of actors with different agendas and temperaments who collectively make up the system of global governance. The proliferation of actors that are bound by sovereignty, namely, nation states and non-state actors such as international organisations and social movements help to explain why global governance systems have not been able to deal adequately with Africa's development dilemmas. They all behave in different ways, depending on the issue and their interests and this is very evident in the African setting where heterodoxy is often the norm. The EU, the United States, China, the UN, the IMF and World Bank, and WTO all follow very different behavioural patterns when it comes to Africa. Notions of partnership have therefore failed to generate real policy traction and remain platitudinous. Yet, the great paradox is that "there is a desire to control, steer and address all levels of human activity that have transnational repercussions" (Knight 2009: 178).

There is, however, a great strategic opportunity for the G-20 to emerge as a prominent player on issues of global governance and to anchor future debates on how a better and more enduring social contract can be developed among the multiplicity of actors and plurality of interests. As such, the G20 "is representative of a fundamental shift in the way power is distributed globally" (Cargill 2010: 14). This holds special promise since the majority of G-20 members are developing countries and hopefully will bring a greater sensitivity to how differing perceptions of development in Africa can be brought together to generate more consequential and sustainable outcomes. This is the primary moral and economic imperative for Africa, especially with regard to what has been called the 'triple bottom line': social development with equity; economic growth with financial performance; and environmental protection with a green future.

The third critical uncertainty relates to the role of African governments as agents of development. Because of their colonial and neo-colonial progenies, African countries are very heterogeneous but all of them are united in the survival and shoring up of the African state in its current form in the midst of often disorderly domestic and continental politics. As Hyden argues, "political leaders in Africa are concerned with building and managing the state out of chaos and ambiguity" (2006: 264). The prevalence of informal practices and neo-patrimonial forms of rule render the state weak, fragmented, and unconsolidated. This institutionalised informality has impaired the emergence of a rational Weberian type of state capable of authoritative management of a country's resources extending its legitimacy across the polity. The prominence of personal rule and 'Big Man' politics accounts for ongoing authoritarian tendencies that circumscribe the prospects for development. The third wave of democratisation in Africa more or less coincided with the erosion of the autocratic patrimonial state in Africa. This provided the strategic opening for democracy and rule of law conditionalities in Africa to become an integral part of the global governance script (Hyden 1999). Ironically, sclerotic political cultures and despotic traits continue to co-exist with positive changes across the African political landscape. The vast majority of African countries have opened their political systems or acceded to some form of multiparty rule. Many have instituted substantive reforms, ranging from token liberalisation to the irrevocable adoption of democratic institutions and constitutional forms of government based on checks and balances and civic freedoms. In particular, authoritarian regimes have come under greater pressure as they experienced increased civil society mobilisation from below and often vocal popular repudiation of personal rule, elite domination, and official corruption (Young 1999). The APRM, endorsed by a range of international actors, has also brought salutary vertical pressure to bear for African countries to better conform to prescriptions of transparency, accountability, and good governance.

9.4 Trajectories to the Future

As the critical uncertainties suggest, the scales of global governance and Africa's future development are delicately balanced. As we have attempted to demonstrate, an array of forces could conspire to tip the scales either towards cycles of virtue or cycles of vice. The calculus of choice can be that stark. In a global context marked by tectonic power shifts and evolutionary changes, choices are underpinned by new ontologies of power and wealth, and a normative quest for global equity. Africa's future development and that of global governance bring into sharp relief the epochal nature of change in ways that highlight the perennial dilemmas and ambiguities of agency and structure. Agency, no matter how wilful and goal-directed, must contend with the limitations, constraints, and even innate inertia of structures with their own embedded norms, rules, procedures, and institutional imperatives. As far as global governance is concerned, these are the constitutive rules and as such they are the 'rules of the game' and serve as means to action. The interaction between agents and structures thus frames the dynamic and context of the trajectories insofar as patterns of causation are concerned but also inform which way the scales will tip.

While a useful metaphor, the cold existential realities in global governance and Africa are far too complex to suggest a simple Manichean binary of virtue and vice. There is also the possibility over the long term that an uneasy equilibrium and stasis will hold, where morbid symptoms co-exist with hopeful signs. Rosenau has emphasised the significance of all forms and levels of order for a larger and truly all-embracing global governance (2009) but there is also the prospect for an exclusionary, self-defeating, and dysfunctional global governance to hold sway. Both forms will have a significant impact on Africa's future development.

Undoubtedly, the paths to Africa's future will be complex and varied. However, the interplay between opportunities, challenges, and structural constraints point to three possible cycles of virtue, vice and maintaining the status quo.

9.4.1 Africa Rises on a Virtuous Cycle

Reassuring resonances come together to underpin this trajectory. Foremost among these is that Africa starts to reap the rewards of deepening ethical norms of governance, human rights, and democracy and developing a culture of responsible leadership. The 30 countries which have made difficult policy adjustments and introduced tough legal, institutional, and regulatory reforms on the basis of the APRM constitute a new geography of ethical governance in Africa. This helps to revitalise NEPAD processes and spurs efforts to make regional integration work. In the AU, these countries form an ad hoc 'APRM reform axis' that moves the Commission towards becoming a genuine supranational Authority whose domain of competences in trade, peace and security, and development cooperation launch it into the circuits of global governance. Desultory and adversarial negotiations in the WTO, the Bretton Woods Institutions and with major partners such as the EU and United States make way for more integrated trade, debt relief, and development finance architectures that fundamentally reshape previous hierarchical arrangements. China immediately sees relative and competitive advantage in these developments and becomes a major catalyst in securing a new UN 'Global Development and Security Compact for Africa'. With China's support, the Compact finally includes a principled agreement between the P5 and the AU Authority to give Africa a permanent seat with veto power on the Security Council although which country will represent Africa is hotly contested.

On the basis of Africa's growing strategic importance, the global race for commodities and rising post-recession demand gives African countries greater bargaining power. In this process, the AU Authority is able to secure better market access, attract higher volumes of private investment and development assistance, sue for deeper debt relief, and win firm commitments for mitigation and adaptation financing in reducing carbon emissions and transferring green technology. Quite critically from a global governance perspective and with the Authority providing the impulse, the G-20 turns the APF into a stronger coordinating mechanism to ensure that international agreements promote Africa's irreversible progress in achieving the MDG targets. And drawing on the synergies between the G-8's Kananaskis African Action Plan and NEPAD's Medium to Long Term Action Plan, innovative agreements provide the conceptual, policy, and financial basis for better management of regional public goods. This proves highly consequential for the emergence of regional growth poles and for unlocking Africa's potential for improving intra-regional trade from 8 per cent of total trade to 20 per cent.

On the domestic front, swelling foreign exchange earnings from commodity exports are used to leverage investment in Africa's infrastructure, and better supply-side management improves value chains, thereby strengthening forward and backward economic linkages and spurring economic diversification. This has positive spinoffs for job creation, employment, and poverty alleviation. These developments help to move Africa's economies out of their rent-seeking paralysis to real production-oriented economic growth led by wider private sector development and greater entrepreneurial opportunities, albeit unevenly spread across regions and countries. The demographic bulge further provides Africa with a rapidly expanding labour force, which accounts for 75 per cent in per capita GDP growth and which is readily absorbed into ever expanding matrices of labour-intensive sectors. Investment in education and skills development, especially in high-level manpower, proceeds apace through NEPAD's African University Network. This is facilitated by the fact that by 2020, most African countries are on track to achieve universal primary education, thanks to the UNDP's Education for All Fast Track Initiative.

In this trajectory, the neo-patrimonial sow's ear of state weakness and mal-appropriation of resources is turned into the developmental silk purse of state capability, accountability, and delivery. The virtues that result from systemically beneficial behaviour and that reverberate from judicious choices and prudent decisions by domestic political leadership and continental institutions have mutually reinforcing effects for an emancipatory global governance.

9.4.2 Africa Sinks into a Vicious Cycle

This trajectory anticipates the apocalyptic forebodings that are usually associated with the worst features of Africa's decline as well as realist and hegemonic readings of global governance. Here the scales in Africa are unfavourably tipped by reversals in gains from governance, multiparty elections, macro-economic and fiscal reform, resolving conflicts, and building regional and continental institutions. Global governance in this scheme is synonymous with managing turbulence, crisis, and structural vulnerability while the global arena is characterised by great disruption, instability, and destructive forces.

The worst structural feature of governance in Africa, neo-patrimonialism, leads the continent into this vicious circle of impotence. Africa's growing strategic relevance is a liability and an easy path to elite enrichment and resource grabbing. The deleterious effects of elite behaviour are writ large by their greed and dishonesty, and pervasive corruption and cronyism undermine the very substance and neutrality of public power. The statist character of development strategies and lack of public accountability account for declining levels of service delivery such that the Horsemen of the Apocalypse stalk the continent with greater ferocity in the form of worsening levels of poverty and disease, communal violence, and environmental degradation. By 2030, close to 80 per cent of Africa's nearly one billion people are expected to live below poverty thresholds exacerbated by slower growth rates and declining global commodity demand. Cyclical drought, famine, and severe food shortages add another layer of human insecurity to the continent's problems. The prevalence of rentier activities fosters more intimate interdependence among state and private sector elites, relying on the evasion of state regulation, taxation, and oversight. This results in growing collusive expropriation of land, special concessions for resource extraction, and corrupt practices in approving state contracts all of which the extensive Chinese presence across Africa is very well placed to take advantage of. In this trajectory, pervasive disorder becomes instrumentalised in the state, society, and regional bodies (Chabal and Daloz 1999).

Within the AU and NEPAD, the positive ideological climate based on participation, development, and democracy gives way to cynicism to such an extent that the 'viral load' in its membership affects and infects their political integrity and operational efficacy; they turn into institutional shells given to issuing fatuous declarations. The charismatic and millenarian premises of political leadership discourage any international engagement that thwarts the designs and imperatives of state and regime security. Indeed, military and defence establishments again emerge to shape and define the nature of African politics while the AU is reduced to protecting the sovereignty and territorial autonomy of its members against the worst excesses of human rights abuses and repression of civic freedoms.

In this trajectory, global governance institutions and actors fail to adequately address the quantum of Africa's growing humanitarian, economic, and environmental challenges. Rather, global governance becomes a Darwinian struggle to maintain hegemony and there is growing recourse to hard military power to project dominance and influence. The dark underside of globalisation becomes more evident as transnational criminal organisations and networks take advantage of a more borderless and ungovernable world in a manner that renders Africa particularly vulnerable. Despite the best efforts of emerging powers, the G-20 disintegrates amid great acrimony about how to manage the growing divisions and tensions between North and South. Developed countries retreat into their protectionist enclaves, abandoning international obligations on trade, development cooperation, debt, and climate change, thereby leaving global governance more balkanised than ever. Not surprisingly, the WTO collapses under the weight of its own contradictions, and the Bretton Woods institutions led by the United States impose more stringent lending and concessional criteria on developing countries, limiting their involvement in Africa to providing restricted budget support. The EU and the United States also introduce tougher market access measures for African exports, while China absorbs most of Africa's commodities on onerous and exploitative conditions of tied aid and full liberalisation of its markets and service sectors. International engagement in Africa thus follows a political logic rather than an economic rationale, preserving the fundamental structures of power and elite domination while African societies suffer from growing social fragmentation. The atrophy and functional breakdown of the AU and NEPAD has a knock-on effect on regional bodies. Coupled with the exigencies of neo-patrimonial rule, this reduces Africa to a chaotic and atavistic environment.

In this characterisation, global governance provides the secular base on which the socio-political superstructure of domination, control, and exploitation rests and from which Africa has little to benefit, burdened as it is with its own welfare, delivery, and governance failures and shortcomings. This trajectory then invokes two of the timeless lines from WB Yeats' *Second Coming:* "Things fall apart; the centre cannot hold....The best lack all conviction, while the worst are full of passionate intensity" (Malan 1969: 58).

9.5.3 Africa Maintains the Status Quo

In this trajectory the pendulum swings between promise and despair. That is the central message and theme of this chapter's narrative. Economic growth will improve the plight of the poor, mainly in those countries that subscribe to principles of good governance and accountability, while predatory behaviour is bound to continue in others, especially those which are oil rich and which tend to be authoritarian. African governments will maintain a notional commitment to establishing democratic forms of government based on multi-party elections without entrenching norms of good governance or without these translating into stronger forms of economic enfranchisement of citizens or better welfare provision. African countries will continue to sign and ratify regional and continental pacts that do not move the continent any further along the frontiers of growth, security, and development, while regional and continental bodies are bogged down by their own institutional inertia and weak political foundations. The same would apply to international agreements and conventions, as with the signing and ratification of the Rome Statute and the International Declaration on Human and Peoples Rights, which are often violated with impunity. At the level of global governance, the ambiguities of the 'pledge paradox' are bound to continue: the more commitments are made to Africa, the less is delivered. This is particularly the case with reform of the global trading system, providing better and higher volumes of aid, cancelling more debt, dealing with climate change, and offering more investment. The density of actors and processes continues to make global governance a messy affair. Consequently, the global governance system will remain bereft of the necessary political will to make normative agency more meaningful while Africa stumbles along and muddles through at its own idiosyncratic pace.

9.5 Conclusion

Notwithstanding the uncertainties that still surround Africa's growth and development prospects, Africa can no longer be described as a 'hopeless continent'.

However, despite the great promise and positive effects of growth, democracy, and good governance alluded to, economic conditions in Africa are likely to remain difficult, subject to vagaries and difficult circumstances. This relates especially to capital flows, terms of trade, growth and employment, investment and savings rates, and the political environment. These are too unstable and variable to attain needed poverty reduction targets set in the MDGs, and if not judiciously managed at political and institutional levels, imply the further marginalisation of Africa in the world economy, notwithstanding the G-20 injunction that Africa should not be left behind in any global recovery programme that addresses the current global recessionary climate. Africa's prospects and challenges can be disaggregated into two continuums: domestic and international.

A bold domestic vision in policy design and implementation is critically needed. This must include monetary and fiscal discipline, macroeconomic stability, promoting entrepreneurship, good governance, and effective institutions. As shown in the virtuous cycle trajectory, these frame the challenges of building developmental states in Africa that are capable of enhancing prospects for economic growth, especially for a growing segment of consumers. This must include a focus on human and physical infrastructure and promoting effective market and regulatory institutions. In this regard, China and Asian Tiger models may be relevant for Africa. Recent developments in Africa's regional integration agenda are also encouraging with regard to creating common markets for goods, services, capital, and labour. This takes on added significance since between 2004 and 2006 intra-African exports only represented 8 per cent of total exports.

At the international level and since the adoption of the Paris Declaration in 2005 and following its revision in Ghana in 2008, better and more effective aid and debt management has become an African development imperative. The question remains whether, in the current climate, existing pledges can be sustained notwithstanding the G-20's commitment to Africa at its London summit in 2009. If not, this will have a lasting and profound effect on Africa's growth and poverty reduction prospects. The enhanced IMF facility of $500 million for assisting poor countries through the financial crisis will prove critical for Africa's future. As suggested, Africa would also benefit from a revived Doha Round and ongoing support to meet the MDG targets. It is encouraging that the G-8 at its meeting in l'Aquila in Italy agreed with India, Brazil, China, Mexico, and South Africa that the Doha Round ought to be saved; if this happens, this will be good news for Africa.

There has been a critical ideological and normative shift in Africa and globally. This firstly relates to Africa taking greater responsibility for its own destiny and seriously adhering to the injunction to seek 'African solutions to African problems'. Secondly, at the global level, the mood has changed from what external development partners can do *for* Africa to what they can do *with* Africa. This articulates the fundamental emancipatory responsibility of global governance in all its hues and forms. As such, Africa's development will remain one of this century's great challenges.

Note

1. The Action Plan defines eight key commitments: promoting peace and security; strengthening institutions and governance; fostering trade, investment, economic growth and sustainable development; implementing debt relief; expanding knowledge, improving and promoting education; improving health and confronting HIV/AIDS; increasing agricultural productivity; providing finance to mitigate the effects of climate change; and improving water resource management. Interestingly, new development aid is excluded as part of the G-8's aim to move away from this emphasis.

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10
Africa Toward 2030: Scenarios for the Future

Erik Lundsgaarde

As the preceding chapters have indicated, even when the discussion of possible futures is limited thematically, the exploration of interaction effects with other key dimensions of change is inescapable. For example, pathways of demographic change are difficult to understand without reference to the policy context that influences how resources are allocated to specific priorities; the influence of emerging actors over African development prospects is hard to assess without knowing how other actors within and beyond Africa might respond to this engagement. This chapter seeks to draw together the possible trajectories presented in the individual treatments of drivers of change through the presentation of four generalised scenarios for Africa's future. These scenarios thus serve a synthetic function in the present study, underlining the interaction of different forces in shaping the future and highlighting possible variations in outcomes suggested by the foregoing analysis. They are written in a similar retrospective form, from the standpoint of an observer describing developments over the previous two decades in the year 2030. As noted in Chapter 2, it is important to reiterate that these scenarios are not intended to represent deterministic pictures of what Africa's future will look like. Rather, they are designed to offer a basis for reflection that researchers and policy makers may use to think about their own assumptions about how the continent's future could evolve.

The simplified procedure for constructing scenarios presented in Chapter 2 involves selecting two key dimensions of uncertainty that can provide a framework for identifying a broad range of variation in outcomes. The dimensions selected to orient the scenarios offered here are informed on the one hand by the analyses of drivers of change and the discussions of key uncertainties contained therein (see Table 10.1 for an overview) and on the other hand by theoretical considerations, keeping in mind the quality of scenarios as thought experiments. These dimensions reflect the recurrent and basic theme that African development prospects are shaped by forces that are both exogenous and endogenous to the continent. The analytical relevance of accounting for these two dimensions is underlined clearly in the treatment of political transformation in Chapter 7, in which Meyer indicates that the study of African politics requires attention both to the nature of the relationships of African states to other actors in the global political economy and to the characteristics of African institutions and patterns of domestic political organisation. In a similar vein, though Le Pere and Ikome (Chapter 9) highlight the influence of an inclusive and coherent global governance framework over the future course of African development, they also emphasise that the extent to which African governments themselves serve as agents of development represents a key uncertainty that helps to outline the contours of what types of development trajectories are possible.

The main dimensions providing a general logic for the scenarios can be summarised as reflecting the nature of international engagement in Africa on one side and the capabilities of African states to propel development forward on the other. These dimensions are presented schematically in Figure 10.1. Both dimensions can represent multiple forces at work. The international dimension captures not only the nature of the economic relationships between African states and foreign actors through their embeddedness in global trade networks or within the development cooperation relationship, but also the nature of interactions among foreign actors and to inter-state dynamics on the African continent itself. As Grimm and He (Chapter 8) suggest, for example, a main uncertainty in thinking about how emerging actors will influence African development relates to the extent to which mutual learning might occur between the traditional development partners and increasingly prominent non-OECD actors to produce complementary development interventions. The degree to which regional and continental processes of economic and political cooperation can proceed to unlock potential for positive change is emphasised as an important open question in numerous contributions to this volume (see Chapters 4, 6, 7, and 9 for example). Hence, variation in the quality of international engagement (whether it is extensive and cooperative or selective and competitive) provides one main axis along which variations in future outcomes can be envisioned.

The second main axis acknowledges the important role that variations in the nature of domestic capabilities to manage development challenges within Africa could play in shaping the continent's future. As Maharajh et al. suggest in Chapter 6, the concept of capability can relate both to the capacity of governments to take action and to their preferences or will to do so. In the context of building domestic systems of innovation capable of spawning new technologies to address development challenges, Maharajh et al. indicate that investments in education and scientific collaboration as well as policies designed to spur economic diversification are central forces contributing to domestic capabilities within this thematic area. Meyer's analysis of political change (Chapter 7) points to other elements underpinning the emergence of more capable states on the African continent, including

Table 10.1 Main Uncertainties and Trajectories in Chapters on Drivers of Change

Key Uncertainties	Possible Trajectories
Demographic Change • Uncertainties related to rates of fertility and mortality decline • Uncertainties related to policies in other key sectors (education and health, along with general framework conditions) • Uncertainties related to demo-economic relationships, especially the role of major economic engines in spurring development in their regional neighbourhoods	• Population growth control as a first step in a virtuous circle that produces sustainable and equitable endogenous development • Economic growth driven by commitment to liberal policies spurs movement toward more favourable demographic regime • Spread of poverty traps due to uncontrolled population growth and maintenance of weak or subsistence economies
Climate Change • Quality of national-level governance and land regimes • Strength of regional governance systems • Availability of climate and development finance to increase resilience and support adaptation	• Food insecurity and poverty challenges mount due to additional pressures from changing climate • Water scarcity threatens existing development achievements and potentially contributes to conflict • Extreme climate events disrupt infrastructure and human settlements
Systemic Technological Innovation • Prospect of mobilising resources for development through private investment and ODA • Quality of social and economic enabling infrastructure • Ability of African states to create better framework conditions for innovation through governance improvements • Ability of African states to remove bottlenecks to enhanced agricultural productivity	• Africa as a passive consumer, dependent on technological innovation from elsewhere • Technological advancement combined with high inequality produces situation where adoption of technologies is linked to extraction, and is exclusive in character • Africa focuses on technological advancement to serve societal needs; innovations are fostered by advances in education in particular

Political Transformation	
• Nature of the demand for political change expressed by central political actors (parties and parliaments), and how they resolve questions related to ethnicity • Nature of reconciliation of local governance structures with federal structures • Influence of regional organisations in promoting governance reforms at the national level	• Ethnicity and legal pluralism coexist with formal state structures and have little impact on democratisation and state effectiveness • Ethnicity and legal pluralism enter into competition with formal state structures, prevent democratic opening, and prevent state effectiveness • Ethnicity and legal pluralism are increasingly linked with formal state structures and provide a mechanism for enhancing democratic governance and contributing to enhanced state effectiveness
New Actors in International Development	
• Nature of response of traditional donors to rise of new actors • Internal issues in emerging partners: sustainability of economic growth in India or China, managing domestic demands • Reaction of African partners to rise of China and other emerging actors	• Africa's missed opportunity: failure to make continent an attractive place for investment, including for the non-DAC development partners • Absence of cooperation among traditional and new donors contributes to stagnation • Coordination among donors and coordination within Africa improves
Africa and Global Governance	
• Future of international agreements related to development finance, climate change, and democracy and governance • Consistency of behaviour of international actors with diverse interests • Capacity of African governments to act as agents of development	• Consolidation of political reform agenda and heightened bargaining power elevates Africa's position in the global economy • Reversals in governance progress and exploitative external relations lead to deepening developmental decline • Picture of continent is mixed due to differences among poorly-governed and well-governed states

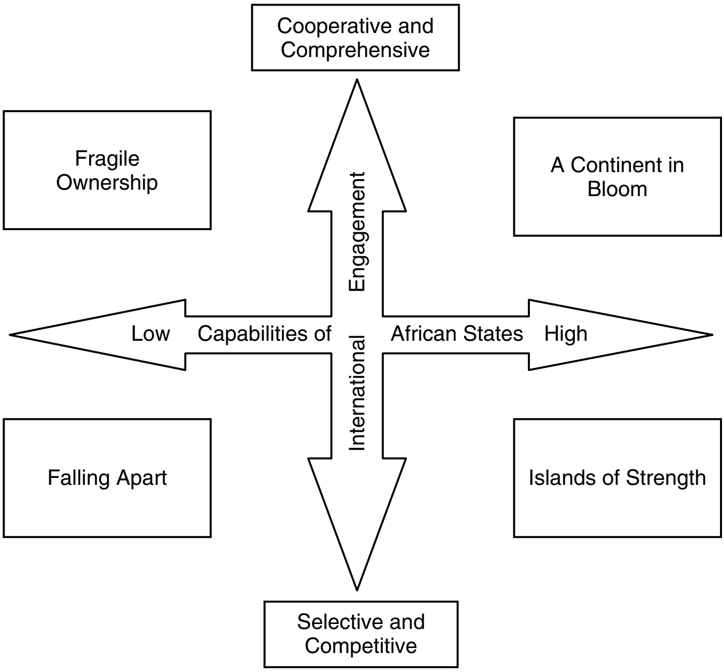

Figure 10.1 Key Dimensions of Uncertainty

how domestic political actors might mobilise and articulate broad societal projects and the reconciliation of possible conflicts in authority between central governments and local governance systems. As with the international dimension, this dimension of uncertainty reflects that outcomes are influenced by a multitude of forces, including the collective efforts of political actors with potentially divergent preferences.

While the identification of main uncertainties is a central element of the scenario approach, alternative narratives of the future can also contain common elements that reflect more predictable trends. In example, one assumption underlying the generalised portraits for the future presented here is the acceptance of the persistence of the diversity of development trajectories of African states due to variations in initial starting points and differences in terms of their available resources and the constraints they face. As Vimard and Fassassi (Chapter 4) aptly highlight in their discussion of prospects of demographic change, Sahelian countries and countries that have recently endured protracted crises are unlikely to see the emergence of favourable population growth dynamics in the near or medium term, whereas North African countries have greater potential to capitalise on previous gains in terms of controlling population growth rates. At the same time, the reference to the challenges that a changing climate poses for African development across chapters in this volume indicates the seemingly inescapable quality that added pressures on natural resource use due to climate change have in exploring the continent's future. Chapter 5 underscores that there is already committed warming in the global atmosphere as a result of historical greenhouse gas emissions. Within the next two decades, this warming is likely to have a constraining effect on African development even if world governments make bold new commitments to future emissions reductions.

If the scenarios share some common implicit assumptions, their differentiation according to the two key dimensions of uncertainty ensures a level of distinctiveness. Table 10.2 provides an overview of the main elements of each of the scenarios presented in the following section. In the first scenario ('A Continent in Bloom'), sustained multilateral engagement and governments committed to equitable growth achieve slow but steady progress in addressing development challenges. The second scenario ('Islands of Strength') highlights the potential for a sharper differentiation among African states over time. A third scenario ('Falling Apart') describes a future where international interest in Africa diminishes and the choices of African governments contribute to deteriorating political order, while the storyline in the fourth scenario ('Fragile Ownership') outlines the possible effects of expanded international engagement on the continent in the presence of governing elites displaying limited interest in pursuing redistributive policies.

10.1 A Continent in Bloom

In 2010, two main lines of thinking about Africa's future seemed to be common among observers following developments in the continent. For

Table 10.2 Overview of Scenario Storylines

Fragile Ownership	**A Continent in Bloom**
International actors expand their engagement on the continent, however their close association with governing elites protecting narrow interests generates growing resentment and social tensions and challenges to state authority mount	Multilateral contributions to stabilisation of the security situation in important regions, the influx of investment in agricultural growth, and commitments of African governments to equitable growth produce steady development gains
Falling Apart	**Islands of Strength**
Struggles within the international community about burden sharing in financing global public goods and limited investments from African governments in their populations feed into rising political fragmentation and growing inter-state conflict	Following declining development assistance flows, the differences in economic performance among African states become more pronounced, contributing to greater divergence in national interests and difficulty in sustaining continental projects

some, Africa was enjoying a revival, gaining prominence due to the added interest that a still booming China displayed in expanding ties with countries across the continent in particular. It would only be a matter of time before global investors would start to tap into the African market in a more serious way, as potential growth rates across a range of economic sectors seemed very promising. While African states appeared to be moving slowly in implementing a continental governance and regional integration agenda, a general commitment to the principles of this agenda was at least reassuring. Others sensed that Africa's place in the global spotlight might be short-lived. With the 2015 deadline for the achievement of the Millennium Developmental Goals (MDGs) in view and many African countries falling far short of reaching them, the governments of the world's wealthier countries appeared unmoved, largely failing to mobilise additional public resources for African development. Given the storm clouds on the horizon related to the changing climate, there were fears that development gains in previous years might be neutralised by a slew of natural catastrophes and rising food insecurity, which could herald political instability and a renewal of frozen conflicts.

Indeed, there were many signals pointing to the potential for more dire development outcomes at this time. As many observers had anticipated, the referendum on the independence of southern Sudan in 2011 served as a precursor for sharpened conflicts between the newly formed states and within them. Major floods in Southern Africa and drought in Niger, Chad, and the Horn region offered ready illustrations of the continued vulnerability of many populations to environmental change. If there was a silver lining in these crises, however, it was that they stimulated new commitments from governments elsewhere on the continent to strengthen common responses. The persisting crisis in Sudan was damaging the reputation of countries across Africa precisely when foreign investors were beginning to take notice of improving framework conditions for doing business. Pleas from outside of Sudan's immediate neighbourhood to offer a lasting solution to the conflict contributed to a mobilisation of African governments within the African Union (AU) to engage with the different parties in the conflicts and increase the multilateral peacekeeping presence. A diplomatic contact group consisting of Egypt, Ethiopia, and Kenya was central in brokering peace in the region.

The aftermath of the Sudanese crisis was important for the future of the continent as a whole because it signalled the character that engagement from the broader international community would assume in the years ahead. A peaceful solution to the crisis was aided considerably by the diplomatic and financial engagement of China, which displayed growing concern about the linkages between political instability and declining economic opportunities in African countries where it had been increasing its presence and viewed added support for peacekeeping and peacebuilding measures as a necessity. China's role in resolving the crisis was welcomed by European states and the United States, which saw new opportunities for collaboration both in the context of multilateral peacekeeping and in development cooperation, as multilateral organisations (the AU and UN) provided the main forums for coordinating assistance in the post-conflict setting. The renewed commitment to continental and regional organisations among African governments encouraged more investment in these organisations from outside of Africa, not only due to their ability to guide regional projects such as the progression of economic integration, but also because they provided convenient forums around which Organisation for Economic Cooperation and Development (OECD) and non-OECD development partners could coordinate development cooperation efforts.

An extension of these steps towards deepened cooperation on the continent and among external actors was sustained support for multilateral peacekeeping in West and Central Africa. Improvements in the general security situation enabled an expansion of agricultural production in these areas. Increasing the area of land under cultivation provided only a partial solution for accelerating growth in the agricultural sector however, and carried with it the danger of contributing to deforestation and soil degradation that might jeopardise the long-term viability of agricultural growth. Public and private investment was needed to expand the productivity of land already under production through the application of fertilisers, increased use of irrigation, and the adoption of new technologies and farming techniques. Increased aid allocated to the agricultural sector provided one source of additional financing – foreign direct investment in agriculture – and agribusiness another. The private investment influx was driven especially by rising global food prices and growing Middle Eastern and Asian demand. In some areas, investment followed from deals to open up large-scale commercial operations designed to produce exports for particular markets. In spite of the added investment that these land deals brought, they also often provoked protests from rural populations. Conceding to rural protestors to avoid the prospect of future tensions related to land consolidation and preferences granted to foreign investors, African governments adopted measures to ensure that foreign engagement in the agricultural sector would help expand rural employment opportunities, support local tax bases, and enhance rural infrastructure.

Rising investment in the agricultural sector visibly bore fruit over a period of several years. In the lead up to 2020, managing the agricultural boom nevertheless presented a variety of governance challenges, as sustaining growth required tackling outstanding land tenure issues, themselves a reflection of the continued negotiation between national governments and rural areas over the distribution of authority. A general awareness of the possible threat that growing intra-country inequalities posed for national cohesion placed redistributive policies at the centre of attention: one result was the expansion of tertiary education institutions and business incubators in secondary cities across the continent to support research and development on locally appropriate technologies and stimulate enterprise creation. Another challenge resulting from improvements in agricultural productivity was the management of growing migration to cities and the need to absorb ever larger numbers of young workers into urban economies.

The expansion of youth employment opportunities was aided by the availability of additional climate finance, which accelerated after 2020. Following years of unfulfilled promises with respect to development finance, the new monitoring mechanisms that accompanied pledges made in the context of G-20 summits held the world's economic heavyweights to their commitments. The initial lethargy of the world's wealthier countries in providing funding for climate-friendly development and climate adaptation measures had been displaced due especially to pressure from major business interest groups that not only saw the growth potential of the African clean energy market and its contribution to a greener European energy market but also feared the consequences of a changing climate for the expansion of trade opportunities with African countries, for example through damage to coastal infrastructure. Large infrastructure projects aimed at decreasing the vulnerability of major economic centres and large-scale reforestation programmes financed externally contributed to dropping unemployment. While international support was important, an increasingly prominent African entrepreneurial class also provided a major stimulus for job creation: African-owned companies not only displayed special savvy in expanding their presence in domestic markets but also made inroads internationally.

With the growing climate challenge and the corresponding influx of global public finance for development, as 2030 approached both OECD and non-OECD development assistance providers retained an active presence on the continent. Partly in response to positive development outcomes such as rising political stability, steady economic growth rates, and improvements in regional trade and food distribution networks, donors in many partner countries began to set deadlines for phasing out bilateral development assistance programmes, preferring to channel resources toward multilateral initiatives and to expand their in-country diplomatic presence instead. Persuaded by the successes of the previous fifteen years and conscious of still significant challenges in terms of consolidating these gains, a new generation of African leadership maintained a commitment to strengthening collaboration within regional economic communities and to pursuing continent-wide cooperation as a mechanism for bolstering domestic capabilities to address persistent deficits. While the continent overall was flourishing and assuming a more prominent place in the global economy, this was no time for complacency.

10.2 Islands of Strength

Over the last twenty years, the fading away of the revitalised continental programme for economic and political development in Africa that had emerged at the beginning of the century was the result of a combination of forces that have made it more and more difficult to consider Africa as a unified entity in anything other than geographical terms. From the vantage point of 2010, this might have been seen as a surprising development to European donors, whose support for continental organisations seemed at the time to be based on the assumption that it would contribute to a convergence in the development pathways of African states by expanding and maintaining peace, promoting the progression of democratic governance, and opening new economic opportunities through accelerated regional integration. Yet European donors themselves played a role in allowing interest in continental initiatives to recede. Though the lead up to 2010 had been marked by a renewal of interest in Africa among European donors, sustained interest in increasing development finance to the continent was limited by persisting challenges of economic and social adjustment at home. The pressure to justify aid in terms of providing a direct return on investment to domestic constituencies contributed to a strengthened focus on bilateral aid provision, which promoted a concentration of public development finance in African countries where positive results of aid were easier to demonstrate in the short-term and economic opportunities for donor firms were more apparent. Fissures within the European Union resulting from divergent preferences among member states concerning the priority attached to development cooperation with Africa introduced further pressure on sustaining European engagement.

While non-OECD actors continued to increase development assistance flows to Africa as European and other OECD donors sought to trim commitments, the availability of external financing from major emerging powers was also not a lasting guarantee. Pressures on the Chinese government to address domestic social issues slowed down its pace of engagement with African states. Facing continuing resource demands, China maintained significant development cooperation relationships in resource-rich African economies, but limited the expansion of development cooperation in states that did not fit this label. Indian aid and investment beyond the resource sector, in contrast, showed no signs of abating in this period, with East African countries benefiting from a diversified portfolio of public and private development finance that supported improvements in regional infrastructure, helped to finance social programmes, and strengthened manufacturing and service sectors in the region.

The more selective engagement of global actors on the continent reinforced the differences between African states with stronger institutional starting points and fragile states. The states that remained the most attractive to investors were states where improvements in governance had already been registered. Aside from the small island states, these countries were generally concentrated in northern and Southern Africa and displayed a higher level of economic diversification. Rising prosperity in Northern Africa in the years leading up to 2020 was driven by the attention of the region's governments to capitalise on declining dependency rates. This was achieved as a result of added investments in primary, secondary, and tertiary education, attention to gender parity within educational institutions, and the high prioritisation of job creation across the region. Due to the changing nature of the European labour market, the young and relatively highly qualified workforce emerging in North Africa proved especially alluring to European firms, which expanded their presence in the manufacturing and service sectors in the region.

A similarly dynamic economic picture was emerging at the southern end of the continent around the same time. Facing the persisting challenge of HIV/AIDS, governments in the region had committed to controlling infection rates in the previous decade. Massive information campaigns and investments in sexual and reproductive health to prevent the spread of the disease had contributed to lower prevalence rates, while investments in treatment and care had helped to improve the well-being and productivity of an important part of the labour force living with the disease. Though these investments placed major pressures on governmental spending, leaders also recognised that the consequences of failing to respond to the HIV/AIDS crisis would be devastating for their economies and societies, elevating the fight against the disease to the highest priority. This fight was a regional as well as a national political priority, accompanying moves to intensify cooperation and expand economic linkages within the Southern African Development Community (SADC), particularly in the southernmost countries represented within this organisation. South Africa continued to serve as a driver of growth in its regional neighbourhood, with South African companies deepening their investment ties, while the government increased its development assistance to its neighbours to enhance political stability and promote stronger economic ties. Development cooperation had nevertheless been controversial within South Africa itself, and only became more politically acceptable as the government confronted the challenge of domestic inequality head on.

Growing economic prosperity in select regions was combined with stagnation in others. In the absence of significant commitments from the international community to finance adaptation to climate change in the Sahelian zone in particular, many governments were overwhelmed by mounting pressures such as growing food insecurity and rural to urban migration. By 2025 the divergence of development pathways across African regions was evidenced in a Northern Africa focused on strengthening a privileged position in the European marketplace and seeing itself as part of a Mediterranean political space to an increasing degree, a Southern African community demanding sustained support for health programmes from the international community while making strides in developing an internal market and engaging with a variety of partners in Europe, Asia, and the Americas, and an East Africa increasingly committed to deepening ties with India. These regions witnessed a consolidation of sub-regional political and economic communities as a primary vehicle for international cooperation.

Though differences in wealth between West Africa and North Africa on the one hand and Central and Southern Africa on the other engendered a certain sense of distrust of the wealthier countries on the continent, there was nevertheless demand from poorer states to renew the continental integration project with the hope that this would provide an avenue for attracting international support in dealing with their unresolved development challenges. However, these demands did not resonate in North African countries, which saw no need to underwrite continental integration processes given their closer ties to the North and East, nor did they resonate in South Africa, which already treaded a delicate line in assuming a leadership role within its neighbourhood and appeared satisfied with its economic opportunities there. One candidate for bridging differences among African regions and jumpstarting continental political and economic cooperation was Nigeria, which had managed to build a more capable state by investing resource revenues in redistributive programmes over the previous decade. The Nigerian government nevertheless preferred to concentrate on maintaining domestic stability given the still tenuous domestic situation and the potential for economic growth expansion within its large domestic market independent of whether it would deepen economic integration with smaller countries on the continent.

Towards 2030, these developments reinforced the international perception of Africa as a collection of states differing widely in terms of their strategic and economic value. Addressing transnational security threats such as drug trafficking and terrorism remained key concerns for OECD governments in the region, and policies favouring stricter border control measures took preference over policies designed to address the conditions allowing illicit economies to flourish in fragile states. As growing inequalities among African countries generated intra-regional migration pressures, the continent's more prosperous states were happy to accept bilateral security support to bolster border defences, fuelling tensions among states expecting more solidarity from their regional neighbours.

10.3 Falling Apart

Having witnessed improvements in governance, the progression of peace and stability, and sustained economic growth in the previous decades, by 2010 the African continent showed signs of breaking free from a still widespread image of the region as a collection of faltering states on the margins of the global political economy. Yet the pathway towards a more prosperous future required addressing multiple challenges simultaneously: expanding food production while limiting land degradation, accommodating a growing number of young people in the labour force, and addressing regional infrastructure deficits in order to stimulate intra-regional trade, to name but a few. To cope with these challenges and build resilient systems of governance that could make African states less vulnerable to events beyond their control, a sustained commitment among African leaders to strengthening the foundations of their political systems buttressed with support from the international community appeared necessary.

The deterioration of the promise that African governments and external actors would confront obstacles facing the continent with steady determination did not happen overnight, but rather followed from gradual setbacks which over time accumulated to make the widespread acceleration of growth and poverty reduction ever more difficult. One early setback emerged from the conflicts within the Sudan in the aftermath of the referendum on the independence of South Sudan in 2011. Initially, both African states working together at the AU level and the international community seemed to be prepared to assume an active role in establishing peace in Sudanese territory by supporting multilateral peacekeeping and providing long-term assistance to contribute to the development of territories affected by conflict. Despite commitments from Asian, European, and North American actors to stabilise the region, however, the issue of how to distribute the funding burden for the mission opened tensions among these actors. Persistent inter-state tensions in the Horn of Africa not only drew attention away from efforts to stabilise Sudanese territory but also indicated that the chances of regional neighbours playing a constructive role in resolving the conflicts were dim.

Reflecting broader lines of international dispute related to financing global public goods, in evidence in stalled discussions on expanding climate financing and in the context of the reform of the United Nations system, demands from traditional OECD donors that emerging powers contribute resources consistent with their weight in the global economy were often met with resistance from emerging powers, which noted that domestic challenges prevented them from increasing their support. Facing economic challenges at home, OECD states responded to this reluctance with greater hesitation of their own as far as providing additional finance for peace and stabilisation and climate adaptation programmes was concerned. This reluctance carried over to other peacekeeping operations on the continent, opening possibilities for a resumption or escalation of conflict in West Africa and in the Eastern Congo.

External actors did not abandon Africa entirely, however. Energy security remained a driver of engagement, and oil and gas resources continued to lure private investors. The prospect that resource revenues would contribute to enhanced public investment in vital areas such as education and health care and infrastructure development within resource-rich states was mostly unfulfilled, as elites saw opportunities to exploit competition for resources and the lowered external demands for political reform that came along with it, using natural resource revenues to strengthen their hold on power. Inequality and social exclusion grew. While resource-poor states had difficulty attracting investment, this was also increasingly true for South Africa due to the enormous pressure that the HIV/AIDS epidemic continued to exert on its economy. The sluggish development of the Southern African regional market and rising concerns about social instability kept many investors away.

Moving toward 2020, the consequences of lacklustre private and public investment over the last decade became more and more apparent. Inadequate financing of education, health, and family planning programmes limited movement away from a trajectory of sustained high population growth. Even where tentative progress had been made on this front in the past, as in East Africa, population pressures mounted. Growing demand for food led to the expansion of land under cultivation, but this offered only a mild reprieve from food shortages, and came with the cost of placing marginal lands under strain and overusing more fertile lands. The dearth of investment in human capital carried along the additional disadvantage of hindering the development of African innovation capacities, reinforcing a dependence on technology imports and limiting the widespread use of technologies to improve productive capacities across the continent.

The large-scale failure to unleash forces supporting rapid improvements in agricultural productivity brought accelerated migration to cities already bursting with low-skilled labour. It also fed resentment among rural populations toward national governments, which were perceived as tightening screws on rural populations for their own benefit by continuing to lease large tracts of prime agricultural land to foreign interests and manipulating food markets to prevent agricultural producers from benefiting from increased demand. This distrust of national governments reinforced support for localised governance structures, seen as more capable providers of public services in rural areas and recognised as allies in levying criticism and placing demands on national governments.

As a wave of natural disasters began to hit different corners of the continent (flooding in Southern Africa, drought in West Africa), existing tensions between local authorities and central governments were intensified. While external humanitarian assistance offered some relief to relatively weak governments in responding to these crises, because this assistance was often distributed through non-governmental organisations that worked closely with local authorities in the rural areas which were most severely affected, it frequently reinforced perceptions of the incapacity of national governments to provide basic services to significant segments of their populations. Indeed, to the extent that governments had a visible role in responding to such crises, it was at times perceived as a hostile one, with an emphasis on maintaining order and preventing massive refugee inflows into cities, giving governments a more coercive face.

The multiplication of tensions between rural areas and national governments set the stage for growing political fragmentation. Competing arenas of authority had already spawned separatist conflicts in Central Africa, however pockets of unrest in East Africa and West Africa were also raising the prospect that new states and not just stronger decentralised government would emerge in these regions. In some cases, the response of neighbouring countries to challenges to authority was to seize an opportunity to extend their own influence in adjacent territories; in others a concern about cross-border spillover effects led to growing militarization of borders. Hence, the rise in intra-state conflict also fuelled increases in inter-state conflict. As the security situation on the continent deteriorated and a growing number of territories were considered to be ungoverned or ungovernable, regional and continental organisations seemed powerless to counter these trends. The questionable hold on authority of some governments, a preoccupation with the maintenance of local order rather than investment in regional processes, and diverging interests among African governments combined to leave regional political organisation stalled.

If Africa had already been considered a marginal global player in 2010, by 2030 its low global status had been amplified by ongoing crises and a steady decline on measures of economic and social development. Imagining how the continent could close an ever widening gap with other world regions required substantial optimism and creativity, and it was difficult to see how the downward course could be reversed without a radical shift. Disengaging from this trajectory would likely require action at multiple levels, with committed political movements within African societies confronting the task of internal political reorganisation and a rediscovery of coordinated engagement among the world's leading economies representing key ingredients.

10.4 Fragile Ownership

In the years leading up to 2015, Africa occupied a place in the international spotlight that it had not always enjoyed. Though the large gaps related to the achievement of the MDGs provided one reason for external actors to invest attention and resources in the continent, the lure of economic opportunities and the association of the continent with emerging transnational security issues such as the spread of terrorist networks and the narcotics and small arms trades arguably provided the stronger motives for OECD and non-OECD actors to strengthen ties to African states.

In comparison to other world regions, states on the continent continued to display a relatively low capacity to govern. Even in states such as Algeria or South Africa, considered among the continent's strongest, internal challenges related to small-scale insurgency or domestic demands for better public services highlighted ongoing challenges to building foundations for long-term stability and prosperity. The dominance of the executive in national governments remained a common feature across African polities. The development of the continent over the next decade was marked by the tension between increasing engagement from powerful external actors and the limited capabilities among African governments to mould this engagement to the full benefit of their populations.

Interest in Africa within the OECD was amplified in response to the continuously expanded presence of emerging powers on the continent. Initial trepidation that China might undermine efforts of OECD development partners to promote governance reforms soon ceded to concerns that China and to a lesser extent Brazil, India, Russia, and Malaysia would leave traditional development partners in the dust as they leveraged public investment into commercial opportunities. In the development aid arena, China's presence across the continent encouraged consolidation in the development cooperation programmes of traditional donors. This was particularly true for European donors, which having previously made commitments to improve their division of labour, increasingly pooled their resources and grew accustomed to the EU flag replacing national flags as the symbol of European development cooperation. Internal differences in Europe reflecting the varied histories of engagement with Africa among EU member states owing to colonial legacies and distinct traditions of development cooperation subsided with the recognition of larger and smaller European states that joint action provided a more efficient way of leveraging resources and expanding economic opportunities across the continent.

The scale of consolidated European development assistance permitted the EU to maintain a prominent position in the aid marketplace. With a larger economy of scale, the types of programmes funded also tended to be wider in scope, as trade-related infrastructure on a regional level assumed a higher priority. Though OECD and non-OECD actors were commercial competitors, their common focus on building infrastructure to expand trade created opportunities for investment partnerships. Cooperation in the African context was seen on both sides as a way of facilitating inroads into lucrative overseas markets. European and Chinese companies in the natural resources and agro-industry sectors saw consolidating stronger African footholds as a key ingredient in expanding their global market shares. The strong position of Angola in both areas made the country a particular star to external investors. European firms investing in African agriculture became a more prominent constituency in favour of further liberalisation in the global trade regime as a result.

For African governments, the high level of investment interest among external actors was welcomed with open arms, and the perceived linkages between public investment and the expansion of business opportunities led OECD donors to focus less on the promotion of democratic values, which had previously distinguished them from the emerging donors. Of central emphasis in the aid and trade relationship was the maintenance of stable relationships with governments that would respect contracts concluded with foreign investors. Hence, donors tended to focus on supporting improvements in governance using a narrower sense of the term focusing on the maintenance of the rule of law rather than broad societal participation in the political process. A trend in external actors favouring interactions with strong executives seemed noticeable across the continent. Although parliaments had been regarded as institutions that could monitor and increase efficiency in public spending and enhance the legitimacy of decisions being taken by the executive, in supporting strong executives, foreign actors were also conscious that legislatures might slow down the decision-making process and attempt to curb their influence.

The concerns that legislatures might put a brake on plans of foreign expansion were well-founded, because as 2020 approached there was indeed growing resistance to the omnipresent actors from outside of Africa who were considered to receive privileged treatment from governments at the same time that persistent development challenges, including insufficient access to education, health care, and energy and the limited availability of employment in the formal sector remained unaddressed. Grumbling came also from the indigenous bourgeoisie in many countries, which felt shunned by their governments due to their limited ability to offer the immediate resource payoffs that foreign investors could provide and their difficulty in competing with the external actors in spite of their insider knowledge of local economies. In rural areas, resentment toward foreign actors built up as governments bypassed local authorities to conclude deals to place ever larger tracts of land in the hands of foreign producers. Often the result of these deals was to enhance agricultural productivity, given improved access to technology and fertilisers; however, the influx of investment in agriculture did not always contribute to improvements in food security, as these operations had a strong export orientation and in many cases did not expand the production of food staples. Associated processes of land consolidation also had the effect of pushing workers away from the land without offering alternative sources of employment.

More fuel was heaped on the fire due to the manner in which additional financing for responding to the climate change challenge was distributed. At a rhetorical level, major donor governments justified new resource commitments as a way of assisting vulnerable populations, especially those whose livelihoods were tied to the land. In practice, the distribution of climate finance did not seem to follow from standards of best practice that

OECD donors had applied to development assistance years earlier, signalling a failure to transfer learning from the development community to the climate regime. Foreign contractors appeared to have special privileges in implementing infrastructure financing, while foreign agricultural producers had no problem attracting adaptation funding to subsidise their operations. Though it was billed as redistributive at the global level, in the end climate finance contributed to reinforcing inequality, and that inequality stoked tensions between populations whose living conditions had barely improved over the course of a decade and an elite viewed as complicit in allowing the economy to be taken over by outside interests.

The character of political organisation resulting from building social tensions assumed different forms depending on the structure of domestic economies and the qualities of the leadership at the helm of individual African countries. In countries where extractive industries continued to play a disproportionate role in the economy, such as in Angola, the Republic of Congo, or Chad, leaders tended to respond with repressive measures, investing resources in the maintenance of security around their sources of income but redistributing little wealth to growing poor populations. Where economies were more diversified and mobilisation of agricultural producers was more extensive, governments tended to demonstrate more of a will to bend, integrating new domestic political coalitions into the political process and shifting toward more strongly redistributive processes. With its diversified domestic market and a history of domestic political contention surrounding extractive industries behind it, Nigeria became a continental success story in crafting an equitable development pathway and increasing domestic prosperity.

When this did not happen, political organisation around alternative sources of authority deepened fault lines within countries, leading to effective state collapse. If Angola had been a beacon of international investment 15 years earlier, resurgent conflict directed against a highly centralised state apparatus now provided investors with a cautionary tale of how easily boom times could give way to crisis. Although external actors remained willing to contribute to stabilisation efforts in spaces of fragmented authority through multilateral peacekeeping and military intervention, international forces found themselves with a persistent image problem due to the quality their earlier engagement assumed that undermined their ability to serve as guardians of peace and stability on the continent. Towards 2030, development prospects for the continent appeared mixed, and it seemed that international engagement had opened new challenges for African populations in many cases rather than offering a vehicle for dramatic improvement from conditions of extreme poverty. This mixed record of engagement reopened time-worn debates about the hazards of external assistance, though given the visible contribution of African governments to deteriorating circumstances, identifying a new political agenda to break from the past was by no means a straightforward task.

Table 10.3 Characteristics of Major Actors across the Scenarios

	African States	**Regional and Continental Organisations**	**OECD**	**Emerging Powers**
Fragile Ownership	Executive dominance persists; integration of societal players varies according to structure of economies	Limited visibility as states serve as focal points for international engagement and major differences in political organisation among African states emerge	Consolidation of coordinated development cooperation in European Union; neglect of societal dimensions of development	Maintain interest in natural resources and agro-industry, expand partnerships with OECD donors
Falling Apart	Logic of self-protection among elites prevails over commitment to investments in human capital and agriculture	Largely powerless in the face of divergent preferences and growing tensions among African states	Reluctant to commit new political and financial resources to conflict resolution; limited private investment	Still attracted to continent's resource wealth, but engagement is not broad-based
Islands of Strength	Varied performance related to governance and nature of domestic investment priorities	In Northern, Southern, and Eastern Africa consolidation of regional communities; stalled continental integration	Domestic pressures limit development cooperation; more selective engagement with good performers	Indian engagement grows while Chinese development cooperation slows
Continent in Bloom	Management of foreign investment to expand rural opportunities; emphasis on redistribution	AU becomes key forum for coordinating post-conflict assistance and a focal point for coordinated action among development assistance providers	Strong commitment to multilateral action; supportive of climate finance while moving toward phase-out of bilateral aid	China embraces multilateralism through peacekeeping; expansion of private investment in agriculture

10.5 Conclusion

As these narratives indicate, scenario development in the qualitative exploratory scenario analysis tradition represents a form of storytelling based on an underlying examination of the main forces propelling future developments.

The general nature of the narratives leaves out many details about developments within individual countries and across the continent. While the open quality of the narratives invites readers to insert their own interpretations of how the future could develop, the incomplete nature of these broad generalisations also points to the necessity of supplementing the approach taken in this book with approaches analysing future prospects at a lower level of abstraction, including both political economy analysis at the national level to understand the behaviour of diverse political actors within a given institutional setting and foreign policy analysis to understand how the relationships between African states could change through time. Between the national level and the continental level, the analysis of the dynamics of change and political organisation within sub-regional organisations such as the regional economic communities represents another critical building block in anticipating future development on the continent as a whole.

The presentation of scenarios as narratives requires thinking through a chain of events that result from the combined actions of the diversity of players shaping the contours of the African development landscape. This orientation suggests that if development actors attempt to reason through the long-term impact of development interventions, they may increase their awareness of the elements of the background context that could either accelerate progress or present a countervailing force to the achievement of specific goals. Such long-term explorations also highlight that some political choices may have unintended consequences, in part due to the other elements of the development context they interact with. Finally, these narratives draw attention to the prospect that the future can unfold in a nonlinear fashion, with successes bringing new challenges and potentially also the possibility for reversals in progress. In the African context where the consolidation of past gains in economic and political development remain fragile, this point has special relevance.

11
Implications for European Development Policy

Erik Lundsgaarde

The preceding chapters have covered a wide variety of terrain both in exploring the basis for the future evolution of African development using the analysis of thematic areas as a starting point. The discussion in this chapter examines the implications of this exploration of Africa's future for European development cooperation, focusing on possible strategic directions for development policy to adapt to the challenges this volume has highlighted. In Section 11.1, some of the main lessons emerging from the studies of individual drivers of change that point to overlooked issues in development thinking and practice are underlined. Section 11.2 discusses ways that the scenario approach guiding this study can inform strategic thinking in the development arena. This is followed by an analysis of general challenges for European donors related to the selection of future priorities, the organisation of development cooperation, and considerations on European engagement in global governance forums.

The future of the African continent is awakening growing interest and has been treated in other recent works. As examples, the McKinsey Global Institute (2010) has painted an optimistic portrait of the continent's long-term economic growth prospects, signalling Africa's rising importance for global investors, while the Africa Progress Panel's 2010 report conveys a more cautious message, noting that advances in some areas in recent years have been counterbalanced by challenges in others, with climate pressures providing a key example (Africa Progress Panel 2010). Both of these reports offer relevant guideposts for imagining Africa's future, and this volume also acknowledges that there are both grounds for optimism and reasons to remain focused on development hurdles that persist in African states. The present volume has sought to underscore that envisioning alternative narratives of the future can contribute to flexibility in preparing for it by recognising that a fixation on a single narrative, whether emphasising a massive takeoff of the continent or resignation to poverty and recurring conflict may restrict the attention of policymakers to a small subset of issues that are relevant in thinking about future engagement with African states.

11.1 Learning from Analyses of Drivers of Change

The chapters exploring Africa's future through the lens of central drivers of change are a core part of the analysis in this volume. Though some insights and commonalities emerging from these chapters have already been discussed as a background for outlining scenarios for Africa's future, this section identifies some of the main takeaway messages from the analyses. Table 11.1 presents an overview of key conclusions across the chapters.

In their chapter (Chapter 4) on demographic change in the African context, Vimard and Fassassi present a compelling case for elevating the priority attached to integrating demographic policies into development strategies. Noting that the global development agenda has neglected demographic issues in recent decades, their analysis highlights the relationship between demographic factors, economic growth, and sustainable development, and emphasises that the relationship is not a unidirectional one. In presenting possible trajectories for the future, the analysis also makes clear that Africa's changing demographic profile presents both constraints and opportunities for African development. While the authors argue that population growth poses a key obstacle to the achievement of the quantitative development targets set out in the Millennium Development Goals (MDGs) and could place additional stress on the use and distribution of resources, growing populations also provide a basis for increasing demand, which could

Table 11.1 Key Messages from the Chapters on Drivers of Change

Demographic change	Development policy priorities should be adapted to reflect diverse population trends across African countries.
Climate change	Climate change will likely have a significant impact on economic development via agriculture, among other areas. Land use changes will influence the nature of future climatic changes on the continent.
Systemic technological innovation	Technological progress is rooted in a domestic system of innovation. Inclusive development pathways building human capacity will likely foster improvements in innovation capabilities.
Internal political development	The reconciliation of localised and informal institutions with formal state structures presents a central challenge for political development.
New actors	The impact of emerging actors on African development will be influenced by the way African actors regulate their influence.
Global governance	The multiplicity of global governance arenas inhibits progress in responding to African development issues and provides a stimulus for African actors to articulate a stronger common voice.

stimulate economic growth by encouraging greater agricultural productivity, as one example. If rapid population growth is considered in terms of expanding the consumer base and the size of the internal African market, it can be viewed in a positive light (Severino and Ray 2010). Moving towards a more favourable evolution of demographic profiles in African countries will nevertheless likely require efforts not only with respect to family planning, but also in areas such as educational attainment, health provision, economic production, and employment policy that can contribute to producing framework conditions that enable African states to benefit from current population dynamics.

The examination of demography draws attention to the specificity of the African continent in international comparison. As a result of the slave trade and colonisation, Africa south of the Sahara in particular experienced stagnation in population growth and the persistence of low population densities while population growth boomed in other world regions. In recent decades, fertility and mortality rates have dropped significantly in other regions while the emergence of a demographic transition in many African states remains uncertain (Guegnant 2007), indicating that demographic issues should be given special consideration in development policy towards Africa.

While Vimard and Fassassi outline broad challenges for the continent related to rapid urbanisation, persistently high rural population growth rates, and the young population structure, they also emphasise that policy responses to engender the appearance of more favourable demographic regimes need to acknowledge variations in population dynamics across African sub-regions. Whereas the emphasis on the control of HIV/AIDS remains especially relevant in Southern Africa, for example, in other parts of the continent broader investments in health care, education, and women's empowerment should take precedence to address the underlying causes of high fertility and slow mortality decline. The discussion of demographic challenges underlines the necessity of formulating guiding orientations for development policy that allow for differentiated responses that take into account varied country contexts and the problem complexes that characterise different types of states. This recommendation resonates with other contributions to this volume.

For Grist and Ifejika Speranza, population pressures represent one of several factors that are likely to influence how climate change impacts African development in the future. One lesson from their analysis is that the climate challenge must be understood within the context of a variety of overlapping forces shaping patterns of environmental change across the continent. These forces relate in part to natural phenomena, as the discussion of climate variability highlighted, but also to land and water use patterns and how the development of the agricultural sector proceeds, economic factors such as the diversification of production away from primary sectors, and political factors including the quality of governance. Grist and Ifejika Speranza indicate the importance of understanding and addressing the consequences of climate change both in urban contexts where damage to infrastructure may inhibit development progress and in rural areas, where livelihoods are often directly dependent on climatic conditions.

Improving agricultural productivity is widely recognised as a critical component of efforts to accelerate economic growth and address food insecurity. At the same time as a variety of international actors are contributing to efforts to promote a Green Revolution in Africa, climate constraints are expected to limit the possibilities of achieving this objective (Hassan 2010; Sissoko et al. 2011). Even below the 2°C global warming threshold beyond which more catastrophic consequences of climate change are expected, recent estimates of climate change impacts indicate prospects for significant damage to food production on the continent (Hare et al. 2011). Beyond responding to the priorities identified in National Adaptation Programmes of Action (NAPAs) in low-income countries, external actors need to emphasise natural resource management issues in development policy towards Africa in recognition of the headwind that added development constraints from climate change represent.

The attention that Grist and Ifejika Speranza draw to national and regional governance frameworks as key contributors to enhancing the capacity of African states to confront the climate challenge resonates with Maharajh et al.'s discussion of systemic technological innovation as a driver of change. An implication from this analysis is that it is wise to exercise caution in viewing technology by itself as a mechanism for overcoming development barriers. For Maharajh et al., unleashing unrealised economic potential in Africa requires addressing deficits in the innovation systems that foster technological development. As the authors indicate, inclusive educational systems leading to higher levels of skills acquisition, improved regional communications infrastructure, and government policies related to support for innovation all represent building blocks of more robust innovation systems. If the nature of governmental engagement in promoting innovation remains a foundational element in determining the qualities of domestic innovation systems, Maharajh et al. signal that further mobilisation of the private sector to support investments in research and development can also provide a stimulus for addressing deficits in areas such as access to energy and the development of green technologies to put the continent on a low-carbon growth path. A general lesson from the analysis is that external donors can invest more effort in systems-oriented thinking.

Political economy analysis provides a framework for exploring political units in systemic terms. Common political economy frameworks draw attention to underlying structural forces, such as the demographic and environmental forces examined in Chapters 4 and 5, formal and informal institutions that structure interactions between actors, and the resources and interests of actors themselves (Fritz et al. 2009). Even if many external donors are conscious of the relevance of political economy analysis in understanding levers or obstacles for change at the country level, Meyer's analysis in Chapter 7 suggests that certain forms of political institutions and actors have received more attention than others in strategies for engaging with African states, with formal state institutions and executives representing a focal point for development policy. As Meyer's chapter indicates, efforts to promote greater governmental effectiveness in responding to domestic development challenges depend in part on the role that parliaments and political parties assume in the representation of societal interests and the reconciliation of formal state authority structures with traditional governance systems. The emphasis placed in the discussion on resolving tensions between traditional institutions and centralised state institutions, which reflects a growing awareness of the importance of analysing competing forms of authority in examining state-building (UNECA 2007), highlights the multilayered quality of state capacity. Extending state control remains a key challenge and a source of possible instability for many African states.

Although the focus of Meyer's chapter is on domestic political development, he acknowledges that external actors, whether multinational enterprises or foreign governments, can also influence the politics of development within African countries. The scaled up engagement of emerging powers like China and India in Africa that Grimm and He describe in Chapter 8 has amplified attention to this issue in recent years. Research on the effects of rising development cooperation from non-DAC donors on the political economy of development in African countries has to date been largely conceptual in character, identifying possible rather than actual impacts (McCormick 2008; Adisu et al. 2010). As Grimm and He indicate, however, even an overview of the rationale and priorities of development cooperation from major non-DAC players can be useful in identifying the challenges and opportunities that their engagement presents for the DAC community and for African governments.

Apart from their status as a source of development finance, emerging actors also bring alternative models for development, which may have added credibility in comparison to DAC donors due to their recent domestic development achievements. At the same time, these actors present dilemmas that are not unfamiliar from decades of DAC development cooperation and European engagement in Africa more specifically. In example, both sets of actors face the challenge of reconciling their national interests with development objectives of partner countries, the prospect that framework conditions where they invest may strongly shape the overall outcome of their engagement, and the promotion of equal development cooperation partnerships in a context of basic inequality among the partners. Moreover, these actors are not simply competitors for markets or sources of energy, rather they share an interest in promoting stability on the continent, as growing Chinese contributions to African peacekeeping initiatives suggest. These common challenges might serve as a basis for expanded dialogue and the mobilisation of new partnerships for development at the global level, and the common challenges among external actors in Africa could similarly provide a stimulus for mutual learning that includes the exploration of development models well-adapted to the national and regional contexts where they are pursued.

At the heart of the issue of how the new actors will transform African development prospects remains the question about what the nature of the response of African governments and African populations to their engagement will be. African actors themselves will play a critical role in defining the terms of future engagement with traditional and new development partners and in determining the extent to which the logic of mutual benefit prevails in practice. As the engagement of the so-called new actors grows, scrutiny over the impact of their activities and the consistency of their rhetoric with development practice will likely increase, providing a sounder knowledge base to determine how their engagement, like the engagement of more established development cooperation partners, can be shaped to best benefit African populations. This suggests that efforts of traditional donors to contribute to capacity building and strengthening regulatory frameworks are relevant elements of responding to the diversifying donor landscape.

In their contribution on the linkages between global governance processes and Africa's future, Le Pere and Ikome similarly note that the nature of interest articulation among African governments should also influence the extent to which the global framework conditions for promoting development provide a more favourable context for Africa to confront development challenges. The global governance system that Le Pere and Ikome describe is an amalgam of multiple and overlapping governance arenas possessing different sources of legitimacy. These arenas are places of cooperation and contestation, where divergent interests have to be accommodated. As Le Pere and Ikome acknowledge, this diversity of interests can present a trade-off between inclusiveness and efficiency: more representative institutions may have a more difficult time accomplishing key tasks, underlining the value of maintaining a plurality of institutions with complementary areas of responsibility. The diffuse character of global governance nevertheless places a limit on the coherence of action in addressing African development challenges. The formulation of more cohesive positions among African actors across governance arenas presents one means of working against the difficulties that stem from the pluralism of the global institutional backdrop.

An important component of the multi-level and plural global governance order are the sub-regional and continental organisations that have the potential to play a larger role in managing development challenges and acting as a stimulus for change within African countries, as many contributors to this volume have emphasised. Such regional-level governance structures have the potential to contribute to the mobilisation of resources on the continent through the promotion of domestic accountability systems and the expansion of market integration, for example. Chapter 9 nevertheless underlines that the external dimensions of development resource mobilisation remain critical in shaping the framework conditions in the world economy facing African states. The analysis underscores that creating opportunities on the continent requires not only upholding existing financing commitments through public channels, but also expanding efforts to awaken greater interest in the continent among private foreign investors. In discussing trade, aid, and private investment under the common umbrella of global governance, Le Pere and Ikome usefully highlight that analysing the potential contributions and interactions of these different vehicles for generating wealth should increasingly be emphasised in development strategies toward the continent.

11.2 General Lessons from the Scenario Approach

Viewed together, the chapters on drivers of change also draw attention to the interdependence of policy areas that are often studied separately. For example, the chapters demonstrate that it is difficult to analyse possible future impacts of climate change or technological innovation without addressing how political systems could evolve to manage natural resources, promote research, and foster agricultural development. The exploration of interaction effects through time is one perceived benefit of the use of the scenario approach, and the orientation toward systems-thinking that the scenario approach encourages also has clear implications for building better development strategies. In a similar vein, Levy and Fukuyama (2010) have recently emphasised that the integration of different disciplinary vantage points in understanding transformation processes is a key element in enhancing strategic thinking in the development policy arena. In their view, examining interaction effects (in their case between governance and growth) and exploring causal relationships is necessary to inform priority setting and to outline possible sequences of policy choices that could contribute to desirable end goals. Without this type of integrated thinking, priorities outlined in development strategies may rather appear to be laundry lists that do not identify the complementary character of different thematic areas of intervention. This challenge relates not only to better integrating knowledge within the development cooperation community, but increasingly mobilising knowledge from other policy communities (in areas such as security, trade, or environmental policy, for example) that can be useful in advancing more holistic approaches to engaging with Africa.

The Joint Africa-EU Strategy from 2007 (Council of the European Union 2007) offers an example of a strategic framework for development that contains a long list of priorities with limited attention to the interrelationships between key themes, even though the priority areas are described as 'interrelated' before they are introduced. Each of the framework's four main thematic pillars (peace and security, governance and human rights, trade and regional integration, and accelerating progress towards the MDGs) shelters a variety of proposed areas for action varying in specificity, some of which serve as a basis for the eight thematic partnerships where cooperation under the umbrella of the strategy should be pursued. The long list of priorities within this framework reflects the multiplicity of challenges facing Africa and Europe in a changing world economy as well as the difficulty of building political consensus around a more focused set of objectives. However, such a broad agenda likely offers little guidance in determining how scarce resources should be allocated or few clear signposts of change against which progress can be measured. Though the Joint Africa-EU Strategy is still in an early phase of implementation, observers have noted that achievements that have been linked to the framework have actually been associated with more focused initiatives that preceded it rather than a result of the framework itself (EARN 2010). The preparation of a strategic framework for engagement presents an opportunity to direct action towards important goals. Where the relationship between goals outlined in a strategy remains poorly defined, implementation deficits cannot be unexpected.

If one of the positive influences of scenario approaches on strategy development is the encouragement they offer to reflect on the interrelationships between key challenges and between different areas of intervention to address them, another advantage of the approach comes from the nature of questions that they allow researchers and policymakers to ask. Constructing narratives describing how the future could unfold is a creative exercise requiring attention to underlying determinants of change and to exploring the consequences of possible occurrences. The prospect of non-linearity in future developments that scenario approaches acknowledge prods thinking about possible sequences of events, unintended consequences of actions, and the long-term implications of current assumptions about the drivers of development. The encouragement to imagine alternative possibilities represents another contribution of a scenario approach, as this may contribute to greater flexibility in interpreting the changing context that policymakers have to respond to. Even if scenario building is not explicitly made a part of policy planning processes, these aspects of the scenario approach can inform the way that policymakers prepare for the future.

Incorporating lessons from scenario analysis in development planning is not a substitute for strengthening other tools for monitoring political, economic, and environmental developments at different levels of analysis on the African continent. The further development of existing early warning systems such as the ECOWAS Early Warning and Early Response Network (ECOWARN) or IGAD's Conflict Early Warning and Response Mechanism (CEWARN) to increase the capacity of African governments to anticipate emerging social tensions would represent one additional avenue for building a better knowledge base to analyse future development prospects. Elements that are regarded as crucial in establishing effective early warning systems include the incorporation of field-level analysis involving a variety of stakeholders and the integration of a mix of methods exploiting strengths of quantitative methods with a predictive orientation and qualitative methods geared toward generating context-specific knowledge (Nyheim 2009). Sensitivity to diverse sources of information (by reserving a place for multidisciplinarity) and the establishment of clear channels of communication between knowledge production and decision-making arenas are key aspects of improving the ability of policy actors to anticipate and quickly respond to emerging challenges.

11.3 Challenges for European Development Cooperation

The appeal above for greater integrated thinking in development policy planning represents a central construction site for European development cooperation in the future. This relates not only to the set of objectives outlined in the EU's Africa strategy, but to reflection on the goals at the EU level and in member states placed at the top of the development agenda and the organisational set-up for formulating and implementing development policy.

11.3.1 Development Cooperation Priorities

Contributions to this volume have called attention to areas where current emphases on the development agenda remain relevant. The continuing importance of investing in health and education sectors is not disputed, and the recognition of the centrality of stimulating accelerated growth in the agricultural sector also finds broad resonance. As Chapter 10 illustrated, a recurring theme throughout the book is the awareness that responding to long-term development challenges on the African continent requires a focus on expanding the capabilities of governments to respond to domestic needs and adapt to future constraints.

Though the goal of improving governance is not a part of the MDG reference system, it is widely acknowledged as a central determinant of progress towards the achievement of the MDGs and broader development objectives, as the outcome document of the MDG Plus 10 summit in September 2010 recognised (United Nations General Assembly 2010). The development of more responsive and accountable political institutions within developing countries is considered to be a primary vehicle for more inclusive development trajectories expanding opportunities available to poor populations (UNDP 2010) and can be considered a development goal in its own right. Elevating the position of governance within a post-2015 development reference system would represent an acknowledgement of key underlying forces that need to be addressed in order for countries to unlock their development potential and achieve the types of goals that are outlined in the MDG framework. At the same time, a focus on governance presents a means of tying together and integrating different thematic dimensions in development.

European development cooperation orientations already recognise the pivotal role that good governance can play in supporting development progress. In a Green Paper outlining future directions for European development policy, the European Commission has recently underlined the contribution of stronger parliaments, judiciaries, and auditing institutions in ensuring more transparency in public policymaking and public financial management, making note of several instruments that the EU uses to increase incentives for governments to pursue reforms (European Commission 2010). Yet governance promotion efforts in European development cooperation could also benefit from the systemic thinking outlined earlier in this chapter. It is not only relevant to list the key actors with which to cooperate but also to tailor policy responses to the broader institutional setting in which they operate, which may require further attention to institutions that potentially compete with formal state institutions, as suggested above. Action at multiple levels designed not only to strengthen the capacities of governmental actors to allocate resources efficiently but also to support the accommodation of societal actors within political systems is needed to make governments more responsive to the needs of their populations and to enhance their prospects for managing development challenges in the future.

Good governance promotion is a contentious field as a result of its association with democracy promotion, and the emergence of China as a major development actor has raised questions about how effectively European actors can advance a pro-democracy agenda given the availability of financing and an alternative view on preferred political regime types that China brings (Hackenesch 2009). The further development of dialogue initiatives between European actors, China, and other new actors in international development should work to identify points of commonality in approaches for enhancing governmental effectiveness in African countries. At the same time, European actors need to consider how to strengthen the platforms available to African actors, for example in the context of continental organisations, to guide these dialogues and shape the discussion on priorities for improving governance.

Like governance, inequality has been emphasised as an important issue in many contributions to this volume. This issue has recurred because it represents a plausible trigger of destabilisation or growing social unrest in narratives on future development trajectories. As noted in Chapter 3, many African states are already characterised by high inequality in the present day. Improved economic performance at the national level in the future is not a guarantee that poor populations will benefit from expanding economic opportunities. As Sumner (2010) has recently noted, a large number of the world's poor now live in middle-income countries. In Africa, some 90 million Nigerians and 12 million South Africans continue to live in poverty in spite of their countries' middle-income status. In this context, domestic systems of redistribution represent a central component of confronting growing inequalities. This relates not only to domestic resource mobilisation through taxation, but also to the further development of social protection schemes for which support has been growing across the African continent (European Report on Development 2010). Regardless of the specific policy interventions that are proposed to address inequality, the issue merits greater consideration on the international development agenda. It is worth underlining in this context that while the MDG reference system addresses gender inequality directly, broader socio-economic inequality is neglected in this framework and could be elevated in priority in the post-2015 global development reference system.

The introductory chapter of this volume indicated that trade, peace and security, and environmental protection represent three main areas for thematic reflection in European policy towards the African continent. The following paragraphs briefly highlight some points for further consideration in these areas that are implied by the analysis in the volume.

Discussing trade within the context of global governance processes more broadly, Le Pere and Ikome draw attention in their chapter to deficits among European actors in terms of their support for addressing supply-side constraints in African states' abilities to increase their participation in international trading networks. These constraints relate not only to limited financing from public or private sources, but also to limitations concerning production capacities and transport infrastructure. European influence over the governance frameworks regulating trade relationships is also regarded critically. In particular, a key criticism of the Economic Partnership Agreements (EPA) concluded between the European Union and regional groupings within Africa has been the potential for incoherence between these initiatives and existing regional integration processes on the continent (Bilal 2010).

The EPA process is a sign of longer ongoing transformation in EU-Africa relations, with the EPAs reflecting an attempt to transition from the trade privileges of the post-colonial era of Europe-Africa relations to a liberal regime consistent with principles of the multilateral trading system. Even if the negotiations are taking place between collective actors on both sides, the EPAs nevertheless represent an extension of a bilateral logic. In light of the growing interest in commercial opportunities on the African continent, that actors such as the United States and the world's emerging economies are displaying, Europe should maintain a strong commitment to building a more effective multilateral trading system and ensure that bilateral initiatives are complementary to efforts to advance global trade agreements, rather than a distraction from progressing on this front. Although Europe alone cannot resuscitate the stalled Doha round in the WTO, it can assume a larger role as an alliance builder to further a trade agenda that addresses EU interests and the interests of African partners. If support for regional actors to enhance their capacity to participate in trade negotiations is one avenue for advancing this agenda, engaging with other major bilateral actors outside of Africa to foster an African trade agenda is equally relevant.

While trade issues have been addressed throughout this volume due to the common view that strengthening regional integration represents a valuable mechanism for unlocking economic potential in African economies, reference to peace and security issues has often been less direct. It is clear from the analysis that African states face numerous pressures which could exacerbate already fragile conditions, with pressures related to population growth and environmental change chief among them. The potential role that declining social cohesion can play in contributing to the emergence or renewal of conflict and the linkage between inequality and destabilisation have also already been mentioned. Security issues are closely related to the discussion of strengthening governmental capabilities to manage change. This implies that confronting the challenge of state fragility requires broader attention to processes of political development, including to questions concerning how a range of societal actors such as private sector actors can be integrated into the political system and how competing authority structures within states can be reconciled. A broad view of institutional development in development cooperation that extends beyond centralised state structures would help to tie the conflict prevention agenda together with economic development issues such as resource management, cautioning against treating state fragility as an issue to be viewed primarily through a security lens.

The relevance of placing governance at the centre of the development agenda is also evident in the examination of environmental change. As Chapter 5 stresses, the impact of a changing climate on African development will be influenced by how African governments cope with environmental pressures. At the same time that African states face added stress on land and water resources, they must manage environmental change in a manner that contributes to economic development while avoiding ecological depletion. A major challenge for the continent and for the international community is accelerating productivity in the agricultural sector, and African agriculture has the potential to make a significant contribution to economic growth and poverty reduction (De Janvry and Sadoulet 2010). Policies directed towards agricultural development therefore represent an area where attention to sustainable natural resource use is critical. Managing environmental change and mainstreaming sustainability is not only a rural issue, as the continent's rapid urbanisation will also affect resource consumption patterns and present challenges for social and economic organisation at the same time that demand for placing societies on a low carbon growth trajectory increases. Applying a sustainability lens to urban development strategies to promote opportunities for innovation is thus essential in mainstreaming environmental thinking into development policy.

The trade, security, and environmental domains remain important areas for reflection because they underscore the centrality of issue linkages in development cooperation that demand integrated responses from European actors. Further policy areas such as energy or migration are equally illustrative of the rising relevance of issue linkages. Although aid agencies are often distinguished from other bureaucracies with an external mandate due to the holistic or cross-sectoral perspectives that they are able to combine in formulating policy to implement in diverse developing country contexts, it is unlikely that they possess the same depth of sectoral expertise that bureaucracies devoted to trade, defence, and environmental protection (as examples) have accumulated in their main areas of competence. At the same time, development advocates consider specialised aid agencies to have a greater sensitivity to the challenges facing developing country populations and a stronger interest in defending the interests of developing countries and their residents.

In acknowledging the relevance of issue linkages, the need for the development policy community centred on aid agencies to mobilise the expertise of other governmental actors to advance development goals becomes clear. In the same way, the problem complexes present on the African context, whether related to the promotion of regional integration, coping with challenges of fragile statehood, or dealing with the effects of climate change require forms of engagement that extend beyond the aid relationship. Aid has the potential to provide a stimulus for addressing specific needs, by financing health care or educational programmes, for example, or to play a catalytic role by contributing to the improvement of an enabling environment that mobilises additional domestic and foreign sources of development financing (OECD 2006). However, the achievement of development goals ultimately depends on a range of factors both exogenous and endogenous to any given country or region. Though Africa is a continent where aid has remained an especially visible policy instrument, in some countries it already constitutes a small percentage of national revenues, and its leverage effect and overall contribution to development in these contexts may be limited.

In thinking about priorities for the future, the call for more integrated development thinking and broadening the nature of the policy community concerned with African development issues should not be interpreted as an appeal for reducing aid. Indeed, many of the preceding chapters underline the positive role that additional official development financing to African states can play in responding to development challenges. Rather, it is a call to transition to a more comprehensive approach to development cooperation with Africa that prepares the way for a relationship with regional organisations and states that truly moves beyond aid and embeds the Europe-Africa relationship within a normalised logic of foreign relations.

11.3.2 Challenges of Organisational Reform

This call for systemic thinking in the formulation and conduct of European development policy towards the African continent cautions against quarantining the development community (or specialised communities within it) from other policy communities whose expertise and increasingly international orientation mean that they cannot be neglected in the changing development cooperation landscape. Bridging divides between policy communities and managing issue linkages will undoubtedly require organisational adjustments, both at the EU level and within EU member states.

As noted in the introductory chapter, a process of organisational adjustment in Europe is already underway, as the Lisbon Treaty has created a new institutional framework for EU external relations designed to better unify foreign, security, and development policies. This institutional change can be viewed as an important window of opportunity in improving the coherence of EU external action in support of global development goals. However, in the early phase of its existence, the set-up of the external action service has also been linked to a possible dilution of the global development focus of EU relations with the rest of the world, given the prospect that development instruments will increasingly be subordinated to short-term foreign policy interests (Gavas and Koeb 2010). A critical question for the future of EU development policy is how the global development constituency can influence the common European foreign policy agenda to ensure that greater consistency in policy resulting from the new organisational structure does not come at the expense of support for development objectives.

It should not be assumed that integrated thinking is absent in equal measure in all corners of the European development cooperation system at present, and European governments have likely not fully exploited opportunities to learn lessons from organisational reform initiatives across Europe. The purpose of this section is not to propose specific institutional changes, which at EU and member state levels requires a careful analysis of how divergent interests are accommodated as well as the fit of institutional reforms with the broader political system in which they are embedded – a task beyond the scope of this volume. Rather, the focus of this discussion is to present general properties of the organisational set-up for structuring European development cooperation that are basic building blocks for adapting institutions to future challenges.

One requirement for the internalisation of a systems orientation in policy planning in European development cooperation with Africa is empowering high-level governmental actors to assume a strong mandate for strategy development. Strengthening the consistency of European external relations under the umbrella of a framework of policy coherence for development can fall within this mandate, however producing a guiding vision and plan of action for European engagement goes beyond the question of adding channels for communication among bureaucratic actors with different areas of expertise to ensure that their policy orientations are not contradictory. A cohesive framework to shape the agendas of these diverse actors should originate from an institution with a cross-governmental mandate to assess emerging challenges and establish government-wide priorities for action. In this context, there is a potential that an external agenda will be dominated by actors that have a narrow view of motives for global engagement. The interests and knowledge bases of diverse governmental actors should therefore be represented within such an institution to ensure that the strategic direction it provides has a strong basis for acceptance in the organisations responsible for bringing strategies to life across policy fields.

A second desirable feature of an organisational set-up for European development cooperation is the strengthening of coordination mechanisms at the highest levels of government. The demand for greater coordination results from a variety of pressures, including the multiplication of relevant actors with whom European actors need to engage in the development policy sphere, the growing external orientation of policy actors outside of the development policy community, the expansion of issue linkages, and demands for greater coordination from developing country partners themselves. Foreign affairs bureaucracies at the EU level and within EU member states have a natural role to play in coordinating external policies. The extent to which these bureaucracies can assume the task of coordinating multidimensional relationships with African states that have traditionally held a lower priority in foreign policy portfolios than relations with more economically powerful states will depend in part on their ability to integrate medium and long-term perspectives on engagement favoured by the development policy community. Given pressures to place more responsibility for global development policy in foreign affairs bureaucracies, considering how to ensure that lessons from decades of development cooperation can be transmitted to these organisations should be a key concern for development policy advocates.

External challenges such as the proliferation of actors in the development landscape increase pressures for better internal coordination within Europe. If the demand for coordination concerns horizontal processes of harmonising relations among bureaucratic actors overseeing different policy portfolios, processes which occur at both EU and member state levels, it also relates to the need for improvements in the division of labour among EU member states in development cooperation. Elements of the division of labour agenda that have still been insufficiently addressed by European donors include the development of common criteria for the geographical concentration of aid resources and common strategies for phasing out aid in particular partner countries (Grimm et al. 2009).

The demand for greater coordination in European development cooperation does not necessarily imply a wholesale centralisation of responsibility for all externally oriented dossiers, given that it is difficult to wipe the slate clean of existing institutions and interest constellations. However, it does require deliberation on the appropriate division of labour between EU level action for global development and the contribution of bilateral assistance programmes to the achievement of development goals. The possibilities for strengthening coordination mechanisms at the EU level might expand with the acknowledgement of the value of maintaining organisational diversity within the institutional landscape of European development cooperation, including the preservation of a variety of bilateral implementing agencies, and retaining this institutional pluralism within the EU development system could contribute to greater flexibility in adapting to changing circumstances in the future. Nevertheless, there is an inherent tension between organisational pluralism and promoting coherent action. As a result, European development actors should strengthen their commitment to embedding their actions in a common strategy for engagement with Africa.

11.3.3 Challenges for Europe in Global Governance

Pluralism is also a feature of global development governance more broadly. As the economic and political weights of states in the global political economy shift, the channels for responding to global challenges will likely continue to grow. The diffusion of power in the world economy creates opportunities for African and European actors alike to diversify their political and economic partnerships, as the expansion of development cooperation partnerships under the label of South-South cooperation illustrates. The growing interest in Africa among a variety of external actors at the same time signals the diminishing relevance of a privileged position of European actors in Africa and the necessity of recasting relations with African states outside of an aid paradigm.

This changing landscape encourages greater recognition of the role of African actors as global governance players. The continent itself contains a plurality of governance fora, with national governments, sub-regional organisations, and continental organisations forming part of a multi-level governance system. Given the role ascribed to sub-regional and continental organisations in this book as catalysts for development progress, the EU will continue to be a relevant source of knowledge for African countries on how to improve multi-level governance, including how to arrive at a division of roles at different levels that contributes to more effective management of development challenges. For this reason, European engagement with the African Union should acknowledge the multi-level system underpinning the ability of the AU to strengthen its own role as a global governance actor. The EU has long recognised the need to "improve the effectiveness and legitimacy of global rule making" (European Commission 2001) as a basis for a more prosperous world. If the pursuit of these aims globally will be linked to the willingness of European states to cede some power within global institutions, it also implies that the EU should work to ensure that the effectiveness and legitimacy of the AU in representing common African interests in global governance fora is strengthened. This is not simply a question of bolstering the administrative capacity of the AU to act globally but also a question of identifying how to support the expression of the will of African populations, political and economic actors, and states themselves within sub-regional and continental governance fora. Building solid foundations at lower levels of governance is necessary in order to improve the functionality of governance at higher levels (Messner and Nuscheler 2003; see also Chapter 7).

Even if the process of harmonising governance systems on different scales within the EU itself is not unproblematic, the European Union provides a unique model of collective governance in the world. As the discussion of organisational changes in European development cooperation above suggested, however, the EU has often had difficulty in speaking and acting with a common voice in its external relations, with the trade policy field representing a notable counterexample. The institutional reforms that the Lisbon Treaty has introduced provide a welcome opportunity for the EU to assume a more coherent role as a global development partner. For the EU to take on this role and leverage its influence in global governance, member states will have to strengthen their commitment to a common European foreign policy and to crafting a common development policy that can sustain European interest in global development.

11.4 Conclusion

If describing the past and the present can already be the subject of contestation, outlining possible future developments may provoke even more debate given the multitude of forces that have some role to play in shaping the world ten or twenty years from now. At the time of writing, unfolding events in different corners of the African continent including changes in government and pressures for regime transitions in Egypt, Libya, and Tunisia, the progress towards the creation of a new state in the Republic of South Sudan, and the uncertain political future of Côte d'Ivoire in the aftermath of the 2010 presidential elections and the subsequent political standoff underline the speed at which expectations can be overtaken by real-world developments and the uncertainty that prevails even in thinking about possible developments in the very near term. Exploring the long-term futures of political and economic spaces on a large and diverse continent requires an acceptance of a degree of imprecision in anticipating the road ahead. In spite of this imprecision, a central conclusion of this volume is that it is possible for European actors to better prepare for the changing global development landscape by increasing their capabilities to engage in systemic thinking. This is not only a question of better analysing environmental, economic, and political dynamics at work within developing regions, but also of ensuring that knowledge production is followed by knowledge transfer and coordination among governmental actors so that different types of information from a variety of sources about emerging challenges can be evaluated together and provide a basis for coherent global action.

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