

# EXPORT DIVERSIFICATION AND VALUE ADDITION

FOR HUMAN DEVELOPMENT



ADDRESSING THE IMPACT OF THE AGREEMENT  
ON TEXTILE AND CLOTHING EXPORTATION ON CAMBODIA

June 2007

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ECONOMIC INSTITUTE *of* CAMBODIA

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## LIST OF ABBREVIATIONS

ABiC	Agri-Business Institute Cambodia
ACFTA	ASEAN China Free Trade Area
ADB	Asian Development Bank
AFD	Agence Française de Développement
AfT	Aid for Trade
AFTA	ASEAN Free Trade Area
AGOA	African Growth and Opportunity Act
AISP	ASEAN Integration System of Preferences
AKR	Angkor Kasekam Roonroeung Co., Ltd
ASEAN	Association of South East Asian Nations
ASYCUDA	Automated System for Custom Data
ATC	Agreement on Textile and Clothing
CB	Commercial Bank
CBCL	Cambodia Biological Company, Ltd.
CCRD	Community Cooperative for Rural Development
CDC	Council for Development of Cambodia
CED	Custom and Excise Department
CEDAC	Centre d'Etude et de Développement Agricole Cambodgien
CEPT	Common Effective Preferential Tariff
CIF	Cost, Insurance and Freight
CIT	Reduced Cooperate Income
CMA	Cambodian Microfinance Association
CMDG	Cambodia Millennium Development Goals
CMT	Cut, Make and Trim
CNPA	Cambodian National Petroleum Authority

COrAA	Cambodian Organic Agriculture Association
DFQF	Duty Free Quota Free
DTIS	Diagnostic Trade Integration Study
EAC	Electricity Authority of Cambodia
EBA	Everything but Arms
EC	European Commission
EDC	Electricité Du Cambodge
EIC	Economic Institute of Cambodia
ETE	Export Tax Equivalent
EU	European Union
FAO	Food and Agriculture Organization
FAOSTAT	Food and Agriculture Organization Statistical Database of UN
FCI	Food Corporation of India
FDI	Foreign Direct Investment
FIAS	Foreign Investment Advisory Service
FIBL	Forschungsanstalt für Biologische Landwirtschaft
FOB	Free on Board
FTA	Free Trade Agreement
GATT	General Agreement on Tariffs and Trade
GCI	Global Competitiveness Index
GDP	Gross Domestic Product
GRDP	General Directorate of Rubber Plantation
GDS	Global Development Solution
GMAC	Garment Manufacturer's Association in Cambodia
GMO	Genetically Modified Organism
GMS	Greater Mekong Sub-region

GSP	Generalized System of Preferences
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit
HDIA	Human Development Impact Assessment
HS	Harmonized System
ICS	Internal Control System
ICT	Information, Communication and Technology
IDA	International Development Association
IF	Integrated Framework
IFOAM	International Federation of Organic Agriculture Movements
ILO	International Labor Organization
IMF	International Monetary Fund
IRA	International Rubber Association
ISC	Industrial Standards of Cambodia
ITC	International Trade Center
ITF	International Task Force on Harmonization
JBIC	Japan Bank for International Cooperation
JICA	Japan International Cooperation Agency
KAP	Khmer Agricultural Product
LDC	Least Developed Country
LIAs	Low Income Asian Countries
MAFF	Ministry of Agriculture, Forestry and Fisheries
MBP	Marketing and Promotion Board
MDG	Millennium Development Goal
MEF	Ministry of Economy and Finance
MFA	Multi Fiber Agreement
MFAIC	Ministry of Foreign Affairs and International Cooperation

MFI	Micro-finance Institution
MFN	Most Favored Nation
MIME	Ministry of Industry, Mines and Energy
MLMUPC	Ministry of Land Management, Urban Planning and Construction
MoC	Ministry of Commerce
MoEYS	Ministry of Education, Youth and Sport
MoH	Ministry of Health
MoJ	Ministry of Justice
MoLVT	Ministry of Labor and Vocational Training
MoSAVY	Ministry of Social Affairs, Veteran and Youth Rehabilitation
MoT	Ministry of Tourism
MOU	Memorandum of Understanding
MPTC	Ministry of Public Transports and Telecommunication
MRA	Mutual Recognition Agreement
MRD	Ministry of Rural Development
MT	Metric Ton
NAC	National Arbitration Council
NAFTA	The North American Free Trade Agreement
NBC	National Bank of Cambodia
NES	National Export Strategy
NGO	Non-Government Organization
NIE	Newly Industrializing Economy
NIS	National Institute of Statistics
NR	Natural Rubber
NRG	National Reference Group
OECD	Organization for Economic Co-operation and Development

PASS	Project d'appui au Secteur de la Soie
QIP	Qualified Investment Project
RCA	Revealed Comparative Advantage
RCN	Raw Cashew Nuts
RDB	Rural Development Bank
RDP	Rural Development Program
RGC	Royal Government of Cambodia
RMG	Ready Made Garment
ROO	Rule of Origin
RRIC	Rubber Research Institute of Cambodia
RTA	Regional Trade Agreement
SEZ	Special Economic Zone
SIBOR	Singapore Inter-Bank Offer Rate
SLA	Service Level Agreement
SME	Small and Medium Enterprise
SOFRECO	Société Française de Réalisation, d'Etudes et de Conseil
SPS	Sanitary and Phytosanitary
SR	Synthetic Rubber
SSM	Special Safeguard Mechanism
STIF	Special Inter-Ministerial Task Force
SWOT	Strength, Weakness, Opportunity and Threat
T&C	Textile and Clothing
TBT	Technical Barrier to Trade
TIFA	Trade and Investment Framework Agreement
TISI	Thailand Industrial Standard Institute
TPO	Trade Policy Objective



UN	United Nations
UN ComTrade	United Nations Commodity Trade
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNDP-RCC	United Nations Development Programme Regional Centre in Colombo
US	United States
US\$	United States Dollar
USA	United States of America
USAID	United States Agency for International Development
USDA	United States Department of Agriculture
USDA	United States Development Agency
USITC	United States International Trade Commission
VA	Value Addition
VAT	Value Added Tax
WB	World Bank
WEF	World Economic Forum
WTO	World Trade Organization
WTTC	World Travel and Tourism Council

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## FOREWORD

With its mission to enhance the awareness of development issues and to participate in the formulation of sustainable economic development policies and strategies, the *Economic Institute of Cambodia* is pleased to present the book on “*Export Diversification and Value Addition for Human Development: Addressing the Impact of the Agreement on Textile and Clothing Expatriation on Cambodia*”. This publication discusses the challenges faced by garment industry after quota phase out and formulates policies and strategies for this particular industry and beyond.

Though its significant growth in exports over the last decade, Cambodia has been running the risk by high dependency on few export sectors and trading partners. To avoid that risk, the country must diversify its export profile along with ultimate objective to promote human development, rural income and poverty reduction. To reach this goal, the supported policies have to be designed both at the supply side to enhance sector competitiveness and at the demand side to overcome export market barriers. Effective implementation must be ensured once they are formulated.

This book is a series of four inter-related research studies. The first part deals with the impact of the ATC expiration on Cambodia. The second part is about export diversification and value addition, identifying the potential of several non-garment sectors for exports. The third and fourth parts examine appropriate policies to support the identified export sectors.

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## EXECUTIVE SUMMARY

Since opening its economy to international markets in the early 1990s, Cambodia's export profile has been limited by high dependency on few sectors and trading partners. Over 75 percent of exports are garments directed largely to the US and the EU. Exports in other industrial products and agricultural produces account are minimal.

This book comprises four sequential research studies. Part I analyze the challenges facing the garment sector and proposes policy recommendations to overcome them. Part II identifies potential sectors for export diversification with high potential to promote human development. Part III and part IV propose policies to address constraints applying to the supply and demand sides.

### **Cambodia's Garment Industry Post-ATC: *Human Development Impact Assessment***

The number of garment factories grew from almost nil in 1995 to about 250 in 2005, as Cambodia's trade status with the United States was first normalized and then placed under a preferential quota system, while at the same time joining the EU's General System of Preferences. The value of garment exports thereafter increased from US\$27 million to US\$2.2 billion.

The expansion of garment sector has sustained economic growth over last decade. An increase of US\$100 in garment export creates an additional demand of US\$205 in the whole economy. The sector generates direct and indirect employment, rural incomes, improved work conditions and workers' empowerment, thereby promoting human development.

The garment sector is competitive because of its cheap and abundant work force supply, buyers' recognition of good labor standards and various domestic and international incentive schemes. The sector's main weakness is the fact that its workforce is unskilled and poorly educated, a constraint to introducing modern technology and shifting to high value-added products. Compliance with the industry's corporate social responsibility standards also imposes costs for factories when some labor unions over-execute their rights. The sector is also disadvantaged by weak governance, poor infrastructure and lack of supporting industry.

Despite the fear of huge international competition facing this industry after the end of the WTO's Agreement on Textiles and Clothing (ATC), garment exports increased 10 percent in 2005, reaching US\$2.2 billion. However, the ATC phase-out indirectly affects workers' livelihoods. Many factories today prefer short-term contracts and pay rates based on production. Real wages have thus decreased although exports increased. This suggests that workers must work more to earn as much as they could earn when the ATC was in effect. Moreover, the health condition of workers deteriorates after working for two years or more in garment factories, because the workers limit their daily food expenses to have money for other purposes. However, employer-worker relationships are likely to have improved.

A number of actions must be taken in order to improve the business environment, develop skilled workers, promote a spirit of negotiation and conciliation among employers and trade unions, and revise the current labor law. Meanwhile, the sector has to maintain and promote the high compliance with labor standards and working conditions. In addition, the country should negotiate with the US government for duty-free garment exports and with the EU governments for relaxing conditions on rule of origin. These actions would improve Cambodia's trade in garments, thereby contributing to better workers' livelihoods, rural poverty alleviation and promoting human development.

### **Export Diversification and Value Addition in Cambodia**

To avoid the risk of high dependency on few sectors, Cambodia must diversify its export profile. Agriculture is an obvious starting point, as the country has comparative advantage in abundance of land and high concentration of citizens already employed in the field. The country should also look into light manufacturing industries which require a low-skilled labor force. In the service sector, the country has enjoyed the growth in tourism, but is likely limited in terms of export diversification in other service sectors such as financial/banking or ICT, which require higher skilled labors.

The Economic Institute of Cambodia (EIC) identified five sectors with the best potential for export diversification, namely organic rice, cashew nuts, rubber, silk and tourism. The criteria of selection include (i) Priority sectors of the NES 2007-2010, (ii) Revealed Comparative Advantage, (iii) Potential for export earnings, (iv) Employment opportunities, (v) Use of domestic inputs, (vi) Sustainability of possible exports, and (vii) Suggestions from members of the National Reference Group.

Organic rice holds potential for targeting niche markets and creating higher farming incomes. In 2003, a number of NGOs introduced pilot projects to convert regular rice fields to organic over a period of three years. Farmers of organic rice may increase their income by up to 50% by converting to organic production through premium pricing, reduced expenditures on chemical fertilizers and increased yields.

Cashew nuts may also be a sector with high potential for value-addition. The current annual production of raw cashew nuts is estimated at 30,000-50,000 tons. However, the industry is handicapped by a lack of investments in processing. Only five percent of raw cashews are domestically processed and the remaining are informally exported to Vietnam. Thus, value addition and new job creation could be enhanced by domestically processing raw cashew nuts for local and export markets.

Rubber presents high potential for export earnings as a result of growing international demand and a gradual increase of prices. The sector can increase export earnings by expanding production into new areas of cultivation, further processing natural rubber and its trees, and overcoming the challenge of discounted prices for rubber exports.

Silk is a sector with high potential for rural employment. The hand-woven silk industry is part of Cambodian heritage, and the country's silk is well known for its gold-colored yarn. In 2005, there were approximately 20,000 active silk weavers and about 700 employed full time in yarn production. Employment could increase due to rising tourist arrivals, potential sale to and through Cambodian expatriates and the identification of niche markets. Any increase in silk production would directly create jobs for more weavers.

Tourism is a growing sector with potential for high job creation. Tourist arrivals continue to increase, reaching almost five million in 2005, creating new jobs directly and indirectly. Employment and value addition could further be enhanced by overcoming the challenges of weak backward linkages and by diversifying tourist destinations. However, a number of legislative supports are required to govern the sector in sustainable way.

These five hold high potential to connect to export markets and contribute to human development objectives. However, the sectors need appropriate policies and effective implementation. The policies must be designed to address constraints applying to the structure of both domestic supply and international demand.



## **Trade and Industrial Policy Environment in Cambodia**

The third section addresses major supply-side constraints. The constraints and accompanying policy recommendations are organized through two approaches, cross-sectoral (applicable to all five sectors) and sector-specific. The categories are equally important and mutually reinforcing.

Major cross-sector issues include (i) Fuel prices, (ii) Access to credit, (iii) Infrastructure, (iv) Investment incentives, (v) Anti-competitive practices, (vi) Trade facilitation and governance and (vii) Standards and certifications.

Sector-specific issues are identified along the supply chain of production, processing, marketing and export development. The tourism sector is broken down differently, by supply capacity, diversification, marketing support and legislative support.

The implementation of policy recommendations in both approaches would resolve the majority of supply constraints for the five selected sectors, thus increasing the country's competitiveness. However, implementation requires the participation of various levels of stakeholders. High level decision-makers should formulate policies and legislation on such items as fuel price and competition. Coordination among relevant government agencies is crucial, for instance in the areas of trade facilitation and standards and certification. The role of the private sector is important to provide feedback and express the needs of development. Donors can provide technical and financial assistance. Last but not least, local governments play an important role by raising awareness and increasing the participation of villagers and farmers.

### **Promoting Human Development through Trade Negotiation: *An Action Plan for Cambodia***

The final section addresses major constraints on the demand side. It analyzes the options for the Royal Government of Cambodia (RGC) to increase market access for rice, cashew nuts, silk and natural rubber through trade negotiations taking place in different fora. The analysis of access conditions in target markets reveals that tariff and non-tariff barriers, as well as the country's limited supply capacity currently act as major constraints.

While tariff regimes in developed countries are mainly favorable to the exportation of the products under consideration, this is not the case in developing countries like India and China.

Non-tariff barriers are of broader concern to market access to both developed and developing countries. In the case of rice, silk products and cashew nuts, Cambodia's export potential is seriously affected by its weak ability to comply with food safety, sanitary and phytosanitary, product, production and certification standards.

In the case of the rice sector, quantitative import restrictions are a further severe measure constraining market access.

Looking at the options for overcoming market access barriers on a broad basis, it is argued that this is best done within the framework of the WTO and its current Doha Round negotiations. Negotiations through the ASEAN framework could further lead to more specific and deeper market access in ASEAN-member countries as well as in India and China. In both negotiating for a, Cambodia could pursue collective negotiation strategies by joining negotiating alliances with countries that pursue similar market access and development goals. Due to the lack of negotiating power of Cambodia as an individual country, bilateral negotiations on market access issues are only seen as a complement to negotiating collectively.

This part concludes that trade negotiations alone may not lead to an effective increase in market access. They may fail to lower import tariffs in target markets and to address non-tariff barriers expeditiously. Domestic constraints to international trade should therefore be addressed in parallel in order to obtain quick results. Thus particular attention should be given to trade capacity building and facilitation in order to increase the ability of producers to better comply with production and certification requirements in target markets.

Financial resources are necessary in order to implement this agenda. While funding may be found among traditional donors, other sources are worth considering as well. It is proposed that Cambodia ask current and future trade partners to provide effective support towards trade capacity building measures. This conversation would best be had in the venue of the WTO and its Aid for Trade Initiative as well as in the context of the ASEAN-plus framework.



# Part I

## Cambodia's Garment Industry Post-ATC: *Human Development Impact Assessment*



## Introduction

The garment industry has played an important role in the Cambodian economy, becoming prominent in the late 1990s. The industry has attracted about 30 percent of the country's Foreign Direct Investment, directly generated more than a quarter of a million jobs for poor rural Cambodians, and created even more jobs in supporting industries. The success story of the Cambodian garment industry, even after the ATC phase-out on January 1st, 2005, is explicitly linked to good labor standard compliance monitored by the International Labor Organization.

In 2005, garment exports reached almost US\$2.2 billion, increasing by about 10 percent compared to 2004, and saw 53 new investment projects in garments in the year following the elimination of the global T&C quota. However, the economy's considerable dependence on garment exports makes it highly vulnerable. Any employment loss in the garment sector could result in a decline in workers' livelihoods.

This study's main objective is to provide a clear picture of the impact of garment exports on human development after the end of the Agreements on Textile and Clothing (ATC). To understand the role of garment exports in Cambodian society, the report will begin with the country's socio-economic overview and the contribution of the garment industry to the economy and human development. The competitiveness of Cambodia's garment industry and the impact of the end of quota system will be scrutinized. Some possible scenarios, such as the duty-free access to the US and EU markets with no condition to the rules of origin will also be assessed. Finally, a set of policy recommendations will be suggested to support the industry.



# Chapter 1

## Socio-economic Overview

Cambodia is situated in the fast growing region of South-East Asia. With an estimated GDP per capita of US\$450, Cambodia is classified as a least developed country (LDC). The country has made substantial transitions from a planned economy to a market economy after the 1991 Paris Peace Agreement. It eventually integrated itself into the world economy, becoming a member of ASEAN in 2000 and the WTO in 2003. With an average annual population growth rate of 1.8 percent for 2000-2005 (NIS, 2006),<sup>1</sup> Cambodia today has a population of around 14 million people and an estimated labor force of 6.5 million.

According to the National Institute of Statistics, Cambodia's economy peaked in 2005 with a growth rate of 13.4 percent, up from 10 percent in 2004. This high growth rate was the result of an exceptional expansion in agriculture, and continuous growth in garments, construction and the tourism sectors, in spite of a sharp increase in the price of oil and other imported input costs. However, the Economic Institute of Cambodia (EIC) expects a moderate economic growth of 6 to 7 percent over the coming years (EIC, 2006).<sup>2</sup>

**Table 1.1: Cambodia's Real GDP Growth (% , 2000 prices)**

	2001	2002	2003	2004	2005
<b>Agriculture</b>	<b>4.5%</b>	<b>-2.1%</b>	<b>11.9%</b>	<b>1.1%</b>	<b>16.4%</b>
Crops	0.7%	-7.8%	22.3%	-12.2%	43.6%
<b>Industry &amp; Construction</b>	<b>11.7%</b>	<b>17.7%</b>	<b>12.5%</b>	<b>16.8%</b>	<b>12.3%</b>
Garments	28.4%	21.3%	16.8%	24.9%	10.3%
<b>Services</b>	<b>8.7%</b>	<b>6.3%</b>	<b>4.4%</b>	<b>11.7%</b>	<b>12.1%</b>
Tourism	22.6%	18.8%	-16.7%	23.4%	17.3%
<b>Total GDP</b>	<b>7.7%</b>	<b>6.2%</b>	<b>8.6%</b>	<b>10.0%</b>	<b>13.4%</b>

**Source:** *National Institute of Statistics, 2006.*

<sup>1</sup> National Institute of Statistics. National Accounts of Cambodia 1993-2005. June 2006.

<sup>2</sup> EIC. 2006. Cambodia Economic Watch, April 2006.



The country's economy is driven by a few select sectors. Each sector has specific strengths and weaknesses as the country continues to develop. The agriculture sector represented 33 percent of GDP, although about 70 percent of the Cambodian population derives their living from this sector. The agriculture sector's growth for 2005 was at 16.4 percent, against an average growth of around 3 percent in the past, due to favorable climate conditions and the expansion of cultivated areas.

The country's industry sector, which accounted for 25 percent of GDP, also saw significant growth of 12.3 percent in 2005, after an increase of 16.8 percent in 2004. This was driven mainly by the garment industry's continuing expansion. Besides the garment industry, the construction sector increased its growth to 20.1 percent in 2005. The growth rate of the food, beverage and tobacco sector rebounded to 8 percent.

The service sector (42 percent of GDP) has also played a significant role in the Cambodian economy besides the agriculture sector and the garment industry. The service sector grew by about 12.1 percent in 2005, resulting from the annual record of 1.3 million tourist arrivals. The tourism sector, including hotels and restaurants, constitutes the most important sub-sector of the service sector. In 2005, the tourism sector grew by 17.3 percent, transportation and communication by 13.1 percent and finance by about 19.2 percent.

Parallel to this high economic growth, inflation has risen since the beginning of 2004, mainly due to higher energy costs and food prices. The consumer price index increased by 6.7 percent in 2005, up from 5.6 percent in 2004 and only 0.5 percent in 2003. However, inflation during the first half of 2006 significantly slowed down, reaching only 3.8 percent in June 2006 (NBC, 2006).<sup>3</sup>

Cambodia is a dollarized economy. The amount of US dollars circulating through the banking system accounted for 73 percent of total recorded money supply in June 2006 (NBC, month 2006).<sup>4</sup> The Thai Bath and Vietnamese Dong are also widely used in Cambodian border provinces because of strong border trade activities. The Cambodian Riel remained stable against the US Dollar and the Vietnamese Dong over the last three years, but significantly depreciated against the Thai Baht during the first six months of 2006.

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<sup>3</sup> National Institute of Statistics. 2006. Consumer Price Index, July 2006.

<sup>4</sup> National Bank of Cambodia. 2006. Report for the first semester and direction guide for the second semester.

In recent years, the Government showed significant improvement in collecting state revenue. Government revenue rose by 23 percent in 2005, after an increase of 21 percent in 2004. However, government revenue remained weak compared to the overall level of economic activity, reaching only about 10 percent of GDP in 2005, while government expenditure stood at about 14 percent of GDP. This deficit was mainly financed by foreign assistance, of which external loans accounted for about 45 percent. By the end of 2005, Cambodia's total public debts amounted to US\$3.4 billion, representing 54 percent of GDP (IMF, 2006).<sup>5</sup>

The Cambodian Government committed, within the framework of the Millennium Development Goals (MDGs), to reduce the national poverty rate to 19.5 percent by 2015. However, according to the World Bank's Poverty Assessment Report in 2006, the poverty rate remains high, representing 35 percent of the total population in 2004 (WB, 2006).<sup>6</sup> Moreover, Cambodia's poverty reduction rate was relatively low at only around 1.1 percent per annum opposed to 3.2 percent in Vietnam and 1.3 percent in Lao PDR.

Although Cambodia has enjoyed relatively high economic growth rates in the last decade, the challenge remains to equitably redistribute the welfare gain throughout the population. Still today, only a small portion of society benefits from the economic growth, suggesting that inequality is on the rise. The gap between the rich and the poor, between urban and rural is widening. Poverty remains a major concern, and reforms are a necessity for Cambodia to achieve its MDGs to halve poverty by 2015.

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<sup>5</sup> International Monetary Fund. 2006. Cambodia: 2006 Article IV Consultation - Staff Report, July 2006.

<sup>6</sup> World Bank. 2005. Halving Poverty by 2015: Cambodia Poverty Assessment 2005.

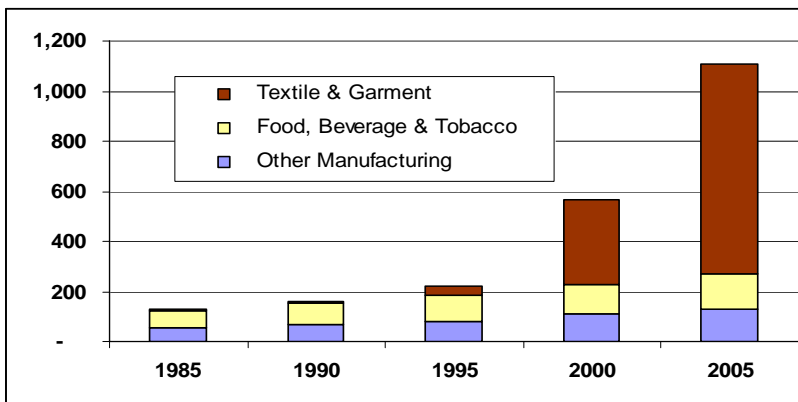


## Chapter 2

### Contribution of Garment Exports to the Economy

With an economy highly concentrated in just a few industries, the Cambodian manufacturing sector contributed about 18 percent of GDP and 8 percent of the country's labor force in 2005. The garment industry alone makes up 70 percent of the whole manufacturing sector's value added. Food, beverage and tobacco accounted for 15 percent and other manufacturing sectors (mainly rice milling, tiles and bricks) for another 15 percent. In principle, the entirety of the garment production is geared to exports, while non-garment products are manufactured only for domestic markets.

**Figure 2.1: Value Added of Cambodia's Manufacturing Sector**  
(Million US\$, 2000 prices)



Source: National Institute of Statistics, 2006.

#### 2.1. Production Capacity and Cost Profile of Cambodia's Garment Industry

The number of garment factories grew from almost nil in 1995 to about 250 factories in 2005, mostly operating in Phnom Penh and a few surrounding provinces. The country's garment factories previously operated with about 80 percent capacity. By 2004 and in 2005, factories were operating at full capacity due to a continued sharp increase in demand and limited new investment.

Based on an EIC estimate, the 250 garment factories currently operating in Cambodia have stocks of fixed assets reaching about US\$300 million. Including the operating cash flows, the industry's FDI accumulated

between 1995 and 2005 amounted to around US\$700 million, or about 30 percent of total FDI accumulated during the same period.<sup>7</sup> Most garment investors in Cambodia are from Hong Kong, Taiwan, and China. These three top investors represent more than 70 percent of total garment factory owners.

Cost and profitability are worth considering from an investor's perspective. The industry must be competitive and profitable enough to attract investors. Results from the survey conducted by EIC in May 2006 among garment factories have shown that Cambodia's garment business remains profitable. The estimated profit margin for the industry today can reach as high as 9 percent of sales. This level of margin is somewhat behind the industrial margin prior to the ATC environment, which was estimated at 13 percent of sales (Sok et. al, 2001). Strong competition and tariff requirements in importing countries contribute to this decrease in industrial profit margin.

The garment industry generates limited value added because factories only perform the Cut, Make and Trim (CMT) and most materials are imported. Therefore, the value added from Cambodia's garment industry is generated mainly from labor. Results reveal that raw materials alone constitute 52 percent of total sale. It would be advantageous for Cambodia's garment industry if raw materials could be obtained locally, which would allow factories to reduce their production costs through cost saving in transportation and inventory.

Utilities comprise 15 percent of sales. As a result, the value added of the garment industry represents about 33 percent of its sale.<sup>8</sup> This value added stood at US\$726 million or 15 percent of total GDP in 2005.

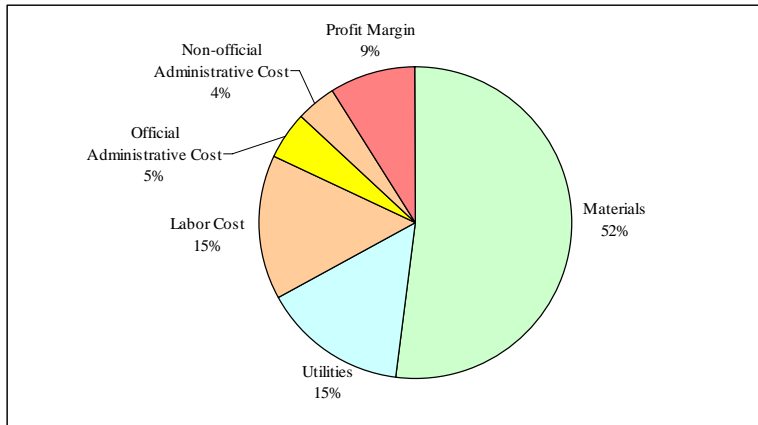
Labor costs represent approximately 15 percent of the production cost. In 2005, about US\$330 million was estimated to have been spent on personnel and workers in the industry. With overtime work, the monthly salary of Cambodian unskilled workers may reach US\$70-80, while skilled workers may earn on average five times more.

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<sup>7</sup> Tourism attracts the second largest amount of FDI with 25 percent of total Cambodia's FDI.

<sup>8</sup> The proportions are consistent with findings in another study conducted in 2005 by USAID in collaboration with Nathan Associates, Werner International and EIC (USAID, June 2005).

**Figure 2.2: Production Costs of Cambodia's Garment Industry in 2006**



**Source:** EIC, HDIA Garment Factory Survey, May 2006.

As previously stated, almost all the garment factories in Cambodia are owned by foreigners, especially Chinese nationals. Many factory owners bring their countrymen to work in managing or supervising positions. They earn on average three to four times more than the Cambodian skilled workforce. The Cambodian skilled workers employed in management or production departments may earn between US\$100 to US\$200 a month, while foreign supervisors could make about US\$400 to US\$500 a month. It is also estimated that the number of employees working in management represents about 10 percent of the total factory workforce, 20 percent of which are foreigners (USAID, 2005). Having more Cambodians in managerial positions could help diminish the costs and make production costs even more competitive.

Administrative costs make up 9 percent of the total production cost. The official administrative cost is estimated at only 5 percent while another 4 percent account for non-official administrative costs. This level of unofficial payment by garment factories is seen to be decreasing, compared to the previous level estimated at 7 percent (Sok et al., 2001).

## 2.2. Contribution to Economic Growth

Garment exports have risen dramatically since 1997 in spite of the political tension which caused fear amongst foreign investors. Despite the quotas imposed by the US authority on some product categories in 1999,

annual Cambodian garment exports rose 46 percent in 1999 and 78 percent in 2000, before slowing down to around 20-25 percent in 2001-2004.

Despite the fear of huge international competition facing this industry after the end of ATC, garment exports remained unexceptionally strong, reaching US\$2.2 billion in 2005. This represented an increase of 10 percent over 2004, and 75 percent of the country's total exports. Data available during the first semester of 2006 continue to show a strong expansion in garment exports. Safeguard measures imposed on China by the US and EU, coupled with the labor cost advantage, good labor compliance monitored by the International labor Organization (ILO) have been the driving force behind the industry's success in the post-quota environment.

Based on official statistics, the annual growth of real GDP (2000 prices) averaged 8.2 percent during 1995-2005, while the average annual growth of garments value added (2000 prices) reached 38 percent during the same period. In terms of amounts (in 2000 prices), the increase during that period of real GDP was US\$3.1 billion, of which garments value added contributed to US\$0.81 billion. This means that the expansion of the garment sector contributed to 26 percent of GDP growth, or about 2 percentage points annually, since 1995.

It is worth highlighting that the garment industry has a spillover effect on other auxiliary sectors. Based on the EIC Input/Output Model simulation,<sup>9</sup> it is estimated that an increase of US\$100 in garment exports would result in an additional demand of US\$205 in the whole economy. As Cambodia does not have strong supporting industries and most inputs are imported, this additional demand ends up only being an increase of US\$45 in the total value added (US\$3 in agriculture, US\$1 in non-garment industry, and US\$8 in services, and US\$33 in garment industry). This multiplier effect seems to be relatively low compared to other countries, especially for agriculture, because Cambodia has no real textile industry that intensively uses agricultural products (cotton for example) as inputs.

### **2.3. Contribution to Balance of Payments and National Budget**

With regard to the balance of payments, the garment sector generated in 2005 a trade surplus of about US\$0.8 billion (13 percent of GDP), merely the same amount as that of the National Bank's foreign reserves. However,

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<sup>9</sup>The EIC I/O Model is under construction and requires further improvement in quality. However, the current version provides some ideas of the trickle down effect of 47 economic sectors, including the garment sector.

most Cambodian garment factories are owned by foreign investors. Therefore, a significant part of this trade surplus is sent back to the investor countries in the forms of benefit and income repatriation (estimated to reach more than US\$300 million in 2005).

Concerning fiscal issues, the garment industry only contributes a small amount to the national budget. To encourage foreign investors to operate in the country, the Cambodian government provides substantial incentives, especially import tax exemptions and significant holiday tax for profit. Before 2005, garment exporters paid fees on quotas and export licenses amounting to around US\$40 million, or 8 percent of total government domestic revenue. Since January 1<sup>st</sup> 2005, the quota system has been removed. Garment exporters continue to pay export licenses, which represented only around US\$10 million in 2005.





## **Chapter 3**

### **Contribution of Garment Exports to Human Development**

Cambodia's garment industry and footwear factories, similar to other countries, are essentially made up of low skilled women, accounting for about 85 percent of the total workforce. About 90 percent of these women come from rural areas. Half of a garment worker's earnings is used for minimum subsistence (food, rent and transportation), while another half is to support family in the countryside and for net savings.

In addition, real wages of garment workers were basically flat during the last five years (CDRI 2006)<sup>10</sup>. This situation does not reflect the sharp increase in workers' productivity during the same period. In 2005, an average Cambodian garment worker produced 8.7 pieces per day, against only 5.6 pieces in 2000, representing an average increase of 9.2 percent per year.

#### **3.1. Contribution to Employment**

The garment industry plays a significant role in providing low-skilled employment in Cambodia. It comprises about 65 percent of total employment in the manufacturing sectors, or 47 percent in the whole industry sector. However, as Cambodia is still largely an agricultural country, the garment industry's work force is relatively modest, representing only about 5 percent of the total labor force.

Due to the high export growth, the garment industry created almost 40,000 new jobs per year on average from 1997 to 2001. However, this trend significantly decreased since 2002 with only about 20,000 to 25,000 new jobs per year, due to the decline in new investment. By the end of 2005, it was estimated that the garment sector directly employed 270,000 people.

The number of indirect jobs created by the garment industry is also relatively important. Taking into account the multiplier effects of indirect job creations, EIC used its Input/Output model to examine further spillover effects of the garment industry. Final results indicate that the number of indirect jobs created by the garment industry may reach 242,000, in other

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<sup>10</sup> CDRI. 2006. Cambodia Development Review, Volume 10, Issue 1, January-March 2006.

words, one garment worker creates another indirect job. Almost half of indirect jobs are concentrated in the service sectors (113,000 jobs) such as transportation (37,000 jobs), trade (29,000 jobs), restaurant (17,000 jobs), and other small services (30,000 jobs).

The non-garment manufacturing sector and construction have benefited also from the expansion of the garment sector (37,000 jobs). The trickle down of garment exports to the agriculture sector is very indirect, only through the increase of the general economy, as Cambodia does not have a textile industry. The 92,000 jobs indirectly created by the garment industry are concentrated in vegetables and non-paddy crops.

**Table 3.1: Number of Direct and Indirect Jobs  
Created by the Garment Industry in 2005**

	<b>Number of Jobs (in 000's)</b>	<b>%</b>
<b>Total Jobs</b>	<b>512</b>	<b>100%</b>
Direct Jobs	270	53%
Indirect Jobs	242	47%
Agriculture	92	18%
Industry (excl. garment)	37	7%
Services	113	22%
<i>Transportation</i>	<i>37</i>	<i>7%</i>
<i>Trade</i>	<i>29</i>	<i>6%</i>
<i>Hotel &amp; Restaurant</i>	<i>17</i>	<i>3%</i>
<i>Other Services</i>	<i>30</i>	<i>6%</i>

**Sources:** EIC using I/O model simulation.

Equally significant is the economic effect on areas surrounding garment factories. The worker concentration creates demands for certain necessary basic needs, especially food and accommodation. The survey conducted by EIC in May 2006 shows that for every five garment workers one indirect job is created around the factory. They are mostly small businesses, such as food sellers, housing, transportation etc. Food sellers represent almost 40 percent of indirect jobs, housing 25 percent and

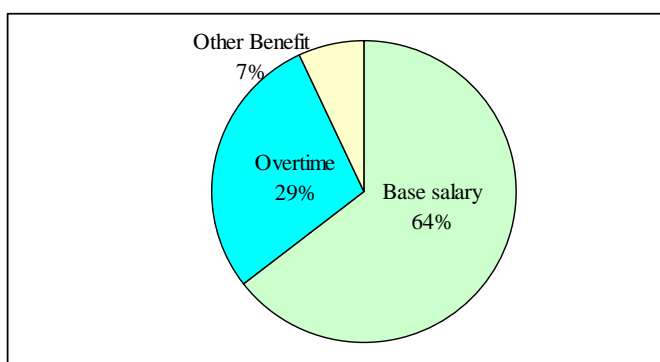
transportation 5 percent. Another 30 percent include small traders, clothing shops and other supporting businesses.

It is noted that from 1995 to 2005, Cambodia's total labor force increased by about 1.9 million people. During this period, the garment industry created about 0.5 million direct or indirect jobs, thus contributing about 26 percent to the total new entrants in the labor market.

### 3.2. Contribution to Workers' Incomes and Poverty Reduction

Willing to work overtime, garment workers could earn more today. The survey shows that a typical garment industry worker earns on average US\$73 a month, 29 percent of which comes from overtime work. A basic monthly salary for many workers is limited to US\$45, the minimum wage determined by law, which has not increased since 2001. Of particular note, many workers and union representatives have complained about the decrease in real wage due to the high increase in the general price of goods. Last year the inflation rate in US dollars was 3.6 percent.

**Figure 3.1: Portion of Garment Worker's Income**



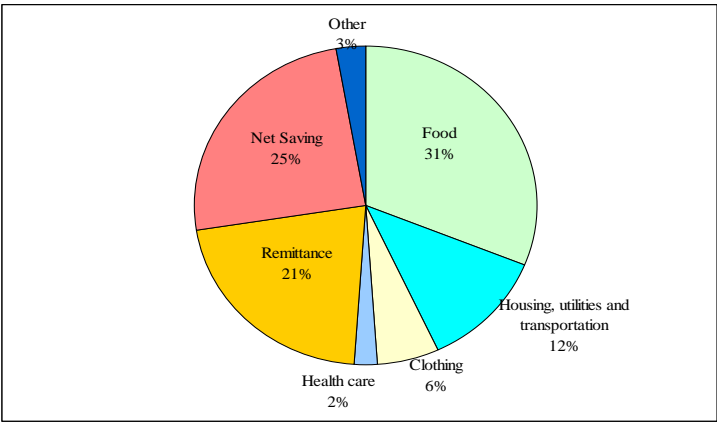
**Source:** EIC, HDIA Garment Worker Survey, May 2006.

Yet, this level of income does not suffice for garment workers to support themselves and their families. Only 10 percent of the workers surveyed thought that the amount earned is enough for their daily needs, while an overwhelming 90 percent agreed that this minimum wage was unlikely to be sufficient for them. As a result, workers have to limit their spending to only basic needs, particularly on food, clothing and utilities. The Committee for Research on Worker's Salary in 2002 estimated that a Cambodian garment worker supports on average another two family

members, mainly living in rural areas. The committee also estimated that about US\$82 per month is required for a garment worker to support herself and her family members with decent lives.

It is worth highlighting that a large proportion of workers' income (31 percent) is spent on food, representing a daily expense of US\$0.75 on average. The money spent on food is not appropriate for workers, who work on average 10.5 hours a day. It should be noted that limited food consumption severely affects a worker's health, while almost 55 percent of workers interviewed complained that their health deteriorated after working for two years or more in garment factories.

**Figure 3.2: How do Garment Workers Spend Their Income?**



**Source:** EIC, HDIA Garment Worker Survey in May 2006.

Earnings spent on housing, utilities and transportation averages 12 percent of workers' total income, while spending on clothing represents 6 percent, and spending on healthcare stands at only 2 percent.

In sum, garment workers' gross savings amount to around 46 percent of their monthly income. However, a vast majority (about 80 percent) of garment workers frequently send part of their earnings home. It is estimated that 21 percent of their monthly earnings is sent home to support their family members. Therefore, garment workers can save up to 25 percent of their income for future use. However, this saving level depends on the number of overtime hours.

The survey results showed that 44 percent of those who send money home do so in order to support the education of younger siblings, while 34 percent said to buy necessary basic needs for their family members.

Renovating the house, paying debts and running a small business are not the main reasons for money being sent home. However, among other reasons, the money is also used to improve farming productivity by buying fertilizer and extending the family's farming activities.

Based on this survey's results, the total 270,000 garment workers sent home about US\$50 million in 2005 to support families in rural areas. This amount represents just about 3 percent of total income generated from the whole agriculture sector.

### **3.3. Contribution to Working Conditions**

The garment worker survey indicates that 40 percent of garment employees received employment contracts when they started work. Many other workers received contracts after working for a short period (1-2 months). Overtime work is common when there are more orders. The overtime work is not limited to only two hours per day regulated by the labor law. Over 30 percent of the workers surveyed work overtime for more than two hours a day, and less than 5 percent have not participated in overtime work.

Forced labor has not been a problem for Cambodia's garment industry, according to the ILO Synthesis Report on Working Conditions in Cambodia's Garment Sector published in March 2006. However, the chain work in garment factory requires workers to work overtime when more orders come in. The results from the EIC Survey in May 2006 show that approximately two-thirds of employees surveyed have experienced overtime work requirements.

Concerning abuse by supervisors or managers, the general answer is that verbal abuse occurs. Physical and sexual abuse is unlikely to happen, according to the survey. About 31 percent of the interviewees have experienced verbal abuse by their managers. One should note that many of the supervisors or managers are Chinese, who have different mindsets and management styles. The possible substitution of a Chinese management by Cambodian managers would help decrease to some extent social conflict between workers and management, and thus increase worker productivity in the factories.

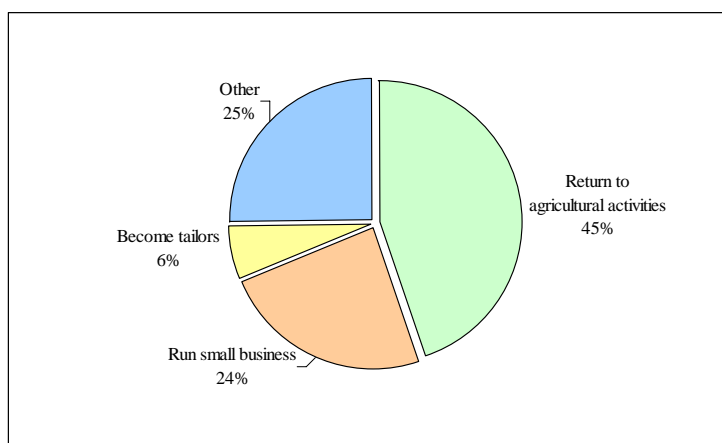
In addition, as part of the social compliance required by many buyers and the ILO, many garment factories have set up medical centers within their factories. Factories in Cambodia seem to comply fairly well and workers can access medical services provided by factories for free. Nonetheless, many do

not yet have satisfactory infirmary services within their factories. According to the ILO (2006), many factories have not yet taken steps to improve their infirmary service such as recruiting a doctor or more nurses, ensuring that a nurse and/or doctor is on duty during the required number of hours, including overtime and ensuring that the infirmary has enough medicine and medical equipment.

As mentioned in the previous section, 55 percent of garment workers surveyed perceive that their health conditions worsen after working for several years. One of the reasons for the deterioration in health conditions is that workers in general limit their spending on basic needs, especially food, while they have to work over 10 hours a day including overtime. Working in the garment factories could indirectly affect workers' health. Appropriate incentives should be provided to workers who work in the factory for several years to receive compensation for their worsening health conditions.

Interestingly, about 73 percent of workers surveyed are generally satisfied with their working conditions. Their complaints were focused more on the issue of low salaries. Almost 80 percent of the workers surveyed wish to see their salaries increased as the price of basic goods has steadily increased. However, the concern of many factory owners is productivity, repeating that only when worker productivity increases, can the factories raise salaries. In general, garment workers intend to continue working in the garment factories for another two years due to the lack of other foreseeable jobs.

**Figure 3.3: Future Objectives of Garment Workers**



**Source:** EIC, HDIA Garment Worker Survey in May 2006.

Regarding their future objectives, many of the workers are willing to return to their homeland and work in agriculture with their families or run a small business. As shown in the figure 3.3, 45 percent of the workers surveyed wish to pursue work in agriculture to earn their living, while another 24 percent would like to start a small business when they have enough money. Only 6 percent of them would like to become tailors since they have some experience in the garment factories.

However, interviews with trade union leaders seem to contradict the above worker survey results. They are not convinced that garment workers, many of whom are young girls, will return to work in agriculture now that they have experienced modern life in the city whilst working in the garment factories.

### **3.4. Contribution to Workers' Empowerment**

The garment industry has widened the opportunity for workers to participate in social and economic activities. The Cambodian labor law obliges that each factory has a worker representative. There are 26 union federations and around 1,026 labor unions within Cambodia<sup>11</sup>. Through union participation, workers can ensure that their issues are brought to management and solutions are found. Cambodian law gives workers the right to strike and to receive protection where necessary.

As the majority of garment workers are women, trade in garments has empowered women through job creation, many of whom would otherwise still be excluded from participating in the formal economy. As women gain access to economic empowerment their family status has also changed. Garment workers tend to support three family members, making them a vital component for the family's financial security.

As women move to the city to work in factories they leave behind their traditional family structure and find themselves alone often working and living in tough conditions. Though they are empowered as they gain economic independence and acquire a skill, they are equally vulnerable to any shift in the garment industry.

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<sup>11</sup> Data from the Ministry of Social Affairs, Veteran and Youth Rehabilitation (MoSAVY) by mid-2006.





## **Chapter 4**

### **International Competitiveness of Cambodia's Garment Industry**

When quota restrictions disappear, competition in the textile and clothing trade intensifies, especially for small producers. In the long term, only countries which deliver high quality products with competitive prices can maintain their market share. Several factors may determine the industry's competitiveness. A competitive garment industry is normally composed of high worker productivity, reliable access to high quality fabrics, short production and delivery cycles, and efficient public institutions.

Cambodia's garment competitiveness could also be affected by national and global factors, such as the national macroeconomic environment, global trade policy (elimination of quota system and safeguard measures), and to some extent, consumer ethics on good labor compliance.

#### **4.1. National Competitiveness of Cambodia**

In the context of globalization, competitiveness has become the main concern for all countries in order to achieve high growth and prosperity. The definitions and sources of competitiveness have been interpreted in different ways, depending on its many dimensions. The World Economic Forum (WEF), for example, thinks of competitiveness as a collection of factors, policies and institutions which determine the level of a country's productivity and that, therefore, determine the level of prosperity that can be attained by an economy<sup>12</sup>.

The most well-known and comprehensive tool for a cross-country competitiveness comparison has been the model developed by WEF, known as the Growth Competitiveness Index (GCI) which puts emphasis on the ability of a nation to grow through its macroeconomic environment, public institutions and technology. Cambodia has been included for the first time in 2005 in the GCI, thanks to the partnership between WEF and EIC.

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<sup>12</sup> Global Competitiveness Report 2005-2006, (page 3)

**Table 4.1: Countries' Ranks in the  
Growth Competitiveness Index (GCI)**

	<b>GCI</b>	<b>Macro Environment Index</b>	<b>Public Institution Index</b>	<b>Technology Index</b>
China	49	33	56	64
India	50	50	52	55
Indonesia	74	64	89	66
Vietnam	81	60	97	92
Bangladesh	110	83	117	101
Cambodia	112	104	114	105

**Source:** WEF, *Global Competitiveness Report 2005-2006*.

Table 4.1 shows that the national competitiveness of Cambodia is very weak, ranking 112<sup>th</sup> among 117 countries included in the global index. Cambodia is close to Bangladesh (110<sup>th</sup>), but quite far behind China, India, Indonesia, and Vietnam. The country's poor performance is mainly due to poor public administration, lack of rule of law and high levels of corruption. Cambodia is ranked 115<sup>th</sup> in the WEF's corruption index, just before Chad (116<sup>th</sup>) and Bangladesh (117<sup>th</sup>).<sup>13</sup>

In addition, Cambodia is also ranked 104<sup>th</sup> in the macroeconomic index, although the country's economic growth was very strong during the last 10 years (8.2 percent annually). This weak performance is mainly caused by the high interest rate spread, and the difficulty of private firms to access to loans.

## **4.2. Cheap and Abundant Labor Supply**

Cambodia is competitive with its cheap and abundant work force supply. EIC estimates that the total labor force was 6.5 million in 2005, around 47 percent of the country's population. The average new entrants in the labor market are around 250,000 per year. In 2005, it is estimated that about 5 percent of the country's labor force are garment workers. Requiring non-skilled labor, Cambodia's labor supply can therefore support the industry's possible expansion.

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<sup>13</sup> Cambodia is ranked 130<sup>th</sup> out of 158 countries as per the Corruption Perception Index (CPI) prepared by the Transparency International in 2005, whilst other competitor countries are ranked such as China at 78, Vietnam at 107 and Bangladesh at 158.

**Table 4.2: Working Hours and Wages in  
the Garment Industry in Selected Asian Countries**

Country	Legal working hours (per week)	Monthly Minimum Wage Set by Law (US\$ in 2000)	Effective Hourly Wage Rate (US\$ in 2002)
Malaysia	48	None	1.41
Thailand	48	[93-109]	0.91
China	40	[12-39]	[0.68-0.88]
Philippines	48	130	0.76
Sri Lanka	45	[29-37]	0.41
Bangladesh	<b>48</b>	<b>16</b>	0.39
India	48	[6-54]	0.38
Vietnam	48	45	0.29
<b>Cambodia</b>	<b>48</b>	<b>45</b>	<b>0.29</b>
Indonesia	40	[15-34]	0.27

**Sources:** *U.S. Department of Labor (2000), USITC (2002) and Sok, et al.(2001), Adhikari and Yamamoto 2005.*

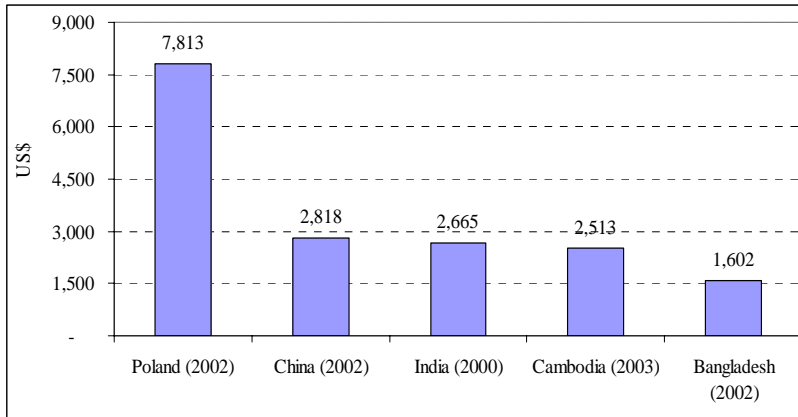
Cambodia's labor costs are relatively lower compared to its main competitors. As indicated in the table above, the hourly wage rate of Cambodia's garment industry is estimated at US\$0.29, much less than in China where the hourly wage rate ranges between US\$0.68 and US\$0.88. The rate in Cambodia is lower than in China, Sri Lanka, Bangladesh and India but higher than in Indonesia. Comparing Cambodia and Vietnam, the labor cost was basically the same a few years ago. But now, it seems that the Vietnamese labor cost has become more expensive, due to recent wage adjustment.

A legal minimum wage of US\$45 a month has been set in the Cambodian garment industry, while it is only US\$16 in Bangladesh. Legal working hours are also fixed at 48 hours a week for both countries.<sup>14</sup> However, these labor regulations are not effectively applied. The effective wage rate is higher in Bangladesh than in Cambodia.

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<sup>14</sup> In Cambodia, an overtime of two hours per day is allowed by law.

**Figure 4.1 : Value Added Per Worker in the Garment Industry**



**Source:** EIC for Cambodia, World Bank for other countries.

Moreover, Cambodia's worker productivity has also improved remarkably over the past years. The value added per worker stood at US\$2,513 per year, slightly lower than in China and India, but higher than some of its Asian competitors such as Bangladesh. Value added per worker in Poland's garment industry stood at US\$7,813, the most significant among the countries compared. However, it should be noted that worker productivity is strongly linked to the level of technology and machinery introduced in the industry.

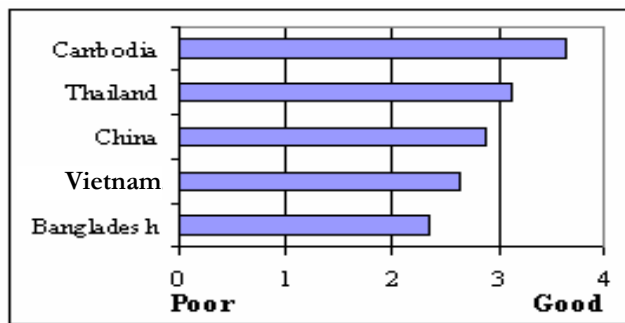
Notwithstanding the above, the majority of garment sector workers are unskilled. Usually, they have very low education, which limits the ability to absorb know-how and know-do from the majority of foreign-owned factories. The majority - 65 percent - of workers surveyed in May 2006 have only elementary school education or less. This lack of education is likely to act as a constraint for the industry if it is to introduce modern technology and to shift to high-value added products.

Furthermore, technical training is still lacking at all levels, although sewing machine mechanics usually receive some basic training. Cambodian factories lack trained administrators, production planners and method engineers, which are vital factors to ensure future progress of the Cambodian garment industry (USAID 2005). Industrial engineers are needed to sustain the garment industry in Cambodia.

### 4.3. Corporate Social Responsibility

Behind the success of Cambodia's garment industry is its status as an industry with good labor practices. Under the bilateral trade agreement, the US promised Cambodia better access to US markets in exchange for decent working conditions in the garment sector. The ILO project, Better Factories Cambodia, was established in 2001 to help the industry make and maintain these improvements. The project has become a useful tool in attracting major Western buyers, allowing Cambodia to capture the niche ethical buying market.

**Figure 4.2: Countries' Compliance with Labor Standards**



**Source:** World Bank Survey, 2004.

Considering the above, Cambodia has an advantage over its competitors, since it already has a progressive labor strategy, which has been supported by major buyers. According to the World Bank Survey in 2004, Cambodia's labor standard was rated much better than its main competitors such as Thailand, China, Vietnam and Bangladesh and it was first amongst other reasons for buyers to source from Cambodia. This highlights the fact that a good labor practice is as important as or even more important than competitive prices. Buyers believe that improved labor standards have positive effects on various aspects such as accidents, workforce productivity, product quality, worker turnover, absenteeism and quality of applicants for jobs.

However, social compliance has its pros and cons. It seems to outweigh cost issues. While labor compliance ensures improved working conditions, it has a negative effect on the price due to the higher costs needed for compliance. On the other hand, it can impose invisible costs for the factories if labor unions reverse their roles and over-execute their rights.

Time lost due to strikes could slow down the production process and creates public sensitivity, which may severely affect sourcing decisions.

From GMAC's point of view, social compliance is like a two-edge sword. Many factory owners highlighted the current situation where some trade unions are irresponsible and work for their personal benefit. Today there are more strikes but the nature of the strikes has changed, occurring more often in the factories with higher demands. Previously, these strikes resembled demonstrations and were more likely to be influenced by political motives.

Overall, corporate social responsibility has been the highlight of the Cambodian garment industry. It is a role model for other countries to follow. Now that the bilateral agreement with the US has expired, the country will not necessarily continue to finance the program. However, the program's success indicates that it is worth continuing to maintain the trademark of Cambodian garments. The management of public expectation is also critically important to ensure trade unions understand their rights and obligations and do not abuse their position.

#### **4.4. Supporting Environment**

Besides the cheap labor supply and the brand name of good labor compliance within the Cambodian industry, garment factories receive various forms of incentives provided by the Government of Cambodia. The garment factories in Cambodia enjoy the import tax exemption and holiday tax on profit. The policy has proved successful to some extent in attracting foreign investors to the garment industry in Cambodia. It has now been expanded for another two years until 2008.

##### ***4.4.1. Governance***

By contrast, the incentives are likely to be offset by the poor environment for a supporting industry. Poor governance has been one of the major concerns for many investors. Corruption is perceived widespread throughout Cambodia, hindering industrial competitiveness. The country's poor governance inevitably affects sourcing as well as investment decisions.

**Table 4.3: Number of Documents and Time  
Required for Exports**

	<b>Document</b>	<b>Signature</b>	<b>Time (days)</b>
Bangladesh	7	15	35
<b>Cambodia</b>	<b>8</b>	<b>10</b>	<b>43</b>
China	6	7	20
India	10	22	36
Indonesia	7	3	25
Vietnam	6	12	35

**Source:** World Bank, *Doing Business 2006*.

Corruption forces an increase in the production cost. As indicated in the previous sections, non-official costs in the garment industry account for 4 percent of total production cost. The level of non-official fees paid by garment factories is as serious as the extent of country-wide corruption for large enterprises, according to EIC<sup>15</sup>. A simple calculation indicates that without unofficial payment, the industry could save up to US\$88 million a year in total export costs. However, according to GMAC, corrupt practices in the industry have been improving. The extent of corruption has been reduced and it is currently more manageable. GMAC names this “*a more transparent corruption*”, which at least allows businesses to have an idea of what the costs will be.

Bureaucracy seems to be a critical concern for businesses in Cambodia as well as its main competitor countries. According to The World Bank Investment Climate Assessment (WB, 2006), a Cambodian company is required to provide on average eight documents and 10 signatures to process exports, positioning Cambodia in the middle compared with its main competitors. Nevertheless, total time for exports reaches 43 days, higher than all its competitors. The complex and non-transparent process creates opportunities for the requirement of unofficial fees since many factories accept to pay additional fees to facilitate their operations.

<sup>15</sup> Economic Institute of Cambodia. Assessment of Corruption in Cambodia’s Private Sector. July 2006.



#### **Box 4.1: The twelve-Point Plan of Investment Climate Reforms**

The twelve-point plan was introduced in 2004 by the Royal Government of Cambodia to improve the country's investment climate and trade facilitation. The plan includes:

1. Establish a full-time, cross-agency change management team by 1 July 2004.
2. Review and re-engineer the entire trade facilitation process to remove overlaps and unnecessary approvals and reduce both cost and time. A performance monitoring system will be put in place with the baseline measures to start in July 2004.
3. Implement a single administrative document by 1 December 2004 to serve as a facilitate transition to automated customs processing.
4. Introduce an overall risk management strategy to consolidated and rationalize all inspection requirements.
5. Carry out a strategic review of the role of CamControl to make better use of the institution's knowledge base and also optimize use of information and resources from other agencies.
6. Implement automation of the streamlined trade facilitation process, including a single-window process in the Sihanoukville Port, by December 2005.
7. The Royal Government of Cambodia will introduce a WTO compatible and publicly announced flat fee for services, which will be defined by a service-level agreement.
8. Remove the requirement to incorporate with the Commercial Register.
9. Remove the requirement to send a notification to the Ministry of Labor to start hiring employees.
10. Automatically register a company for VAT using the same form as for company registration and associate the tax identification number with the registration number.
11. Implement a national award for good corporate citizenship and governance.
12. Ensure that the private sector participates in the monitoring and evaluation of reforms, through the Private Sector Forum.

**Source:** *The World Bank, 2006*

Nonetheless, much improvement has been made in the area of investment climate and trade facilitation within the last few years. With the Government's commitment, the Twelve-Point Plan of Investment Climate Reforms was introduced in 2004. As a result, significant reductions in time and cost to process exports have been observed.

#### **Box 4.2: Impacts of the Implementation of Twelve-Point Plan**

The reforms, though not yet fully implemented, are proving effective. The results of the Reform Score Card survey conducted by the Emerging Markets Consulting in 2005 indicated that the government agencies have made strong improvements in the eyes of the private sector in terms of, among others, documentation problems, costs, time and information dissemination.

- **Documentation Problems:** There has been a sharp drop in the number of firms reporting problems with their documentation during the importing and exporting process. From roughly 41 percent encountering problems in 2003, only 12 percent of export shipments encountering documentation problems in 2005.
- **Costs:** The cost for processing exports with the Customs and Excise Department has also decreased significantly from US\$942 in 2003 to between US\$598 and US\$612, whilst the average costs have decreased from US\$2,477 per import transaction in 2003 to about US\$673 per transaction in 2005.
- **Processing times:** The private sector's perception of the amount of time required to process import/export transactions has also improved. As a result, the export processing time with the Customs and Excise Department is about 20.2 hours in July 2005, a great decrease from 15 days in 2003.
- **Information dissemination:** Concerning government's dissemination of information, 84 percent and 91 percent of respondents said they were at least adequately informed about fees and documentation respectively.

**Source:** *Emerging Markets Consulting. 2005. Trade Facilitation and Competitiveness Project-Performance Measurement System*

#### **4.4.2. Supporting Industry**

Lack of supporting industries, especially the textile industry, is another disadvantage for Cambodia. Garment factories in Cambodia perform only the Cut, Make and Trim (CMT), while most of the raw materials and accessories are obtained mainly from China, Hong Kong and Taiwan. Although garment production is an important part of the country's industry, the textile industry is unlikely to play a supporting role in the economy due to a lack of investment. Encouraging a textile industry would benefit the industry as a whole since it could reduce the lead-time as well as production cost. It would further create additional jobs for thousands of Cambodians.

However, many investors perceive investment in the textile industry as a high risk investment which requires huge capital investment. According to Mr. Van Sou Ieng, the president of GMAC, there is initial interest from investors for a textile industry but they do not pursue their interest due to political instability, poor infrastructure, high utility costs especially electricity, low levels of technology, and the perceived restricted labor law.

### 4.4.3. Physical Infrastructure

In addition, Cambodia's infrastructure is viewed as one of the poorest in the region. Both transportation and energy costs significantly increase production costs. The number of shipping companies is still limited which prevents competition and keeps prices high. Moreover, Cambodia is also naturally disadvantaged because of its relative distance to the important US markets. The shipping time from Cambodia to the US takes longer than from China, Hong Kong and Taiwan.

**Table 4.4: Private Sector Perception on Infrastructure Quality**

	<b>General infrastructure</b>	<b>Railroads</b>	<b>Port facilities</b>	<b>Power supply</b>	<b>Postal system</b>	<b>Telecom</b>
Bangladesh	2.7	2.6	2.6	2.3	2.7	2.5
<b>Cambodia</b>	<b>2.4</b>	<b>1.5</b>	<b>2.7</b>	<b>2.6</b>	<b>2.7</b>	<b>4.7</b>
China	3.2	3.6	3.6	3.7	5.0	5.5
India	2.9	4.2	3.1	3.3	4.9	6.3
Indonesia	3.3	3.1	3.3	3.6	4.1	4.4
Vietnam	2.6	2.3	2.8	3.5	5.3	5.8

**Source:** *World Economic Forum, Executive Opinion Survey 2005-2006.*

**Note:** 1: The worst, 7: The best in the world.

The above table shows the private sector's perception of infrastructure in selected Asian countries. Cambodia's infrastructure is rated low and only comparable to Bangladesh, while lagging behind other competitor countries such as China, Indonesia and Vietnam. Railroads, port facilities, power supplies and the postal system are just some of the areas which are considered underdeveloped and require substantial investment. Telecommunications is the only sector viewed as acceptable by the private sector.

The poor supporting environment contributes to the long-lead time of Cambodia's garment exports. The average lead-time for Cambodia's export consignments varies between 90-120 days<sup>16</sup> in comparison to the ideal 30 days. The import of raw materials and Cambodia's disadvantageous location to its main export markets, the US and EU, are also factors which explain the long lead-time. In this context, it seems difficult for Cambodia to reduce its high lead-time.

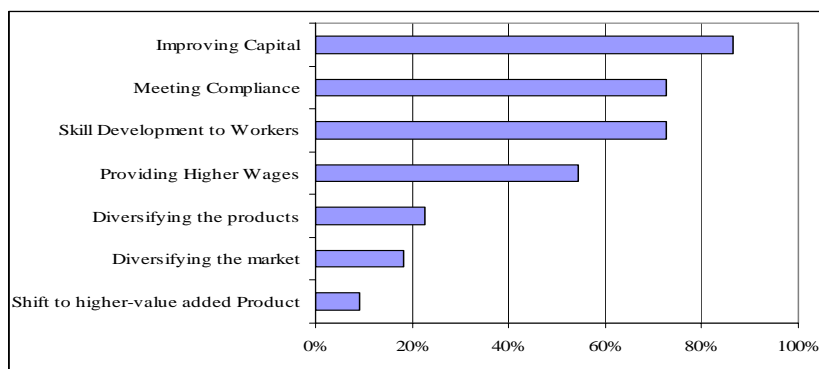
<sup>16</sup> Source: Gherzi Textile Organization

#### 4.5. Firm Operations and Strategies

Factory operations and strategies are also fundamental to competitiveness. In the post-quota environment, factories must be able to respond to market demands as quickly as possible. Delivery time is therefore crucial to meet the requirements of a fast changing seasonal fashion industry.

The survey conducted by EIC in May 2006 with 22 garment factories found that different factories have different priority strategies to maintain their competitive edge. Firstly, many garment factories in Cambodia have invested more in their capital assets, buying more machines and equipment. The continuing growth of garment exports requires that factories in Cambodia bring in more capital, while the technology does not seem to be improving much.

**Figure 4.3: Firm Strategies to meet Increasing Demands in Post ATC**



**Source:** EIC, HDIA Garment Factory Survey, May 2006.

Secondly, many factories have focused on meeting compliances and developing workers' skills. This suggests that compliance remains the most important concern for factories. Shifting to higher value-added products is unlikely to be a useful strategy for Cambodian garment factories, simply because on the one hand the industry is over reliant on foreign materials and on the other hand many of the workers are unskilled. Trying to diversify markets and garment products do not seem to be appropriate measures for Cambodia's factories in the post-quota environment.

## **4.6. Demand-Side Factors Affecting the Cambodia's Garment Industry**

Demand is influenced by a country's internal situation to supply the goods as well as regional and global issues affecting the respective industry. The quota system helped Cambodia's garment industry establish itself and grew remarkably in the last decade. With the expiry of trade restrictions, all countries are facing global competition. In the long run, smaller producers like Cambodia will find it difficult to compete with the integrated supply chain, service standards and savings on volume that the larger producers can offer, unless they can somehow distinguish themselves.

In order to stay on par with its competitors, the Cambodian garment industry needs to identify the external demand constraints it faces.

### ***4.6.1. Tariffs in the US Market***

Preference programs are important to help least developed countries succeed in developed markets. Without quota restrictions, Cambodia's garment exports to the US are subject to an average tariff ranging from 15 to 20 percent. In the free-market, it is unlikely that Cambodia is competitive enough to face direct competition with bigger apparel producers such as China and India. The US has provided some of the African LDCs preferential access to its market. Yet, these preferences have not been accorded to Cambodia nor to other non-African LDCs. African LDCs, therefore, seem to have a competitive advantage over Cambodia.

With tariff-free access to the US market, Cambodia's garments can be price competitive and will thus receive more orders. Though not benefiting directly from the price-cut, Cambodia would attract more investment into the sector and thus more jobs would be created. A detailed analysis of the impact of US tariffs can be found in Chapter 6 in this part I.

### ***4.6.2. EU's Rules of Origin***

Only around 20 percent of total RMG exports go to the EU, although Cambodia could export to the EU with quota and tariff-free, as an LDC, on condition of the Rules of Origin under the EU's Everything but Arms policy. Of the total exports to the EU, 33 percent remained under Rules of Origin constraint. The removal of this constraint would help Cambodia at least keep its market share in the EU.

#### ***4.6.3. Safeguard Measures on China***

As a result of the safeguard measures imposed on China by the US and EU in 2005, Cambodia's garment exports continue to rise. Without safeguard measures, China would be able to capture the lion's share of the US and EU markets due to its high production capacity and productivity. It is nearly impossible for small producers like Cambodia to be direct competition against the likes of China.

So far, Cambodia has performed well to gain contracts abandoned by China due to restrictive US quotas. This helps volumes to double or even triple in certain categories such as cotton knit shirts (338/9), cotton bras (349), cotton underwear (352), knit shirts (638/9), and trousers (647/8) (Emerging Textile, 2006).

#### ***4.6.4. Vietnam's WTO Membership***

A number of buyers have mentioned that Vietnam has a more attractive investment climate because of investment security, lower energy costs and a perception that the workers are more skilled. In general, since the quotas have ended, life for the Cambodian garment industry seems to be stable, as it fights to expand its industry in the shadow of its larger neighbor and rival Vietnam. The country will have to build upon this success in order to form a strong base when Vietnam joins the WTO.

Vietnam's market share of garments and textiles in the US currently stands at about four percent. The US has become the largest importer of Vietnamese clothing, accounting for 58 percent of the country's total garment exports in 2005. As a WTO member, Vietnam could export more to the US markets, and will thus attract more foreign investment in the garment sector.<sup>17</sup> Since Cambodia and Vietnam have the same markets for apparel products, the WTO membership of Vietnam will negatively affect Cambodia's garment exports due to Vietnam's more favorable business environment.

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<sup>17</sup> Asian Business, June 2006



## **Chapter 5**

### **Implications of MFA Phase-Out for Cambodia**

Over the last 30 years, global trade in textile and garments has been influenced by the Multi Fiber Agreement (MFA), quantitative restrictions applied by the developed countries. Under the agreement, importing countries negotiated quotas bilaterally with the exporting countries, which impacted global apparel sourcing patterns. A major consequence of the quota regime is that it helped spread the textile and clothing business globally. With the Uruguay Round negotiations, the Agreement on Textiles and Clothing (ATC) came into force and created special interim rules to govern trade in textiles and garments among WTO member countries.

From 1995 to 2004, the industry faced a new transition period as the ATC called for the gradual elimination of quotas on textiles and garments established by developed countries under the MFA. It required that all textile and garment quotas be removed over the transition period ending on 1 January 2005. The shift in trade and investment in global textiles and garments would occur after the ATC expiry. In the post quota environment, sourcing patterns depend on individual competitive strengths and not on legislation and restrictions. This global shift in the industry places enormous burdens on Cambodia, whose current garment exports represent over 75 percent of total exports.

#### **5.1. Main Findings from Empirical Studies**

A number of studies have attempted to assess the impact of ATC expiration on the industry as a whole, using the Global Trade Analysis Project (GTAP) with different assumptions. Most remarked that China will dominate the world's trade in textile and garments. China alone is estimated to have 50 percent or more of the post-ATC market share. No doubt, in the free market China has a significant competitive edge in textile and apparel trade due to its huge resources, cheap and abundant manpower and fully integrated value chain which allows China to supply garment products at competitive prices with competitive quality.

Many of the studies concluded that China and South Asia will benefit greatly from the quota removal. As suggested by Francois and Spinanger (2001a), textile and garment exports from China and South Asia would



increase substantially following the quota elimination, while preferential access to the US and EU would be reduced and demand would be shifted away from countries such as Turkey and Mexico. Furthermore, simulations by Avisse and Fouquin (2001), using the quota removal policy, confirmed that China's exports would increase by 87 percent and South and South-East Asia's would increase by 36 percent. In the same simulation, output share of Asia would increase from 12 percent to 18 percent while Latin America and NAFTA would lose 39 percent and 27 percent respectively.

According to Diao and Somwaru (2001), the annual growth of the world's textile and garment trade would be more than 5 percent and the market share of developing countries as a whole would increase by 4 percent following the ATC. China would gain almost 3 percent of the world textile and garment markets, while other Asian countries would capture more than 2 percent. Non-quota-restricted developing countries are predicted to lose about 20 percent of their markets due to the constraints. However, it should be noted that this simulation was based on the assumption that the MFA phase-out simulated by improving the efficiency of textile and garment exports from constrained countries. It also assumed that other trade barriers on textile and garment imports be reduced by 30 to 40 percent in all countries and a percent increase in garment trade share is associated with a 3.3 percent increase in per capita income.

As for Cambodia, there are limited literature reviews concerning the implications of the MFA phase-out, given its insignificant market share in the global textile and clothing products. However, the few studies conducted in 2004 came to the conclusion that Cambodia is among the most vulnerable countries in Asia since almost 80 percent of its exports are in garments.

Preliminary estimates by the IMF staff (Mejia, et al. 2004) as published in the IMF Country Report<sup>18</sup>, suggested that Cambodia's GDP growth could drop by about 2 percent after the removal of quotas. Cambodia and Mongolia appear to be the countries that could be more heavily affected by the removal of quotas, whereas the effects on Lao P.D.R. may be negligible. According to the same study, textile and clothing exports of Low Income Asian countries (LIAs<sup>19</sup>) could see their share decline in these markets from 5 percent to 4 percent following the quota removal. However, the negative impact on Low Income Asian countries (LIAs), including

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<sup>18</sup> Cambodia: Selected Issues, IMF Country Report No. 04/331

<sup>19</sup> Bangladesh, Cambodia, Lao P.D.R., Mongolia, Nepal, Sri Lanka, and Vietnam

Cambodia, may be lessened somewhat if the US uses the WTO Agreement on Safeguards to impose new quotas on China.

Analysis by Omar (2005) highlighted that the fall in unit price, especially in the US market, in the quota-free environment, should be readily absorbable by Cambodian exporters, either through savings made on the cost of export licenses or through material cost savings, efficiency improvements and some shaving of profit margins. The effect of the fall in the unit value of sales could be a much larger percentage fall in sector value-added, assuming that other prices remain unchanged. For example, a 10 percent fall in unit price could result in a 25 to 30 percent fall in sector value-added. In a country like Cambodia; whose value added of garment exports represented 12.5 percent in 2005, this would cause a decline in GDP by about 2.2 to 2.6 percent. If employment remains unchanged; the burden of the GDP loss will be shared by the Government and the mainly foreign enterprise proprietors.

According to Sok (2004)<sup>20</sup>, the prospect of Cambodia's garment industry in the post-quota environment depends heavily on the concerted efforts undertaken by the Government and the industry to improve competitiveness. With the Laissez-Faire Scenario, Cambodia's garment exports would see a decline of nearly US\$300 million by 2010. In contrast, with proper reforms in the industry, Cambodia's garment industry would remain competitive on the world market and as a result the country would be able to increase their garment exports from about US\$1.6 billion in 2003 to US\$2.6 billion in 2010.

## **5.2. Cambodia's Quota System**

The US and EU markets are the two main destinations for Cambodia's garment exports. The US markets absorb over 70 percent of total garment exports from Cambodia. The pace of great influx of Cambodian garment exports to the US has brought about restrictions from the US government through an introduction of quotas on 12 categories of textiles and apparel products. The quota was effective from the period of 1 January 1999 through 31 December 2004.

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<sup>20</sup> Detail analysis can be found in the EIC Economic Review, Volume 01, No. 05: The Cambodia's Garment Industry in 2005 and Beyond: A Quantitative Analysis of the Critical Challenges

**Table 5.1: Cambodia's Garment Exports (Million of Pieces)**

	1999	2000	2001	2002	2003	2004
US Market Under Quota	118	115	110	137	139	123
US Market Without Quota	30	91	157	172	202	288
<b>US Market - Total</b>	<b>148</b>	<b>206</b>	<b>267</b>	<b>309</b>	<b>341</b>	<b>411</b>
EU and Other Markets	38	63	86	98	126	176
<b>Total Markets</b>	<b>186</b>	<b>269</b>	<b>353</b>	<b>407</b>	<b>467</b>	<b>587</b>
Quota/US Market (%)	80%	56%	41%	44%	41%	30%
Quota/Total Market (%)	63%	43%	31%	34%	30%	21%

**Source:** *Ministry of Commerce, 2005.*

With this limitation agreement, the US government planned to increase quotas by an additional bonus percentage, on the top of 6 percent annual automatic increase, if Cambodia would substantially comply with internationally recognized core labor standards. Since 1999, the quota utilization mostly reached its limits, except for some non-important categories of products.

Fortunately, the quotas do not seem to have had any significant effects on Cambodian garment exports to the US markets. The significant increase in garment exports to the US market during 2000-2004 was mainly fuelled by the rapid expansion of garment categories not under the quota, which is estimated to reach about 60 percent of total garment exports to the US in 2004, up from only 20 percent in 1999.

### **5.3. Impact of MFA Phase-Out on the Economy**

Although most studies gave pessimistic conclusions for Cambodia's garment industry after the ATC expiry, the situation is not as dramatic as some have forecasted. Trade figures have revealed that Cambodia's share of apparel products continued to increase remarkably in the US market from 2.2 percent in 2004 to 2.5 percent in 2005 but slightly decreased in the EU market from 0.9 percent in 2004 to 0.7 percent in 2005.

**Table 5.2: Sources of US's Imports of Clothing**

	<b>2004</b>	<b>2005</b>	<b>Change</b>
China	13.8%	22.0%	8.3%
India	3.4%	3.8%	0.4%
<b>Cambodia</b>	<b>2.2%</b>	<b>2.5%</b>	<b>0.3%</b>
Dominican Republic	3.2%	3.5%	0.3%
Indonesia	3.7%	4.0%	0.3%
Vietnam	4.0%	4.2%	0.2%
Honduras	4.1%	4.3%	0.2%
Bangladesh	3.1%	2.7%	-0.4%
Guatemala	3.0%	2.6%	-0.4%
Hong Kong	5.9%	5.1%	-0.8%
Mexico	10.3%	8.8%	-1.5%
Others	43.3%	36.4%	-6.9%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>0.0%</b>

**Source:** U.S. Department of Commerce. Office of Textiles and Apparel (OTEXA).

China has greatly benefited from the ATC expiration. The lion production capacity allows China to capture about 22 percent of the US clothing market in 2005, increasing from 13.8 percent in 2004. Other noticeable gainers in this market are India, Indonesia, Bangladesh, and Indonesia, all of which saw their US market share increase. By contrast, Mexico, South Korea, Hong Kong, Taiwan and the Dominican Republic lost a significant share of their market.

The situation in the EU's clothing market is not far different from that of the US, while China and India have taken over the clothing market shares of many countries. China's market share increased by around 9.5 percent in 2005 compared to 2004 and India by only 1 percent. Remarkably, Bangladesh, Indonesia and Cambodia, who have gained in the US market, were unable to maintain their market shares in the EU market and as a result their exports to this market decreased in 2005.

**Table 5.3: Sources of EU's Imports of Clothing**

	<b>2004</b>	<b>2005</b>	<b>Change</b>
China	23.4%	32.9%	9.5%
India	5.9%	6.9%	1.0%
Vietnam	1.3%	1.2%	-0.1%
<b>Cambodia</b>	<b>0.9%</b>	<b>0.7%</b>	<b>-0.2%</b>
Turkey	15.7%	15.5%	-0.2%
Pakistan	2.9%	2.4%	-0.5%
Tunisia	4.9%	4.4%	-0.5%
Indonesia	2.5%	1.9%	-0.6%
Morocco	4.5%	3.8%	-0.7%
Romania	7.3%	6.4%	-0.9%
Bangladesh	7.1%	6.1%	-1.0%
Hong Kong	3.5%	1.9%	-1.6%
Other	20.1%	15.9%	-4.2%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>0.0%</b>

**Source:** Eurostar, *EU imports and exports of clothing (ranked by EU imports 2004 in value)*. <http://ec.europa.eu/comm> (accessed July 21, 2006).

**Note:** The Shares of EU's imports of Clothing are projected based on the nine month (January-September) data for each year.

So far, Cambodia has been able to maintain the growth of its garment industry, while its garment exports continue to grow both in volume and value term following the quota elimination. Recent export data confirms that garment exports are maintaining the growth trend though the growth rate is relatively lower compared to the prior ATC period. Overall, garment exports from Cambodia increased by 20.7 percent in volume terms in 2005 due to fast growth in the US market but the growth level shrank to only 11.7 percent in value terms because of the fall in unit price, especially in the US market.

Of particular note, Cambodia's garment exports to US markets at the end of 2004 and early 2005 (October 2004 to April 2005) were relatively flat, varying around the average 30 million pieces. This reflects the impact of Cambodia's good labor standards which maintain major US buyers. Following the April 2005 safeguard measures imposed on China, Cambodia's garment exports to the US started growing considerably by more than 50 percent per

month compared to the flat period. In contrast, exports to the EU market were not favorable to the impact of good labor standards.

**Table 5.4: Cambodian Garment Exports (% increase)**

	2002	2003	2004	2005
<b>Value</b>				
USA	15.1%	17.6%	13.9%	20.9%
EU	15.3%	14.3%	42.7%	-13.5%
Others	57.0%	180.1%	63.8%	33.8%
<b>Total</b>	<b>15.8%</b>	<b>20.1%</b>	<b>23.7%</b>	<b>11.7%</b>
<b>Quantity</b>				
USA	15.8%	10.2%	20.6%	32.5%
EU	11.0%	19.3%	34.2%	-11.7%
Others	65.1%	146.8%	71.1%	15.4%
<b>Total</b>	<b>15.3%</b>	<b>14.7%</b>	<b>25.7%</b>	<b>20.7%</b>
<b>Price Increase</b>				
USA	-0.6%	6.7%	-5.5%	-8.7%
EU	3.9%	-4.2%	6.3%	-2.0%
Others	-4.9%	13.5%	-4.2%	16.0%
<b>Total</b>	<b>0.4%</b>	<b>4.7%</b>	<b>-1.6%</b>	<b>-7.5%</b>

**Source:** Ministry of Commerce, 2006.

In sum, Cambodia's economy still strongly benefits from the expansion of garment exports. The contribution of the garment industry to GDP growth in 2005 should reach about 3 percentage points, with the creation of about 50,000 new direct and indirect jobs.

Notwithstanding the above, the future prospect of Cambodia's garment industry is still in doubt, especially when the safeguard measures on Chinese products become defunct in 2008. To counter the future Chinese domination and competition from other countries, Cambodia will require necessary reforms to improve the industry's competitiveness.

#### **5.4. Impact of MFA Phase-out on Workers**

Not many garment workers are aware of the direct impact of the ATC expiry on their livelihoods. They are interested in keeping their jobs and

earning more money. The impact may not necessarily be on individuals but the industry as a whole since ATC expiry may affect factory operations, jobs and workers' working conditions. Workers' perception of the prior and post ATC situations are mixed depending on various factors.

In general, many workers feel that their real wage has decreased. According to the survey conducted by EIC in May 2006, salary decline was perceived by 30 percent of workers interviewed as opposed to 19 percent who perceived that their salary is increasing. Although garment exports increased by over 20 percent in 2005, workers' earnings decreased by 8.5 percent in 2005 compared to 2004 (CDRI 2006). In addition, many garment factories today prefer short-term contracts for their workers and paying their workers based on what they have produced. This suggests that workers must work more in the post ATC to earn as much as they could earn prior ATC.

**Table 5.5: Workers' Perceptions: Prior and Post ATC**

	<b>Better</b>	<b>Same</b>	<b>Worse</b>	<b>Total</b>
Health Condition	12%	29%	59%	100%
Factory Management	17%	45%	38%	100%
Living Conditions	17%	42%	41%	100%
Overtime Work	20%	41%	39%	100%
Working Environment	20%	54%	27%	100%
Salary	19%	51%	30%	100%
Social & Economic Participation	20%	61%	18%	100%
Employer-Worker Confrontation	36%	33%	30%	100%

**Source:** EIC, *HDIA Garment Worker Survey*, May 2006.

Of particular note, the health conditions of workers have been the most negatively affected. Almost 60 percent of workers surveyed argued that their health situation is becoming worse after working for two years or more in garment factories. This is because, on the one hand, the workers themselves limit their daily food expenses to have money for other purposes. On the other hand their health could be indirectly affected by the work as factories prefer insist on working overtime to meet increasing orders in the post-quota environment.

More garment workers perceive that their living conditions and factory management are worsening, while working environments and social-

economic participation are seen as somewhat stable. The survey's results indicate that 54 percent of the respondents feel that their working environment has stayed the same and 61 percent of them agree that social-economic participation remains unchanged in the post-ATC. Noticeably, employer-worker relations seem to have improved. About 36 percent of the interviewees say that the current situation is better than before 2005, while only 30 percent were of the opposite view.





## Chapter 6

### Assessing the Impact of the US and EU Duty-Free Scenarios on Cambodia's Garment Industry

During the Doha negotiations, in November 2001, developed countries gave the opportunity for LDCs to sell their goods freely and earn their way out of poverty. Developed countries seemed to be making good on their promise, as Europe extended the “Everything But Arms” initiative, under which it was to open its markets to LDCs in the world. However, the complex Rules of Origin (ROO) coupled with supply-side constraints meant there was little chance for poor countries to export their newly liberalized products.

Meanwhile, the situation did not much improve during the Hong Kong Ministerial Conference in December 2005. The US ostensibly agreed to a 97 percent opening of its markets to LDCs but there is no deadline set for the call to progressively achieve this compliance. The official argument for the 3 percent exclusion is it affects “sensitive products”. If the 3 percent rule applies to the tariff lines that the US imports from the rest of the world (rather than to the lines individual LDC export to the US), the US can exclude about 300 tariff lines from duty-free and quota-free treatment. This exclusion could reach 100 percent of Cambodia's exports, which were only 277 tariff lines to the US in 2004<sup>21</sup>.

As mentioned in the previous section, demand-side factors such as the US tariff and EU Rules of Origin affect to some extent the prospect of Cambodia's garment exports. This section attempts to evaluate the potential effect on Cambodia's garment industry of different scenarios, more particularly the US Duty-Free Scenario and EU Duty-Free with no Condition to the Rules of Origin Scenario.

#### 6.1. Potential Effect of the US Duty-Free

##### *6.1.1. Current Situation*

As a member of the WTO, Cambodia now exports to the US under the normalized tariff with an average rate ranging from 15 to 20 percent. The US has granted trade preferences to a group of African LDCs, while the

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<sup>21</sup> Joseph and Hamindur 2006.

Asian LDCs have not yet enjoyed the same benefit. After the ATC expiry, Cambodia and other Asian LDCs are seeking preferential access to the US in order to enhance their ability to compete internationally. The countries are trying to lobby for duty-free access to the US market for their products, including textiles and clothing.

The US Trade Act 2005, if passed, would give duty-free access to the US markets for 3,677 products, including apparel, from a bloc of 14 LDC's. However, with US mid-term elections looming and a new top trade negotiator in Washington, ongoing negotiations may be further delayed while the implementation of already signed deals could also take longer than expected. The road to US duty-free access could be longer than expected for Cambodia. The negotiation is unlikely to be successful for Cambodia although during the Hong Kong Ministerial Meeting, developed countries agreed to offer duty-free and quota-free to LDCs. But this was linked to the success of the Doha round.

With the collapse of the Doha round, Cambodia's current strategy is to negotiate through the WTO to get duty-free and quota-free without any link to the Doha declaration. Bangladesh agreed to share the cost with Cambodia in the quest for this duty-free and quota-free<sup>22</sup>.

### ***6.1.2. Model Simulation: Main Assumptions***

In order to examine the likely impacts of both scenarios, EIC uses a simple but rich Computable General Equilibrium (CGE) model to generate consistent estimates of the impacts on key variables. The scenarios were examined based on expert opinions on likely developments in the areas of competitiveness, and the market access for the Cambodian garment industry and that of major competitors. Since it is difficult to have dynamic analysis over a period of years, the static impact assessment is done for the year 2006. This requires the assumption that Cambodia's production capacity would be able to respond to the immediate increase in demand and that changes in Cambodia's production will have no impact on global prices.

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<sup>22</sup> According to remarks by H.E. Cham Prasidh in the Joint Session of the Sub-Steering Committee on Trade Facilitation and Working Group on Export Processing and Trade Facilitation at the Ministry of Commerce on 07 August 2006.

### ***Baseline Scenario***

The baseline scenario reflects a status quo situation which is perhaps considered to be a likely one if Cambodia does not obtain any preferential program. The overall growth of the global garment market is assumed to be at 5 percent and that conditions in other markets remain relatively favorable for Cambodian garment exports. Under this scenario, it is likely that Cambodian garment exports to the US market will continue to grow while the price of garment products continues to decline.

The final Cambodian garment export values were then fed into EIC's CGE model to generate expected impacts of the various scenarios on a range of socio-economic variables in the overall economy and in the garment sector, namely GDP, trade balance and employment, and more. It should be emphasized that modeling the impact of these scenarios on Cambodia and on international trade will be highly fluid. Undoubtedly, the impact depends on the time when Cambodia is given the status and the way Cambodia responds to the immediate increase in demand.

### ***US Duty-Free Scenario***

The duty-free scenario assumes that the US preferential treatment would result in a unit retail price cut for Cambodian garment exports. Based on expert opinions, the US consumers would directly gain 75 percent of the unpaid tariff which means that Cambodian exporters could raise their export price by about 25 percent of the US tariff.

With the assumed average tariff rate of 20 percent<sup>23</sup>, the export price from Cambodia could thus be increased by about 5 percent, while unit retail price in the US would decrease by 15 percent. This fall in unit retail price would encourage US buyers to place more orders with factories in Cambodia which would result in a 30 percent increase of garment exports to the US.

The above assumptions are in line with GMAC expectations. GMAC roughly estimated that a total of around US\$300 million was paid in tax on garments imported from Cambodia in 2005 to the US Government. According to GMAC, the duty-free access to the US market will likely result in a fall in unit retail prices in this market, implying that US consumers would

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<sup>23</sup> The tariff in the US falls in the range of 15-20 percent depending on product categories. However, to simplify the calculation the tariff is assumed to be 20 percent.

benefit from the price cut, while Cambodia would indirectly benefit from the duty-free access through more investment and job creations.

**Table 6.1: Potential Effect of US Duty-Free**

	2005	2006		Impact of US Duty-free
		Baseline Scenario	Duty -free Scenario	
Main Assumptions				
Average Tariff to US	20%	20%	0%	-20%
Export Price in US (US\$/piece)	2.84	2.72	2.86	+5%
Export to US (million pieces)	540	631	820	+30%
Impact on the Garment Industry				
Exports of Garments (million US\$)	2,221	2,418	3,044	+626
Balance of Trade in Garments (million US\$)	731	802	1,098	+ 296
Investment (million US\$)	168	152	268	+116
Employment (000's)	270	295	372	+77
Impact on the Economy				
Real GDP Growth (%)	13.4%	6.0%	10.6%	+4.6%
Balance of Trade (million US\$)	(702)	(843)	(705)	+138
Total Employment (000's)	5,952	6,118	6,264	+ 146

**Source:** EIC Model Simulation.

### ***6.1.3. Impact on the Garment Industry***

The impact of duty-free access to the US market on some key indicators of the garment industry is considered for the year 2006. In terms of exports, duty-free access to the US market would further increase exports of Cambodia's garment products by about US\$626 million, equivalent to approximately 26 percent of US\$2.4 billion worth of garment exports in the baseline scenario. This increase in garment exports would generate a garment trade surplus of about US\$296 million. Furthermore, more investment, mainly FDIs, would be attracted into the country. The simulation proves that an additional investment of US\$116 million is required to sharpen the capacity of Cambodia's garment production.

Last but not least, duty-free access to the US market is expected to have a strong impact on industrial employment, allowing the industry to absorb a surplus of labor force. Some 77,000 additional jobs would be created in the garment industry, representing approximately 29 percent of total employment in the garment industry in 2005.

#### ***6.1.4. Impacts on the Economy***

Undoubtedly, the effect of duty-free access to the US market is not limited to the industry but it would also impact the overall economy of the country. The measure would translate into 4.6 percent of real GDP growth. The economic expansion generated by the increase of garment exports would boost imports of capital and consumer goods. Therefore, the country's trade balance would only reach US\$138 million, against a trade surplus in garments of US\$296 million.

Finally, the duty-free scenario would have a positive impact on the country's employment, generating a total of 146,000 additional jobs for Cambodians, of which 69,000 would be indirect jobs in supporting industries.

### **6.2. Potential Effect of EU Duty-Free with No Condition to the Rules of Origin**

#### ***6.2.1. Current Situation***

Under the EU's Everything But Arms initiative in 2001, Cambodian exports to the EU are subject to duty-free and quota-free. These benefits are, however, conditional upon the Rules of Origin, which limits Cambodia's capacity to claim the preference status. The EU GSP program provides two levels of preferential access to ASEAN countries. First, it eliminates apparel tariffs, which average 12 percent, for products from Cambodia and Laos that meet the EU GSP Rules of Origin. Second, it provides a tariff reduction of 20 percent (or a duty rate of 9.4 percent) for other ASEAN countries to cumulate origin among each other.

To be eligible for duty-free treatment in the EU market, apparel constructed of originating ASEAN fabrics must have 51 percent value added in Cambodia<sup>24</sup>. To export garment from Cambodia to the EU, exporters must apply for certificate of origin of form A (import duty-free) or from N (with import duty). The products certified by certificate of origin form A can access the EU markets with duty-free.

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<sup>24</sup> Base on discussion with director of GSP Department at the Ministry of Commerce.

The ASEAN cumulation is important to help Cambodian exports meet the Rules of Origin since the Cambodian textile industry is underdeveloped and most fabrics and accessories are imported from China, Hong Kong, Taiwan the Republic of Korea and some ASEAN countries. However, Cambodia's imports of fabrics from ASEAN are estimated to be only between 5 to 20 percent of total imports of fabrics.<sup>25</sup> The higher price of materials in ASEAN countries coupled with buyer's nomination are constraints for Cambodia's garment producers to meet the EU Rule of Origin.

**Table 6.2: Garment Exports to EU Markets Under Form A and N**

	2004	2005
<i>As Percentage of Garment Export to EU Markets</i>		
Under form A (duty-free)	61%	67%
Under form N (with duty)	39%	33%
<b>Total</b>	<b>100%</b>	<b>100%</b>
<i>As Percentage of Total Garment Exports</i>		
Under form A (duty-free)	18%	15%
Under form N (with duty)	11%	7%
<b>Export to EU Markets</b>	<b>29%</b>	<b>22%</b>
<b>Export to non EU Markets</b>	<b>71%</b>	<b>78%</b>
<b>Total Garment Export to EU market</b>	<b>100%</b>	<b>100%</b>

**Source:** Ministry of Commerce, 2006.

In 2005, garments exported to the EU under form A accounted for about 67 percent of garment export to this market, increasing from 61 percent in 2004. Almost all were using the ASEAN cumulation method. The rest, 33 percent of garment exports to the EU, are subject to duty. This represents only 7 percent of Cambodia's total garment export in 2005.

Nonetheless, the fact that imported material represents 52 percent of sales makes it difficult for Cambodia's garment exports to meet the EU Rules of Origin. Furthermore, the relatively higher price of fabrics in ASEAN countries further reduce the local value added and place Cambodia even further from the EU Rules of Origin requirements. If it is designed to help

<sup>25</sup> Cambodia's imports from ASEAN of man-made staple fibers and knitted or crocheted fabrics stood at 6 at 18 percent in 2004, according to the Ministry of Commerce. The two categories represent 75 percent of total fabrics used in Cambodia.

least developed countries like Cambodia, the EU should eliminate their Rules of Origin so that Cambodia could export freely to this market.

### **6.2.2. Model Simulation: Main Assumptions**

The scenario assumes that the EU allows Cambodia to export with duty-free and quota-free without any condition to the Rules of Origin. Under this scenario Cambodian exporters would not have to pay the duty for their export to the EU under form N, estimated to worth up to US\$165 million (or 7 percent of total garment exports). Further assuming that the situations in the EU and US are alike, the EU consumers would directly gain 75 percent of the unpaid tariff and Cambodian exporters could raise up their export price by about 25 percent of unpaid tariff.

**Table 6.3: Potential Effect EU Duty-Free with No Condition to the Rules of Origin**

	2005	2006		Impact of EU Duty-free
		Baseline Scenario	Duty -free Scenario	
Main Assumptions				
Average Tariff to EU	12%	12%	0%	-12%
Export Price in EU (US\$/piece)	3.94	3.74	3.85	+3%
Export to EU under Form N (million pieces)	44.0	44.4	52.4	+18%
Impact on the Garment Industry				
Exports of Garments (million US\$)	2,221	2,418	2,454	+ 36
Balance of Trade in Garments (million US\$)	731	802	819	+ 17
Investment (million US\$)	168	152	159	+7
Employment (000's)	270	295	299	+4
Impact on the Economy				
Real GDP Growth (%)	13.4%	6.0%	6.3%	+0.3%
Balance of Trade (million US\$)	(702)	(843)	(835)	+ 8
Total Employment (000's)	5,952	6,118	6,126	+ 8

**Source:** EIC Model Simulation.

Given the average tariff rate of 12 percent, the export price for garment export to the EU under form N could be increased by about 3 percent and unit retail price would decrease by around 9 percent in this market. The



reduction in unit price would encourage EU buyers to place more order to Cambodia's factories. Finally, this would result in an increase in garment exports by 18 percent of the current export to the EU under form N.

### ***6.2.3. Impact on the Garment Industry***

The impact of EU Duty-Free Scenario on key indicators of the garment industry is for the year 2006. Result from the simulation indicates that the impact of EU Duty-Free with no condition to the rules of origin is not as significant as that of the US Duty-Free Scenario due to the low proportion of current garment exports to the EU with duty. As far as exports is concerned, the EU Duty-Free Scenario would result in an increase in garment exports by about US\$36 million, or 1.5 percent of the garment export level in the baseline scenario. As a result of this, garment trade surplus would be US\$17 million and an additional investment of US\$7 million is required.

Furthermore, the scenario is expected to generate 4,000 additional jobs in the garment industry, almost 20 times lower than the US Duty-Free Scenario.

### ***6.2.4. Impacts on the Economy***

Cambodia seems to benefit minimally from the EU's Everything But Arms scheme due to the perceived restrictive Rules of Origin and the country's supply side constraints. Many garment exporters are not interested in giving priority to make this market the main destination. Besides its direct impact on the garment industry, results from the simulation shows that the effect of EU Duty-Free Scenario on the economy would also be negligible. The measure would translate into a 0.3 percent of real GDP growth and about 8,000 job creations of which about half are indirect job in the supporting industries.

## Policy Recommendations

Although Cambodia's garment industry has exhibited some strength in the post ATC environment, much more needs to be done to sustain the growth of this particular industry for the benefit of many Cambodians. Suggested recommendations from this study are as follows:

### *Dealing with Supply-Side Constraints:*

Cambodia has great potential to improve the competitiveness of its garment industry if supply-side constraints are to be removed. With better supporting institutions and environment, garment production costs and lead time will be reduced. The Cambodian Government, donor community as well as the private sector should provide strong support in dealing with supply-side constraints. Such supports will include necessary actions as follows:

- *Curbing corruption:* A more transparent and simple system should be gradually enhanced through streamlining the administrative procedures. Without informal payments the industry is expected to save up to 4 percent of the current total export cost. This will impact on retail prices of Cambodian garment products on consumer markets. Public administration should also be strengthened to support the country's private sector.
- *Developing skilled workers:* Factories as well as the industry should consider skill development for Cambodian workers because this will not only allow factories to increase their productivity but also to shift to higher value added products. Skill development should not be limited to operational skills but also managerial and supervisory skills in order to transfer the industrial know-how to the Cambodian labor force. This will allow more Cambodians to replace the foreign supervisory positions in the garment factories and therefore cut costs.
- *Developing spirit of negotiation and conciliation among employers and trade unions:* As mentioned in the report, corporate responsibility is good but it can be a two-edge sword. In order to avoid any negative impact, the culture of negotiation and conciliation should be developed among the industry's stakeholders. It is important to educate union leaders about their rights and obligations so that they

can balance what they are actually demanding and what might be the actual impacts.

- *Improving infrastructure:* Investment in infrastructure will be particularly necessary. Both physical and administrative infrastructure should be improved to support the industry through cost cutting and shortening delivery time. Through a better infrastructure, the competitiveness of Cambodia's garment industry will be on par with other main competitor countries.
- *Encouraging development of a supporting industry:* Cambodia's garment industry will only be sustainable in the long run if it has a well established supporting industry, such as a textile industry. Promoting the buildup of a textile industry within the country will make the garment industry less dependent on inputs from abroad and will allow the garment industry to have a broader and firmer base. Moreover, the textile industry will generate a large amount of employment opportunities, particularly in the agricultural sector.
- *Reviewing the Current Labor Law:* Cambodia has been successful because of its compliant labor laws. It is thus necessary for the country to maintain this good image on the international market. Reviewing the current labor law is important to adjust to Cambodia's social and economic situation as well as to global changes.

### ***Lobbying For Quota-Free and Duty-Free Access to the US and EU Markets:***

While Cambodia is still regarded as a least developed country and as a country with a high compliance to labor standards, there is an opportunity for Cambodia to seek preferential treatment from developed countries. In this context, it is essential for the Government as well as the private sector to enhance their efforts in lobbying for duty-free access to the US and EU markets. Therefore, the Government should be more pro-active in the global negotiation arena.

With the US government, Cambodia can claim the status, arguing that the preferential treatment will help accelerate the country's economic growth and efficiently contribute to poverty eradication. An estimated 146,000 more Cambodian will benefit both directly and indirectly from the duty-free access to the US market. The estimated tariff paid of about US\$300 million per year

is somehow negligible for the US government budget, while the scheme will benefit both Cambodian workers and US consumers.

Regarding the EU market, Cambodia should call for duty-free access without any conditions to the Rules of Origin. Given the current context of the Cambodian garment industry, the country cannot benefit much from the EU's Everything But Arms Initiative due the conditions of Rules of Origin. If these rules are to be removed, about 8,000 Cambodians are estimated to benefit from the scheme.



## Concluding Remarks

The history of Cambodia's garment industry is quite recent since the trade preferences accorded by the US and EU in 1996, but the industry has grown rapidly and played a very significant role in the economy. With the ATC expiration on December 31, 2004, Cambodia's garment industry is inevitably affected by the global trend of the trade in textile and apparel. Nevertheless, Cambodia's garment industry has largely benefited from having low worker salaries and good labor standards, allowing it to enjoy some niche markets.

The prospect for Cambodia's garment exports in the post ATC is affected by various factors ranking from supply-side factors to demand-side factors. Constraints on the supply side for Cambodia's garment industry include corruption and inefficient bureaucracy, lack of a supporting industry, poor infrastructure, unskilled work force, etc. while on the demand side, the industry is affected by international trade policies, such as US tariffs, EU Rules of Origin, safeguard measures on Chinese garments and textiles as well as Vietnam's impending WTO membership.

In order to maintain the competitiveness of Cambodia's garment industry, it is vital to address both supply and demand-side constraints. The current context will require new national policies and reforms. However supportive international policies will be of even larger importance to secure the future prospects of Cambodia's garment exports. With a favorable environment, Cambodia will be able to strengthen the garment industry as a whole and to export more garment products. A large number of Cambodians will thus benefit from the industry.

More importantly, trade in garments will have a positive impact on human development in Cambodia. It will generate more employment opportunities, sustain workers' livelihoods and alleviate poverty. Lastly, promoting trade in garments will also contribute to worker empowerment, especially for women in rural areas who form the majority of the garment industry's labor.



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# Appendix 1

## Study Methodology

Cambodia has a reasonably low human development according to the United Nations. The Human Development Report 2004 listed Cambodia 130th out of 177 in terms of human development. Though lacking in human and capital resources, the country has put much effort and committed to a better development that allows its population to enjoy more prosperous lives. In fact, Cambodia has signed the Millennium Development Goals (MDG) in 1999 and the Brussels Programme of Action (BPoA) in 2001. To achieve these goals, Cambodia requires undertaking various reforms and the participation of the private sector is of crucial importance. It is believed that trade has been a key for successful human development within the country.

Trade in garments has played an important role in the Cambodian economy, while it represents almost 80 percent of the country's merchandise exports. Sustaining and promoting the growth of this sector would increase the benefits for Cambodians. The UNDP Regional Center in Colombo (UNDP-RCC) has commissioned the EIC to carry out a research study on "Cambodia's Garment Industry Post-ATC: Human Development Impact Assessment" with the objective to identify and seek opportunities to further promote human development.

The report on "Cambodia's Garment Industry Post-ATC: Human Development Impact Assessment" is the outcome of three main activities carried out by EIC. These include: (i) literature reviews, (ii) field interviews and observations, and (iii) modeling for impact assessment.

### A1.1. Literature Reviews

A review of relevant existing publications from different organizations such as UNDP, EIC, World Bank, WTO, ADB, ILO, GMAC, etc. was undertaken to gain an in depth insight into the topic and to collect necessary secondary information. According to UNDP, human development is defined as a process of enlarging people's choices and building human capabilities, enabling them to: live a long and healthy life, have access to knowledge, have a decent standard of living and participate in the life of their community and the decisions that affect their lives.

## A1.2. Field Interviews and Observations

Extensive field interviews were carried out by the EIC team over a period of about one month starting in early May 2005. Quantitative surveys were conducted among some garment factories and workers to collect primary information and qualitative surveys were undertaken with relevant stakeholders. In addition, observations were made to evaluate the number of indirect jobs created by the garment industry.

### *HDIA Garment Worker Survey*

The survey was carried out in six different locations in and around the capital city (Toul Sang Ker, Russey Keo, Chak Angre, Steung Mean Chey, Pochen Tong, and Chom Chao), where almost 90 percent of garment factories are concentrated. The locations were selected for the survey because of the high level of factory concentration. A total of 365 garment workers were interviewed about their working conditions, living conditions, future objectives and the difference between the prior and post ATC period.

**Sample by Gender**

	#	%
Male	20	5%
Female	345	95%
Total	365	100%

**Sample by Originated Provinces**

	#	%
Prey Veng	86	24%
Kampong Cham	73	20%
Kratie	43	12%
Sihanouk Ville	36	10%
Takeo	34	9%
Kandal	25	7%
Kampong Speu	22	6%
Kampong Chhnang	13	4%
Other	33	9%
Total	365	100%

The sample represents the proportion of female workers and the diverse provinces where workers come from. An overwhelming 95 percent of the workers surveyed are female. The majority of them come from Prey Veng, representing 24 percent of the 365 workers surveyed. Following provinces are Kampong Cham, Kratie, Sihanouk Ville and Takeo where

respectively 20 percent, 12 percent, 10 percent and 9 percent of workers originated. The remaining 25 percent are from other provinces including Phnom Penh.

Sample by Age			Sample by Years of Experience in the Current Factory		
	#	%		#	%
18-20	67	18%	<= 1 year	38	10%
21-24	138	38%	1-2 years	111	30%
25-32	136	37%	3-4 years	129	35%
33-40	23	6%	5-6 years	67	18%
>40	1	0%	> 6 years	20	5%
Total	365	100%	Total	365	100%

Three-quarters of workers interviewed were aged between 21 and 32 year old and another 18 percent of them were younger than 21. It should be noted that all of the workers surveyed are above 18 year old, suggesting that child labor is not common in Cambodia's garment industry. Given a decade of garment history in Cambodia, many workers have worked in the industry for more than one year. Only 10 percent of them have started their first year in the current factory.

Sample by their First Job			Sample by Level of Education		
	#	%		#	%
Yes	296	81%	No Education	22	6%
No	69	19%	Elementary	214	59%
Total	365	100%	Junior high school	103	28%
			High school	25	7%
			Completed High school	1	0%
			Total	365	100%

The majority (81 percent) of the interviewees found their first job in the current factory, while another 19 percent worked in other industries or factories before joining the factory. Remarkably, garment workers have very low education. Six percent of the 365 workers surveyed have not gone to

school, while another 59 percent have only elementary education. The remaining 35 percent have reached high school education.

### ***HDIA Garment Factory Survey***

For the purpose of this study, a total of 22 garment factories were visited and asked about their changes in production, market shares, unit cost and business accounts since the expiry of ATC. All the factories visited are located in and around the capital city (Phnom Penh) and half of them started their operations in Cambodia before 2000, while another half started since 2000 or later. The sample size is somehow insignificant compared to the 247 factories in operation in Cambodia by the end of 2005 but it provides at least an idea of how factories in Cambodia face the quota-free environment. It should be noted that some qualitative questions were also asked in addition to quantitative ones.

**Sample by Number of Workers**

	<b>Number</b>	<b>%</b>
<=500	1	5%
501-1000	8	36%
1001-2000	12	55%
>2000	1	5%
Total	22	100%

Out of the 22 factories surveyed by the EIC team, 5 percent of them employ less than 500 workers. Another 36 percent employ between 501 and 1,000 workers. More medium-sized factories (employing between 1001 and 2000 workers) replied to the survey.

### ***Qualitative Interviews***

In addition to the quantitative interviews with garment workers and factories, qualitative interviews were carried out as well with some relevant stakeholders including government ministries, professional associations, trade unions and national and international organizations. The people who were consulted on this topic are listed as follows:

### List of Persons Consulted

No.	Name	Position	Organization
<b><i>Government ministries</i></b>			
1	Dr. Huy Han Song	Undersecretary of State	Ministry of Labour and Vocational Training
2	Ms. Ma Vanny	Director	Economic Development, Ministry of Women's Affairs
3	Dr. Joern Rieken	Team Leader	Trade Promotion, Ministry of Commerce
<b><i>Professional associations</i></b>			
4	Mr. Van Sou Ieng	President	Garment Manufacturer Association in Cambodia (GMAC)
5	Mr. Ken Loo	General Secretary	Garment Manufacturer Association in Cambodia (GMAC)
<b><i>Trade unions</i></b>			
6	Mr. Chea Mony	President	Free Trade Union of Workers of the Kingdom of Cambodia
7	Mr. Ath Thorn	President	Coalition of Cambodian Apparel Workers Democratic Unions
8	Mr. Kim Chan Samnang	President	Trade Union of Workers Federation of Progress Democracy
9	Mr. Ros Kan	Vice President	National Independent Federation Textile Union of Cambodia
10	Mr. Chork Yorn	Secretary General	Cambodian Union Federation
<b><i>Other national and international organizations</i></b>			
11	Ms. Jan B. O'Dell	Chief of Party	Garment Industry Productivity Center
12	Dr. Mumtaz Keklik	Trade Policy Adviser	United Nations Development Programme/ Cambodia)
13	Mr. Wisal Hin	Trade and Private Sector Analyst	United Nations Development Programme/ Cambodia
14	Mr. Chea Sophal	Programme Assistant	Better Factories Cambodia, International Labour Organization

### ***Indirect Job Observations***

An observation method was used to quantify the number of indirect jobs around the garment factories. One enumerator and one EIC staff were sent to make an observation at different factory sites. Their task was to count the number of people who work around the factories. Only isolated factories around Phnom Penh were selected for the observation in order to compare the number of workers in the factories. It would be very difficult to get an accurate number of the people who work around an area highly concentrated with garment factories.

Finally, the observations were made at 10 isolated garment factories in different areas and each factory requires at least half a day for two people to count all the indirect jobs. Targeted jobs to be counted include restaurants,



home-based traders, transportation means (motor taxis, vans), micro-vendors in front of factories, housing, pharmacies, clothing shops etc. which are working around the factories.

Results from the observation, such as the number of housing for garment workers, was also verified with the village chief, where the factory was located because s/he may have a general idea of the business activity in the village. The counting of micro food vendors was done during the meal times, while the number of transporters was counted in the morning or evening, when workers need to commute from their residence to their work place.

### **A1.3. Modeling for Impact Assessment**

Finally, EIC's macro-economic model (General Equilibrium Model for Cambodia) was used to conclude the impact of duty-free access to the US market. However, it is not possible to use the macroeconomic model to examine the likely impact of EU's flexible rules of origin on Cambodia's garment industry, due to its complexity and lack of information. In addition, the Input-Output model was also employed to evaluate the total number of indirect jobs created by the garment industry in Cambodia.

### **A1.4. Study Limitations**

Given the small scale of the economy, Cambodia has not been included in many studies using the GTAP model. The impact assessment part is somehow difficult due to limited information and literature reviews on Cambodia. Moreover, the survey covers mainly factories located in and around the capital city (Phnom Penh) and the sample size, especially of the HDIA Garment Factory Survey, is insignificant compared to the industry's number of factories. However, information gathered from the survey has been verified with qualitative information and other secondary information from various studies/reports by different organizations. This is in order to increase the accuracy level of information in the report.

## Appendix 2

### The EIC Macroeconomic Model for Cambodia

#### A2.1. A Brief Methodological Note

The EIC macroeconomic model is an annual-frequency supply model, using Microsoft Excel as software support. Its main feature is to produce consistent economic medium and long-term forecasts, which fundamentally depend on the policies and strategies to be implemented, and the behavior of the economic agencies, in accordance with the external environment and internal political developments.

Technically, it depends primarily on the main assumptions (exogenous variables) on the social and political environment in the country, and also the international environment as the Cambodian economy is largely an open economy. More concretely, as the model is a supply model, investment is the key factor for the country's economic development.

In general, the model's behavioral equations are econometrically estimated and fundamentally rely on the quality of the historical data. However, as the quality of statistics in Cambodia is very weak, the number of behavioral equations in the model is limited, and many are generally pre-determined.

#### A2.2. Economic Database

While the quality of the model's underlying database is continuously under improvement, it covers a large range of Cambodian economic and social indicators. It includes business accounts, some elements of household accounts, the national budget, the monetary survey, the balance of payments, employment, and investment. Data are available from 1960 to 1970 and from 1985 to the present. Data for the period 1960-70 were published by the IMF and the World Bank. It is recompiled to be consistent with the new nomenclature (2000 price basis) and its quality is fairly good. Data for the period 1985-93 are roughly estimated from various government sources. Its quality is medium. Concerning 1994 to the present, the economic data is more available and the quality is relatively good. The list of these data is available on request.

The Business Accounts cover 22 sub-sectors, including agriculture (6 sub-sectors), industry (9 sub-sectors), and services (7 sub-sectors). For each sector, there are about 20 economic variables calculated, including: (i) Supply and Demand at current prices and at 1993 prices (Production, Consumption, Investment and External trade of goods and services), (ii) Business operating accounts (value added, salary, potential contribution to the national budget, gross profit and investment), (iii) Other accounts (employment, productivity, average monthly wage).

The Household Accounts cover the total household revenue and monthly wages by major category of profession (rice farmers, non-rice farmers, factory workers, civil servants and others). These accounts are compiled from the national accounts and the socio-economic surveys of the Ministry of Planning.

The Public Administration Accounts cover the national budget operations compiled by the Ministry of Economy and Finance. It includes a large range of revenue components, expenditure by category of spending (investment, salary and other operating costs) and by major category of ministry (civil administration and defense and security), sources of deficit financing

The Financial Institution Accounts are represented by the monetary surveys compiled by the National Bank of Cambodia. This includes main monetary aggregates, such as liquidity (in riel and US dollar) and credits.

The External Accounts reflect the balance of payments (BOP) data compiled by the IMF, the National Bank of Cambodia and EIC, based on the above business accounts (external trade and foreign investment by sub-sector). It includes a large range of external trade, services, private income movements, foreign aid and capital transactions with the rest of the world.

Other Accounts include the labor force and employment, which are roughly estimated from the 1998 census and various socio-economic surveys from the Ministry of Planning.

### **A2.3. Economic Modeling**

The model is a supply model, assuming general equilibrium in terms of goods and services, labor force and employment, and money supply and credit. Investment plays the most important role in the model. The main exogenous variables are the international environment (foreign direct

investment, foreign aid, export of garment products, number of tourists visiting Cambodia, and prices of agriculture commodities and manufacturing goods in the world markets) and real government commitments on reforms that are represented mainly by the effectiveness of the government in collecting taxes and the amount of foreign aid disbursements. The model covers thousands of variables, most of which are calculated by identity or pre-determined equations, so this section only deals with the general structure of the main equations. More explicit and detailed equations are available on request.

The Cambodian economy can be split into two main categories: the traditional sector and the modern sector. The traditional sector covers mainly agriculture, handicrafts, domestic trade, real estate, and other small services. The modern sector has been developed rapidly since the Paris Peace Agreement in 1991. From 1992 to 1993, most of the investment went into hotels, restaurants and real estate sectors. From 1994 to 1995, some modern manufacturing and service sectors started to develop, mainly in the food industry and gasoline distribution. It is only after 1995 that the garment industry, transportation and telecommunications, and the tourism industry showed a significant expansion.

The economic growth of the traditional sector largely depends on population growth, while that of the modern sectors is linked largely to foreign direct investment (FDI) and external demand, which are exogenous and depend on the political stability of the country and performance of economic and institutional reforms of the government.

For these reasons, the Production Functions of the model largely depend on investment (private and public) and past long-term trends.

Specifically, the production of the agricultural sector (excluding livestock, fishery and forestry) relies on the area of cultivable land and its productivity, which depends on past trends and the amount of new investment (private and public) in the sector. Production of livestock is linked to the population growth, while production of fishery and forestry is exogenous and depends on the success of government reform policies on natural resource management.

Concerning the industry sector, the production of manufacturing depends on private investment and market demand (domestic and external), while the production of public utilities (electricity and water) is linked to the

public investment in those sectors. Production of construction (residential and non-residential) relies on the investment.

Regarding the service sector, the production of the transport and trade sectors depends on the production of the agriculture (excluding forestry) and manufacturing sectors, and the level of imports of consumer goods. Production of the tourism sector (hotels and restaurants mainly) is linked to the investment in these activities, while the production of real estate and other services is directly linked to population growth.

Inflation (in riel) in the model is linked to the price of imported goods (in riel) and the trend of worker productivity. In general, Cambodia consumes local agriculture products, and imports manufactured goods. As the country becomes more and more open, the prices of local agricultural products, particularly rice, align with world market prices. It is also noted that the garment industry, which represents about 70 percent of the manufacturing sector (in terms of nominal valued added), exports almost its total production.

The Exchange Rate (riel against the US\$) is exogenous, technically. But in fact, it depends on the level of bank financing in riel to the budget deficit in the forecast period. During past periods, one billion riel of budget deficit financed by the Central Bank resulted roughly in a depreciation of the riel of about 10 riel per US dollar.

The money supply (in riel and in foreign currencies) is linked to nominal GDP, while credit relies on bank deposits (money supply in foreign currencies).

The National Budget projection largely depends on economic activity trends and the government's fiscal policy (the official tax rate and government performance in tax collection).

Specifically, budget revenue is linked to the amount of potential tax payments by each economic sector and the government's performance in effectively collecting this tax. For each sector, the amount of potential tax payment is calculated by multiplying the official tax rate by the amount of value added or profits or salaries paid by the companies, depending on the categories of tax. Government performance in tax collection is represented by the ratio of the "amount of tax collected effectively from past budget data" to the above "potential tax payment". The official tax rates and government performance in tax collection are exogenous and fundamentally depend on the government's fiscal policy. For example, the revision of the

investment law by removing some tax incentives might raise the government's performance in tax collection.

On the expenditure side, the model separates public investment from government salaries and other operating costs. Salaries are linked to the number of public administration staff (exogenous) and the level of monthly wages that depends on the economic growth and inflation, while other government operating costs are linked to the budget revenue. The budget deficit is exogenous, and as a result, public investment is the balance between revenue, current expenditure and public deficit.

The Balance of Payments projection depends on external trade and the exchange of services of each sector. Foreign aid and foreign direct investment (the main components of the capital accounts) are exogenous and rely on the government's success in implementing reform policies. Since 1999, donors mostly linked their assistance to the performance of the government in terms of reforms. In addition, as the Cambodian economy is strongly dollarized, the private sector (business and households) freely own foreign currencies.

For this reason, the balance of payments in the model also considers the foreign currencies owned by both the Central Bank and the private sectors. With regards to trade, the imports of goods depend directly on demands of each sub-sector (intermediate consumption, final consumption and investment), while exports are just the balance between supply and domestic demand. Trade in services mostly depends on foreign tourism activity.

Investment includes four components. As stated above, private foreign investment and public investment financed by foreign aid are exogenous. However, public investment financed by domestic revenue is calculated in the national budget section as the balance between government revenue and current expenditure, while the private investment locally financed is calculated for each sub-sector in the business account section and mostly depends on profits accumulated during the previous three years.

Employment of each sub-sector is directly calculated from the level of valued added at constant prices and the productivity of worker, which is determined by past trends. It is noted that the workforce in Cambodia is very underemployed, especially in the informal economy. The productivity of workers thus fluctuates greatly.

Wages of workers are also directly derived from the productivity of worker and inflation rates.



## Appendix 3

### Questionnaire for HDIA Garment Worker Survey

Survey Number: \_\_\_\_\_

Date: \_\_\_\_\_

Interviewer: \_\_\_\_\_

Factory: \_\_\_\_\_

Address: \_\_\_\_\_

**Q1. How long have you been working at the current factory?** \_\_\_\_\_ year(s)

**Q2. What do you do in the factory?** Specify the occupation: \_\_\_\_\_

**Q3. Is this your first job?**

☐ Yes ☐ No

*If not, what is your previous occupation?* \_\_\_\_\_

**Q4. How many hours and days do you typically work these days?**

\_\_\_\_\_ hours per day

*Basic working hours:* \_\_\_\_\_ per day

*Overtime:* \_\_\_\_\_ per day

\_\_\_\_\_ days per week

**Q5. On average, how much do you earn per month from working in the garment factory?**

	Earning per month (in US\$ or Riel?)
<input type="checkbox"/> Base salary	
<input type="checkbox"/> Overtime	
<input type="checkbox"/> Any monthly benefits/ allowance? Specify items: _____	
<b>Total</b>	
<input type="checkbox"/> Festival/ holiday allowance (per year)	



**Q6. On average, how much do you spend on the following items per month?**

	Expense per month (Riel or US\$)	Frequency (How many times a day or month?)
<input type="checkbox"/> Food		
<input type="checkbox"/> Transportation (commuting)		
<input type="checkbox"/> Housing and utilities		
<input type="checkbox"/> Clothing		
<input type="checkbox"/> Health Care/ Medicine		
<input type="checkbox"/> Recreation		
<input type="checkbox"/> Remittance		
<input type="checkbox"/> Other: _____		
<b>Total</b>		

**Q8. Is the monthly income you receive enough to meet your basic needs?**

☐ Yes

☐ No

**If not, (1) how much do you wish to earn from factory work in order to meet your basic needs?**

\_\_\_\_\_ in Riel/ month as basic salary and/or

\_\_\_\_\_ in Riel/ month including overtime

**(2) what do you do in order to meet your needs? (tick all that apply)**

☐ a. Limit spending on my necessities

☐ food

☐ clothing

☐ health care/medicine

☐ others

☐ b. work part-time somewhere else

☐ c. others (specify: \_\_\_\_\_)

**Q9. If you send the money home (for those ticked "remittance above"), how the money is spent? (tick all that apply)**

☐ a. To renovating the house

☐ b. To buy necessary basic needs

☐ c. To run small business

☐ d. To pay debt

☐ e. To support the study of your family member

☐ f. Other: (specify: \_\_\_\_\_)

**Q10. What is your residential arrangement? How many people share the room/house with you?**

☐ a. Dorm/apartment provided by the firm (sharing with \_\_\_\_\_ persons)

☐ b. Living with the family/ relatives (sharing with \_\_\_\_\_ persons)

- ☐ c. Renting room/apartment (sharing with \_\_\_\_\_persons)
- ☐ d. Others (Specify: \_\_\_\_\_)

**Q11. How do you commute to the factory? How long does it take on one way?**

- ☐ a. on foot (How long: \_\_\_\_\_)
- ☐ b. by bicycle (How long: \_\_\_\_\_)
- ☐ c. by REMOK (How long : \_\_\_\_\_)
- ☐ d. by bus/REMOK provided by the firm (How long : \_\_\_\_\_)
- ☐ f. others (specify: \_\_\_\_\_ ) How long: \_\_\_\_\_)

**Does the firm subsidize the cost?**

- ☐ Yes (How much: \_\_\_\_\_) ☐ No

**Q12: How do you compare the current situations of the following factors to 2004?**

	Worse	Same	Better	Specify how it has improved or worsen)
Salary				
Working environment				
Factory Management				
Health condition				
Living condition				
Social & economic participation				
Employer-worker confrontation				
Overtime work (number of hours) <sup>26</sup>				

**Q13. Have you experienced any verbal, physical and/or sexual abuse by your senior managers at the current firm?**

	Yes	No
Verbal		
Physical		
Sexual		

<sup>26</sup> More hours means “Better”

**Q14. Do you know anyone who were verbal, physical and/or sexual abused by your senior managers at the current firm?**

	Yes	No
Verbal		
Physical		
Sexual		

**Q15. Are you a Union Member?**

☐ Yes ☐ No

**Q16. Did you receive the contract when you start working?**

☐ Yes ☐ No

**Q17: Have you been forced to work over time?**

☐ Yes ☐ No

**Q18: After working in the factory, have you developed any skill(s)?**

☐ Yes ☐ No

**If yes, what are they? (Tick all that apply)**

- ☐ Language skill  
☐ Other specialized skill: \_\_\_\_\_

**Q19. Do factory provide the following services?**

- Medical services ☐ Free ☐ Fees (how much: \_\_\_\_\_)  
Meal ☐ Free ☐ Fees (how much per day: \_\_\_\_\_)  
Transportation ☐ Free ☐ Fees (how much per day: \_\_\_\_\_)

**Q20. Overall do you like working at the factory?**

☐ Yes ☐ No

**Why?**

.....  
.....  
.....

**Q21. How many more years would you like to work at garment factories?** \_\_\_\_\_ years

**Q22. What would you like to do after leaving garment jobs? Specify:** \_\_\_\_\_

.....  
.....  
.....

**Q23. In order to improve your working environment and living standard, what would you like to have at the factories and in societies?**

.....  
.....  
.....  
.....

**Q24. About the interviewee:**

Name of interviewee: \_\_\_\_\_

Age: \_\_\_\_\_ Sex: \_\_\_\_\_

Which province (or town) are you from? \_\_\_\_\_

Level of education:

☐ No Education

☐ 0-6 years (Elementary)

☐ 7-9 years (Junior high school)

☐ 10-12 years (High school)

☐ Completed High school

☐ Higher education



## Appendix 4

### Questionnaire for HDIA Garment Factory Survey

Survey Number: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Interviewer: \_\_\_\_\_  
 Factory: \_\_\_\_\_  
 Address: \_\_\_\_\_

**Q1. The year of establishment of the firm:** \_\_\_\_\_

**Q2. How many people are working for your firm?**

Total: \_\_\_\_\_ of which are Women: \_\_\_\_\_

**Q3. Did the numbers of employees increase or decrease after January 2005?**

- ☐ a. increased (by approximately: \_\_\_\_\_ persons)  
☐ b. decreased (by approximately: \_\_\_\_\_ persons)  
☐ c. no change

**Q4. What are the main commodities for exports at your firm? (tick all that apply)**

- ☐ a. woven RMGs (specify: e.g., girls trousers, \_\_\_\_\_)  
☐ b. knit-RMGs (specify: \_\_\_\_\_)  
☐ c. others (specify: \_\_\_\_\_)

**Q5. To which markets do you export?**

- ☐ US market (% of Market Share in 2006: \_\_\_\_\_)  
☐ EU market (% of Market Share in 2006: \_\_\_\_\_)  
☐ Other market (specify: \_\_\_\_\_) (% of Market Share in 2006: \_\_\_\_\_)

**Q6. Did your export volume increase or decrease after January 2005 (after the expiry of quotas)?**

	Decreasing by > 10%	Decreasing by 0-10%	Same	Increasing by 0-10%	Increasing by > 10%
<input type="checkbox"/> US market					
<input type="checkbox"/> EU market					
<input type="checkbox"/> Other market					

**Q7. Has the price increased or decrease after January 2005?**

	Decreasing by > 10%	Decreasing by 0-10%	Same	Increasing by 0-10%	Increasing by > 10%
<input type="checkbox"/> US market					
<input type="checkbox"/> EU market					
<input type="checkbox"/> Other market					

**Q8. What percentages of earning are spent on raw materials, utilities, labor, administrative requirement, and profit margin?**

	Last Year Value (US\$) (annual aggregate costs)	Percentage
Materials		
Utilities		
Labor Cost		
Official Administrative requirement (such as import/export permit, ...)		
Non-official Administrative requirement (such as unofficial fee, ...)		
Profit Margin		
<b>Total Production</b>		<b>100%</b>

**Q9. How do you compare the current situation of the following factors to 2004 (prior to the expiry of quotas)?**

	Worse	Same	Better	Specify how it has improved or worsen
Salary				
Working environment				
Factory Management				
Health condition				
Living condition				
Social & economic participation				
Employer-worker confrontation				
Overtime work (number of hours) <sup>27</sup>				

---

<sup>27</sup> More hours means “Better”

**Q10. What is the monthly payment to workers (on average) now?**

	Sewing machine operators	QC & other skilled workers	Managers
Basic wage			
overtime			
Festival/ holiday bonuses? (annual or times per year?)			
Other benefits/ allowance? (meal, medical, etc.)			

**Q11. What are the internal factors that affect your export? (Tick all that apply)**

- ☐ Lead time (How many days currently it takes? About: \_\_\_\_\_ days)
- ☐ High cost of transportation
- ☐ Weak physical infrastructure
- ☐ Access to capital and costs of financing investment
- ☐ Shortage of skilled workers
- ☐ Working environment and compliance Issues
- ☐ Invisible cost of doing business
- ☐ Restrictive labor regulations
- ☐ Other: \_\_\_\_\_

**How do you think Cambodia can improve items you ticked above?**

-----

-----

-----

**Q12. What are the external factors that affect your export? (Tick all that apply)**

- ☐ Tariff in the US Market
- ☐ EU Rules of Origin
- ☐ Discriminatory effects of Trading Blocs
- ☐ Negative Social Campaign with Regard to Compliance Issues
- ☐ Other: \_\_\_\_\_

**Q13. Do factory provide the following services to workers?**

- |                  |                               |   |
|------------------|-------------------------------|---|
| Medical services | <input type="checkbox"/> Free | <input type="checkbox"/> Fees (how much: _____)         |
| Meal             | <input type="checkbox"/> Free | <input type="checkbox"/> Fees (how much per day: _____) |
| Transportation   | <input type="checkbox"/> Free | <input type="checkbox"/> Fees (how much per day: _____) |

**Q14. What has your firm done in order to keep or increase production in the competitive market? (tick all that apply)**

- ☐ a. shifting to higher-value added product (such as: \_\_\_\_\_)
- ☐ b. diversifying the products (such as: \_\_\_\_\_)
- ☐ c. diversifying the market to (countries: \_\_\_\_\_)
- ☐ d. meeting compliance



- ☐ e. providing higher wages/ benefits to workers to improve productivity
- ☐ f. providing skill development training to workers
- ☐ g. improving capital such as machines and computers
- ☐ h. others (specify: \_\_\_\_\_)

***Q15. Do you think that consumers in the US & EU gain from the Post ATC? Why?***

- ☐ Yes ☐ No

***Q16. What are major differences in the Cambodia's garment industry you may notice between 2006 and 2004 (before and after the expiry of quotas)?***

***Q17. About the respondent:***

Name of respondent: \_\_\_\_\_ Sex: \_\_\_\_\_

Title: \_\_\_\_\_ Age: \_\_\_\_\_

Contact (phone or email): \_\_\_\_\_

# **Part II**

## **Export Diversification and Value Addition in Cambodia**



## Introduction

Cambodia's exports are concentrated on just a limited number of products, mainly garment products which accounted for almost 75 percent of the country's exports of goods in 2005. The development of the garment industry has become an important part of the national economy as well as the country's human development. The industry has provided a large amount of job opportunities for rural Cambodians. In 2005, the garment industry provided 27,000 direct jobs and it is estimated that another 242,000 indirect jobs were created by the industry.

Although the garment industry collapse is not a foreseeable risk in the post-ATC (Agreement on Textile and Clothing) starting 1 January 2005, it is not ideal for an economy to be highly dependent on just one or two particular industries. Cambodia needs to diversify its economic activities and export portfolio to achieve sustainable high economic growth and move to higher value added products. As a member of the WTO and in the era of globalization, the world is open to Cambodian products and vice-versa. The biggest challenge is how Cambodia can engage more effectively in international trade and use the trade framework as an opportunity to diversify its economy. For this to happen, the most probable solution lies in the competitiveness of Cambodian products in order to increase access to foreign markets.

There are various ways for Cambodia to diversify its exports, including labor intensive-based manufacturing and processing of primary products. However, these opportunities are not being exploited because export diversification is typically a slow process, which needs to be sustained by an appropriate and coherent strategy at both national and international levels.

This study attempts to view the opportunities for Cambodia's diversification in order to sustain the high economic growth and contribute to human development. It also discusses key challenges and issues facing the diversification of Cambodia's exports. In this context, five sectors are selected as case studies to understand their export potentials as well as the challenges that may impede their potential. Lastly, the study will try to propose a number of policy recommendations, contributing to the promotion of export diversification and thus increase domestic added value.

More concretely, the main objectives of this research study include:

- To review and assess the opportunities for Cambodia's export diversification.
- To identify the export-oriented sectors with a high potential for employment generation.
- To prepare a brief profile of the identified sectors, and analyze general trends in production, export and import as well as their contribution to domestic employment generation.
- To conduct value chain analysis, reviewing the roles, responsibilities, capacities and willingness of major players in the selected sectors.
- To identify constraints and opportunities of the selected sectors linked to international markets.
- To develop a modality to make diversification into identified sectors feasible.

The study is based mainly on a combination of secondary information from existing reports of various organizations, and interviews with professionals. The initial stage of the study consisted of extensive discussions among the research team to design the study process as well as to collect relevant information for the study. Existing documents from different organizations such as the Ministry of Economy and Finance (MEF), Ministry of Commerce (MoC), National Institute of Statistics (NIS), National Bank of Cambodia (NBC), UNDP, World Bank, etc. were reviewed and used to gather secondary information. Cambodia's National Export Strategy 2007-2010 was used as an important reference to ensure that the work was in line with the government's vision.

In addition to the desk review, qualitative interviews were carried out to obtain first hand information and to check the quality of secondary data from different sources. Interviews were held with relevant line ministries, the private sector, NGOs, associations and other relevant stakeholders. Numbers and findings in this study have been discussed among the team members before deciding on any specific information. Moreover, the members of the project's National Reference Group (NRG) have played a significant role in providing comments and feedbacks on the process and findings. Valuable input was received from the members of NRG on the selection of sectors for the study.

Finally, five sectors comprising of organic rice, cashew nuts, rubber, silk and tourism were identified as potential sectors for export in this study based on two reasons. Firstly, these sectors qualified the criteria set for this study. These criteria include: revealed comparative advantage (RCA), potential for export earnings, employment opportunities, use of domestic inputs and sustainability of the possible exports. Secondly, suggestions from the members of the project's NRG were also considered.

It is, however, important to note that reliable quantitative data and research on some sectors is not publicly available. Information in some part, especially related to the value chain analysis, was based on existing studies and qualitative interviews. Given the time and resource constraints, a large-scale survey could not be conducted.

The selection of the five sectors to be included in the study does not necessarily mean that they are the only sectors in which Cambodia has potential for export. They were selected simply because of their high potential in contribution to human development. Cambodia may have great potential for export diversification in many other sectors such as cassava, palm oil, fisheries, live stock, etc.

This part II is made up of six chapters. The first chapter discusses the opportunities for diversifying Cambodia's economy by exploring export potentials. The second to sixth chapters provide detailed analysis of the five identified potential sectors: organic rice, cashew nuts, rubber, silk and tourism. The final part contributes to lessons learned, concluding remarks and suggested policy recommendations to promote export-oriented sectors.



## **Chapter 7**

### **Opportunities for Export Diversification**

Acknowledging the importance of external trade in boosting the economy, the Cambodian government embarked on a free market-oriented and trade liberalization strategy starting in the late 1980s. Being well integrated into the international trade framework, Cambodia's primary concern is not about accessing markets, but producing products that are competitive in order to gain market share. Only highly competitive products, in terms of both quality and price, can find their way to the markets.

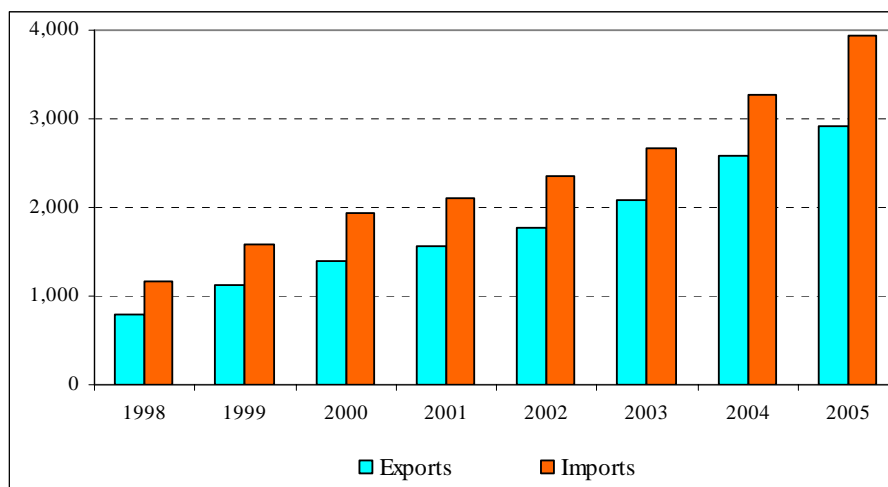
This chapter attempts to identify the opportunities for Cambodia's export diversification. The analysis focuses on two aspects: market diversification and product diversification. Firstly, the country's current external trade performance will be considered. Next, the possibility for diversification within the garment sector will be discussed, given the fact that the current export ratio concentrates highly on garment products. Finally, the opportunities for diversifying goods and service sectors will be highlighted.

#### **7.1. An Overview of Cambodia's External Trade**

Cambodia's annual external trade of goods has increased gradually over the past decade, averaging around 20 percent a year. The export of goods increased from less than US\$1 billion in 1998 to about US\$3 billion in 2005, while the import of goods was up from US\$1.2 billion to US\$3.9 billion during the same period. As a result, trade deficit has been widening, reaching US\$1 billion in 2005. This level of trade deficit accounted for 16 percent of nominal GDP. This situation suggests that Cambodia's export capacity is still limited, unable to fully benefit from the world's open economy.



**Figure 7.1: Cambodia's External Trade (000's US\$)**



**Source:** National Bank of Cambodia.

Concerning trade in service, Cambodia has been successful in attracting foreign tourists during the past years. Data from the Ministry of Tourism (MoT) shows that the number of tourist arrivals to Cambodia totaled more than 1.4 million in 2005, up from less than 0.3 million in 1998. The increasing arrivals of foreign tourists have largely contributed to a surplus in the balance of services, despite deficits in other service balances, especially in transportation due to the foreign control of air-transport to Cambodia. In 2005, trade in services generated a surplus of US\$471 million, representing just about 7.6 percent of nominal GDP

Nonetheless, the export basket of Cambodia is made up of a limited number of products. Of the US\$2.9 billion worth of total exports in 2005, 79 percent were garment products, 16 percent were primary or unprocessed agricultural produces (logs, fish products, rubber, paddy, etc.) and 5 percent were re-exports. The two main destinations for Cambodia's garment exports were the US, absorbing 70 percent, and the EU, absorbing 23 percent. Agricultural produces are sent to neighboring countries, Thailand and Vietnam, through informal channels and to Malaysia and Hong Kong through formal channels. Cambodia also imports products such as cigarettes, alcohol and used-electronics that are then re-exported to neighboring countries.

It should be emphasized that the informal exports of agricultural produces are estimated to reach 84 percent of total exports of agricultural products or about 13 percent of the country's total exports in 2005. It is believed that the complex export procedures and high unofficial fee

requirements create incentives for informal exports. According to the World Bank's Doing Business 2006, exporting from Cambodia requires an average 8 documents, 10 signatures and 43 days.

In contrast, Cambodia imports several types of commodities for local consumption. The two main components of Cambodia's imports are fabrics for garment production and petroleum. The first represented 27 percent of the country's total imports in 2005, while the later stood at about 21 percent. Imports of construction materials including cement and steel were about 6 percent. It is also worth highlighting that about 40 percent of total imports were subject to import tax, while 60 percent were exempt from import tax (fabrics for garments, project aid and government imports). Hong Kong, China and Taiwan are Cambodia's top three import partners, simply because they are the sourcing locations for fabrics and material for garment production. The three countries account for 46 percent of total imports of goods. Thailand and Vietnam are also important import partners of Cambodia, especially for manufactured goods.

## **7.2. Garment Sector**

### ***7.2.1. Product Diversification***

The export of Cambodian garments took off in the mid 1990s when the country received preferential treatment for its garment exports from the US and EU. Cambodia has been exporting about 115 tariff lines of the HS chapter 61 and 62, knitted and not-knitted articles of apparel, to the US. Based on data from the custom department, 95 percent of garment exports are in knitted or crocheted category (61). This export concentrates highly on a few product categories, namely sweaters, pullovers, vests (6110), women's or girls suits, ensembles (6104), men's or boys' suits, ensembles (6103). The three categories accounted for almost 70 percent of Cambodian garment exports.

The general change in product composition is that there has been a significant drop in cotton-based items while an increase in others. In 2005 Cambodia was able to export gloves, mittens and mitts both knitted/crocheted (6116) and not knitted/crocheted (6216) which were not being exported in 2004. Moreover, there seems to be a shift in the non-knitted or crocheted categories (62), especially from women's or girls' suits, ensembles (6204), and garments of felt or fabric impregnated (6210), to men's or boys' shirts (6205). The two (6204 and 6210) together registered a

drop in exports by about US\$18 million in 2005, whilst the later marked a growth of about US\$20 million.

**Table 7.1: Apparel Items with High Growth Prospects (US\$)**

HS. Code		2004	2005	%Changes
610319	Men's or Boys' Suits of Other Textile Materials, Knitted or Crocheted	39,490,572	72,099,232	83%
610443	Women's or Girls' Dresses of Synthetic Fibres, Knitted or Crocheted	390,956	1,150,155	194%
611190	Babies' Garments and Accessories, of Other Textile Materials	12,469,075	28,947,386	132%
620199	Men's Anoraks, Wind-cheaters, Wind-jackets, of Other Textile Materials	22	1,388,785	6223471%
620590	Men's or Boys' Shirts, of Other Textile Materials	5,642,676	26,555,831	371%

**Source:** Author, Compiled from the Custom and Excise Department.

It is interesting to note that the garment industry in Cambodia is dominated by Chinese investors allowing Cambodian firms to have more of an understanding of international fashion trends and technology (Tatsufumi, 2006). However, with most of the product design done in the Chinese parent firms, the Cambodian garment industry only focuses on basic construction and design, with very little added value. Cambodia's garment factories have tremendous potential to increase their productivity. With the right attitude and climate, the increase in productivity could be as high as 15-20 percent, allowing Cambodian factories to improve quality and produce higher-priced garments with more design and labor content (USAID, 2005).

### ***7.2.2. Market Diversification***

The growth of Cambodia's garment exports to the US was the result of a quota system that regulated the volume of international trade in textiles and garments until 1 January 2005. In the context of this system, Cambodia benefited from a quota allowing for the exports of garments to the US. Export growth to the US persists after the end of the quotas system and exports are now made at MFN rates of the WTO. Besides the US, the EU absorbs about 20 percent of Cambodia's garment exports and the rest goes to Canada, Japan, and some ASEAN markets. Thus, it is important to look at the possibility to increase garment exports to other markets rather than the

US market. One general observation is that exports to these countries require certificate of origin to claim preferential tariffs.

Under the “Everything but Arms” Initiatives, Cambodian exports can access the EU markets duty free and quota free, giving Cambodian exports an advantage over its more developed competitors. However, Cambodia could not use this advantage fully due to the lack of industrial integration within the country. There is still room for Cambodian garments to penetrate more in this market. For example, the trend of exports to this market is subject to price adjustment and Cambodia is underrepresented in some European countries for certain categories of garment products. The Italian market represents about 5.4 percent of world market share for women/girls nightdresses and pyjamas of cotton knitted (610831) but Cambodia does not export to this market.

Concerning the Canadian market, Cambodia can have duty-free and quota free access, which started when Canada's Least Developed Country Initiative took effect on 1 January 2003. The criteria for Canada's GSP rules of origin are easier to fulfill for Cambodia than the ones of the EU. For this reason, Cambodia's garment exports rose significantly in this market from less than US\$7 million in 2002 to more than US\$96 million in 2004 and then fell to US\$90 million in 2005. Nonetheless, this level of exports is still minimal; representing not more than 5 percent of the total of Cambodia's garment exports. Based on interviews with experts, the lack of business networks seems to be a major reason for the lack of representation of Cambodian garments in this market. Strengthening business relations with buyers in this market would increase Cambodia's garment exports. However, it seems that not much effort has been made to create stronger business relations given the fact that most Cambodian garment factories are tightly linked with Chinese factories, who have stronger relations with buyers and retailers in the US and EU than in Canada.

Although Cambodia obtained GSP from Japan, the Cambodian garment industry has not benefited much from this privilege. Less than US\$7 million worth of garment exports went to the Japanese market in 2005. It should be emphasized that in this market there have not been quota structures in place, which makes it difficult for Cambodia to face into direct competition with other big producers. China alone can absorb already 70 percent or more in this market, leaving little room for Cambodian products.

Last but not least, in terms of market diversification for garment products, many have argued that Cambodia's advantage lies in working with its ASEAN neighbors. The involvement in Free Trade Agreement (FTA) through ASEAN framework might be useful to help Cambodia's garment exports better access the markets of partner countries. Being a member of the ASEAN-FTA, Cambodia could increase its imports of materials for garment production from some ASEAN member countries like Thailand, Indonesia, Vietnam, etc. which will, in turn, make Cambodian garment products easier to comply with the EU rules of origin using the ASEAN calculation method. Moreover, Cambodia will have more opportunities to diversify its market places for garment exports in those countries, with the potential to establish the FTA with ASEAN (see table 7.3).

### **7.3. Goods (Agriculture and Manufactured)**

#### ***7.3.1. Product Diversification***

It is believed that the competitiveness of the country's exports is based primarily on low labor cost and natural resources. Many studies have concluded that agriculture is a key sector, which Cambodia should focus on because of its important impact on the majority of the population's livelihoods. Within the past decade, the agriculture sector has shown some positive signs such as an increase in production and yield. Agricultural production has been increasing by more than 4 percent per annum with crop production increasing at the faster rate of around 5 percent per annum during 1995-2005 (Lim, 2006).

The total cultivated area under different types of crops represented approximately 2.9 million ha of which 84 percent devoted to rice, 8 percent to secondary crops (maize, yellow maize, cassava, sweet potato, vegetable and mug bean) and another 8 percent to industrial crops (groundnut, soybean, sesame, sugarcane, tobacco and jute). The cultivated areas for agricultural production can be expanded further. Nonetheless, crop production has been volatile and reliant on weather conditions and demands in neighboring countries. Unarguably, Cambodia has a comparative advantage in land and labor and the opportunity for crop diversification would depend very much on how the country exploit and develop a competitive advantage out of differences in seasonality, climatic and soil conditions with the rest of the world.

**Box 7.1: Experiences of the Asian Newly Industrializing Economies (NIE):****How can the industrial and export structures be diversified and strengthened?**

The dependence on a limited number of export items is a common problem that developing countries face in the early phase of industrialization. Most of the economies were once dependent upon primary products; for example, petroleum for Indonesia and Malaysia, and rice for Thailand, and their first manufactured goods for export were textiles and wearing apparel. The next industry advanced by the East Asian economies was another labor-intensive industry, the assembling of electrical and electronic machinery such as refrigerators, televisions, washing machines, and integrated circuits.

Those production processes required cheap and patient manual labor. Those who worked for the textile and apparel industry gradually shifted to the machinery industry in the Asian NIEs and the original ASEAN member countries in the 1970s-80s. This pattern of diversification was “horizontal” in the sense that the diversification was attained by shifting resources from one labor-intensive industry to another labor-intensive industry. Later on, these economies shifted to more capital-intensive and technology-oriented industries as capital and knowledge were accumulated through the second-stage labor-intensive industrialization. Familiarization with machinery, and the internalizing of advanced technology, allowed managers, engineers and workers in the industry to learn state-of-the-art technology even though the parts incorporating the technology were produced abroad.

Some scholars argue that specialization in a labor-intensive production process is simply participating in a race to the bottom and may lead to a dead end for industrialization. Therefore, they suggest low-income countries move to capital-intensive and technology-information oriented industries right away, possibly utilizing backward and forward linkage effects along a value chain. That strategy sounds too hasty for most low-income countries whose capital and knowledge are scarcely accumulated. In contrast, horizontal diversification would appear to be more beneficial for a country experienced in a first-stage labor-intensive industrialization. Cambodia appears to be at this stage of industrialization.

**Source:** Tatsufumi, 2006.

Further, with the growing importance of the garment industry, Cambodia seems to be in the early stages of industrialization. At this stage of development, it is too early for Cambodia to think about capital-intensive or technology-oriented industries. One possibility for Cambodia’s diversification is the shift from one labor-intensive to another labor-intensive industry. Beside the garment industry, footwear production appears to be an industry of interest to Cambodia because of two reasons. First, given its similar nature to the garment industry, Cambodia obtains preferential treatments from many developed countries for footwear exports. Second, there may be some new incentives for shifting shoe-production from Vietnam to Cambodia as the EU imposed anti-dumping tariffs on China and Vietnam in April 2006 due to the production being unfairly subsidized by their respective governments. While the normal import tariff is only 7.5 percent, the EU Commission decided to extend anti-dumping tariffs on Vietnamese footwear (10 percent)

and Chinese leather shoes (16.5 percent) for the next two years (Xinhua, 2006). Based on the experiences of countries in the region, whose first manufactured goods for export were textiles and wearing apparel, it may be beneficial for Cambodia to focus on other light manufacturing, which require a low skilled labor force.

Moreover, the recent discovery of oil and gas as well as other mineral resources (boxite and iron ore) has been identified as priority sectors, which may have important potentials for poverty reduction and the country's development. According to some estimates, in "Block A" alone, the first of six demarcated offshore zones, the government's share of oil and gas revenues are expected to top between US\$500 million to US\$1 billion a year. This level of revenue is more than double of the current national GDP. That is not even counting the disputed zones between Thailand and Cambodia, which could be the richest of all, about 10 times bigger than the oil in Block A. Oil companies from China, Vietnam, South Korea, and Japan are all vying for offshore contracts. The amount of oil Cambodia is likely to produce in the coming years will be a huge opportunity. Revenue from oil, if managed well, could allow Cambodia to make investments in infrastructure, help diversify the economy, and thus improve the country's competitiveness in the region and the world economy (The Christian Science Monitor, 2006).

### ***7.3.2. Market Diversification***

In terms of market diversification, access to preferential markets could be a key to Cambodia's export diversification. As a member of the WTO, Cambodia is granted MFN by other WTO member countries. In addition, Cambodia is accorded GSP by many developed countries, including the US and EU. Table 7.2 lists countries according GSP to Cambodia based on different criteria and/or rules of origin. Bilaterally, Cambodia has not concluded any free trade agreements, but the country could take advantage from the FTA through the ASEAN framework. Currently, ASEAN is negotiating FTA with a number of countries including Japan, Australia, New Zealand, India, Republic of Korea, China and EU.

**Table 7.2: Countries according GSP to Cambodia**

Australia	Denmark	Luxemburg	Russian Federation
Austria	Finland	Japan	Slovakia
Belarus	France	Netherlands	Spain
Belgium	Germany	New Zealand	Sweden
Bulgaria	Hungary	Norway	Switzerland
Canada	Ireland	Poland	UK
China	Italy	Portugal	USA
Czech Republic	Korea (DPR)	Republic of Korea	AISP from ASEAN-6*

**Source:** Ministry of Commerce, 2006.

\* ASEAN-6 includes Brunei, Indonesia, Malaysia, The Philippines, Singapore and Thailand.

**Table 7.3: Cambodia's Involvement in FTA through ASEAN Framework**

Partner	Title	Status
<b>Japan</b>	ASEAN-Japan Comprehensive Economic Partnership	- Negotiations commenced in April 2005 to be concluded within two years.
<b>Australia/ New Zealand</b>	ASEAN-Australia and NZFTA	- Agreement in November 2004 to establish FTA by 2007.
<b>India</b>	ASEAN-India CECA	- Framework agreement signed in October 2003. - Negotiations to finalize FTA on goods by end 2005. - Establish dispute settlement mechanism by end 2005.
<b>Korea</b>	ASEAN-Korea FTA	- Negotiations commenced early 2005, scheduled to be completed by end 2006
<b>China</b>	ASEAN-China CECA Framework	- Framework agreement entered into force on 1 July 2003. - Early Harvest has completed. - Normal track started since July 2005.
<b>EU</b>	ASEAN-EU FTA	- Feasibility study was completed in May 2006 and submitted 7 <sup>th</sup> AEM-EU consultation was held in May 2006. - The ministers welcomed the recommendations to take the ASEAN-EU Economic Partnership to higher level.

**Source:** Author, Compiled from various sources.



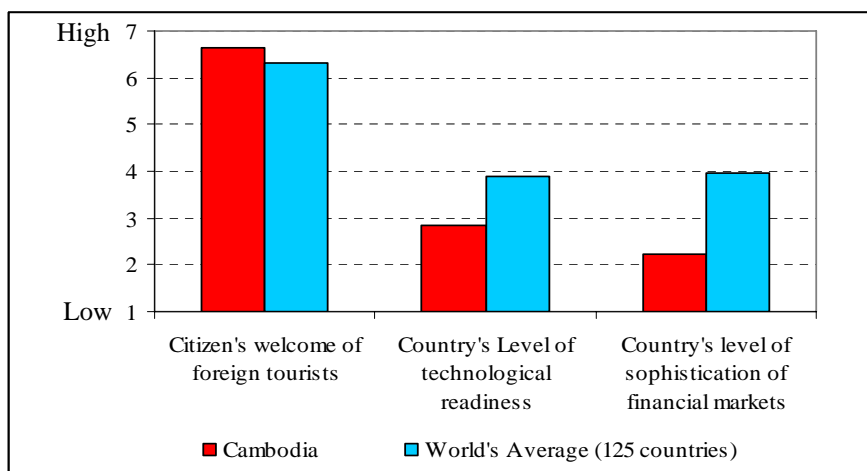
## 7.4. Service Sector

The service sector has been the largest sector in the Cambodian economy since 2000, contributing about 37 percent to GDP. With its historical heritage, culture, tradition and natural resorts such as forest, lakes, sea and attractive landscapes, Cambodia has become a new and attractive tourist destination in South East Asia. In the context where the political situation is stabilized, Cambodia is believed to have great potential in tourism industry.

However, added value created by the tourism industry is very limited because most of the investments in the sector, especially in hotels and restaurants, is made by foreigners. In addition, Cambodia does not have its own airline. The promotion of tourism-related activities such as small-scale artisans, handicraft, souvenir, recreation etc. could be seen as useful for export earnings through tourist arrivals.

Beside tourism, Cambodia is unlikely to enjoy high growth in other service sectors. The modern service sectors including finance, banking, and ICT (Information, Communication and Technologies) are lagging far beyond most countries. The fact that higher skills are required to work in the service sector makes it difficult for much of the Cambodian population to benefit from this particular sector. Based on the Executive Opinion Survey conducted among business executives in each respective country, Cambodia seems to be competitive in tourism, in the sense that Cambodians welcome foreign travelers and tourists. The same survey highlights clearly that Cambodia is not competitive enough in its ICT and finance/ banking service.

**Figure 7.2: Relative Competitiveness of Selected Service Sectors**



**Source:** *World Economic Forum's Dataset 2006-2007.*

It is also worth mentioning that Cambodia has also exported labor overseas, given the country's abundant and low skilled labor force. Data by the Ministry of Labor and Vocational Training (MoLVT) indicates that Cambodia has sent approximately 180,000 workers to Thailand and a couple of thousand workers to Malaysia and South Korea. In addition, Cambodians working illegally in neighboring countries is also very noticeable.

## 7.5. National SWOT Analysis

**Table 7.4: National SWOT Analysis**

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>- Large, productive, and uncontaminated arable land with low population density (72 inhabitants km<sup>2</sup>) and the great lake “Tonle Sap”.</li> <li>- Pocket of entrepreneurial business sector driving the movement towards value creation, addition, retention, and distribution.</li> <li>- Extensive under-utilized capacity to add, create, and retain value, e.g., organic produces, agro-business, agro-/aqua-processing, sericulture, and tourism.</li> <li>- Low-skilled but resourceful/cost-effective labor and labor law (international standard).</li> <li>- Chemical pesticides and/or fertilizers are not being widely used in the agriculture and horticulture in cultivation this make conversion to organic farming for export relatively quickly and more profitable than conventional method of farming.</li> <li>- Angkor Wat temple and others archaeological complexes are the tourist destination of choice.</li> </ul>	<ul style="list-style-type: none"> <li>- Low productivity and poor quality products due to generally inadequate manufacturing and farming experience, technical know-how, and branding practices.</li> <li>- Lacking of property right leading to limited access of arable land and fishing lot.</li> <li>- No domestic sources of venture capital to fund entrepreneurial activities in the agro-industry sector.</li> <li>- Inadequate products from the banking sector to develop and support the exports sector and expensive credit facilities (limited intermediate-, short- and long-term facilities) for all sectors in the economy.</li> <li>- Poor transportations infrastructure coupled with an urgent need to develop and rehabilitate/modernize irrigation systems.</li> <li>- Lack of inter-industry linkages, few serious agro-/aqua-processing facilities and policy impediments to vertical linkage and cluster development.</li> <li>- Ineffective trade support network whether for export processed goods or import of inputs leading to extensive smuggling into/from Vietnam and Thailand.</li> </ul>

Opportunities	Threats
<ul style="list-style-type: none"> <li>- Open access to foreign markets, reinforced by membership such as WTO, ASEAN AISP and EU-EBA.</li> <li>- Organic agriculture and agro-processing under Government consideration to become “lead” industry for export market, e.g., organic rice to EU, China early harvest (297 products tariffs’ free), etc.</li> <li>- Domestic production of fruits and vegetables would provide new sources of growth, value retention/addition within the tourism sector.</li> <li>- Synergy among developing countries and IDA to assist in the implementation of National Export Strategy.</li> <li>- Joint public-private sector initiative to establish and develop cross border transportation.</li> <li>- Joint economic development with Thailand/Vietnam to develop an exchange markets along the major border trading posts to reduce informal trade.</li> <li>- Investment and development in backward linkages and clustering</li> </ul>	<ul style="list-style-type: none"> <li>- Performance of competitor countries in region, i.e., Thailand, Vietnam, Philippines, etc.</li> <li>- Indifferent policing of existing laws and regulations likely to undermine drive towards value addition and value retention and to upgrade quality of products for domestic consumption and export market.</li> <li>- Extremely poor business environment due to corruption and myriad of formal and informal costs of doing business and transaction costs leading to unwillingness of FDI to enter the other sectors of the economy besides garment factories.</li> <li>- Current export mix overly narrow, extremely low value addition/retention and extremely vulnerable to internal/external shock given heavy reliance on a single product (garments) and tourism sector.</li> <li>- GMO crops enter the agriculture production chain.</li> <li>- Chemical pesticides and/or fertilizers enter the country without Khmer instructions and label warning in regard to health and environmental impact.</li> </ul>

**Source:** *Compiled from the Cambodia National Export Strategy 2007-2010, Final Draft, Ministry of Commerce.*

## 7.6. The Selection of Sectors for the Study

The selection of sectors for this study is based on a number of criteria, which includes revealed comparative advantage (RCA), potential for export earnings, employment opportunities, use of domestic inputs and sustainability of the possible exports. To ensure that the selected sectors are consistent with the national priority sectors, the Cambodia National Export Strategy 2007-2010 was also reviewed. Finally, comments and suggestions from members of the project’s National Reference Group were also taken into account, given their important roles in steering the project as a whole.

The proposed criterions for selection of sectors include:

- Reviews of existing documents,
- Revealed Comparative Advantage (RCA),
- Potential for export earnings,
- Employment opportunities,

- Use of domestic inputs,
- Sustainability of the possible exports and
- Suggestions/ comments from members of the project's NRG.

*Reviews of existing documents:*

The National Export Strategy (NES) 2007-2010 was prepared by the MoC in collaboration with the International Trade Center (ITC). It is a comprehensive document detailing necessary strategies to be undertaken to promote the country's exports. The NES is designed for and expected to benefit all sectors of the economy. However, the initial focus of the NES is on five priority sectors including: garment and textile, fisheries, organic agriculture, silk and tourism.

*Revealed Comparative Advantage (RCA):*

The notion of RCA has been introduced to help assess a country's export potential. Balassa introduced it in 1965 his famous RCA index, which identifies whether a country has a revealed comparative advantage rather than to determine the underlying sources of comparative advantage. The index has been later on widely accepted and used in trade literature. The RCA indicates whether a country is in the process of extending the products in which it has a trade potential, as opposed to situations in which the number of products that can be competitively exported is static.

- $RCA_{ij} = (x_{ij}/X_{it}) / (x_{wj}/X_{wt})$ , where:
- $x_{ij}$  refers to the values of country  $i$ 's exports of product  $j$ .
- $x_{wj}$  refers to the values of world exports of product  $j$ .
- $X_{it}$  refers to the country's total exports.
- $X_{wt}$  refers to world total exports.

According to the World Bank's Trade Indicators and Indices, the RCA index of a country for particular product is often measured by the product's share in the country's exports in relation to its share in world trade. It is said that the country has a revealed comparative advantage in the product if the value of the index exceeds unity. Similarly, if the index is less than unity, the country is said to have a revealed comparative disadvantage in the product.

**Table 7.5: RCA Index of Cambodia's Major Exportable Categories**

HS. Chapter	Categories	2000	2004
01	Live animals	0.02	0.34
03	Fish and crustaceans	0.68	0.81
07	Edible vegetables and certain roots and tubers	0.02	0.08
08	Edible fruit, nuts, peel of citrus fruit, melons (including cashew nuts, coconuts, banana, grape, apple, etc.)	0.02	0.02
10	Cereals (including rice, wheat, corn, etc.)	0.14	0.44
11	Milling products, malt, starches, wheat gluten	0.01	0.70
12	Oil seed, grain, seed, fruit, etc.	0.15	0.49
24	Tobacco and manufactured tobacco substitutes	0.51	0.53
40	Rubber and articles thereof	2.61	1.40
44	Wood and articles of wood, wood charcoal	2.35	0.32
50	Silk	0.15	0.07
52	Cotton	0.03	0.01
61	Articles of apparel, accessories, knit or crochet	47.92	51.10
62	Articles of apparel, accessories, not knit or crochet	5.65	2.61
64	Footwear, gaiters and the like, parts thereof	2.77	2.13

**Source:** Author, Calculation based on UNCTAD COMTRADE database.

Beside clothing and footwear categories (61, 62 and 64), rubber and articles thereof (40) is the only category where Cambodia has revealed comparative advantage. Based on this calculation, it seems that Cambodia does not have revealed comparative advantage in other categories, including in agricultural products.

However, the index should be carefully interpreted for two reasons. Firstly, the calculation of RCA could only be done for categories of exportable products (HS. Chapter) and thus a detailed analysis of a specific product or sector could not be made. Secondly, due to a lack of information, UNCTAC COMTRADE database is the only source for country specific and world export figures. In the case of Cambodia where informal exports are significant, the export figures tend to be underestimated, especially for agricultural products. The inclusion of informal agricultural exports may probably affect the calculation of RCA Index.

*Potential for export earnings:*

**Table 7.6: Cambodia's Exports by Selected Categories (000's US\$)**

HS. Chapter	Categories	2000	2001	2002	2003	2004
01	Live animals	48	1,073	1,129	1,250	1,156
03	Fish and crustaceans	5,994	6,080	4,229	2,846	13,139
07	Edible vegetables and certain roots and tubers	78	292	262	694	806
08	Edible fruit, nuts, peel of citrus fruit, melons (including cashew nuts, etc.)	116	40	690	1,072	256
10	Cereals (including rice etc.)	973	2,399	4,465	705	5,783
11	Milling products, malt, starches, wheat gluten	13	71	79	1,545	1,695
12	Oil seed, grain, seed, fruit, etc.	645	462	198	416	4,451
24	Tobacco and manufactured tobacco substitutes	2,407	3,014	3,743	2,075	3,844
40	Rubber and articles thereof	32,491	25,888	29,794	34,795	38,332
44	Wood and articles of wood, wood charcoal	34,600	23,154	16,183	9,461	9,429
50	Silk	80	78	23	162	55
52	Cotton	226	75	221	224	134
61	Articles of apparel, accessories, knit or crochet	840,658	1,089,411	1,222,462	1,511,271	1,865,536
62	Articles of apparel, accessories, not knit or crochet	121,838	41,299	80,496	81,913	108,026
64	Footwear, gaiters and the like, parts thereof	28,826	28,804	32,647	34,055	40,750

**Source:** UNCTAD COMTRADE database.

Beside the RCA measure, the export performance could also be used as a supplementary indicator to understand the characteristic and dynamism of exports for particular product categories. For Cambodia, there is an increasing trend of exports of products in some categories, mainly in apparel and agriculture. Nonetheless, the exports of product in category silk (50) and cotton (52) exhibited a decreasing trend during 2000-2004. Repeatedly, most agricultural produces, especially rice and cashew nuts are subject to large

informal exports and as well as silk exports. The data does not consider the informal exports of these products to neighboring countries.

### *Employment Opportunities:*

It is equally important to consider how a particular sector or industry contributes to human development through employment generation, especially for women and the rural population. An overwhelming majority of the Cambodian population derives its earning from agricultural activities. Table 7.7 provides some indications of the employed population by selected economic activities or industry.

**Table 7.7: Employed Population (aged 10 years and above)  
by Branch of Economic Activity**

<b>Economic Activity</b>	<b>Population (000)</b>	<b>% Female</b>	<b>% Rural</b>
Growing of cereals and other crops etc.	2,503	51%	98%
Fishing, operation of fish hatcheries and fish farms	360	25%	90%
Manufacture of wearing apparel; dressing and dyeing of fu	300	80%	71%
Construction	195	11%	80%
Hotels and restaurants	30	62%	43%
Manufacture of textiles	26	85%	87%
Growing of fruit, nuts, beverage and spice crops	7	49%	87%
Manufacture of rubber and plastic products	7	10%	87%

**Source:** Author, Calculation based on the CSES 2003-2004.

### *Use of domestic inputs/ Value Addition:*

Lack of a supporting industry has been a major problem in Cambodia, limiting the domestic added value. Cambodia is weak in building up a supporting industry for its local businesses. Most of the inputs used in many manufacturing industries are imported from neighboring countries. Notwithstanding its high potential, agro-industry is unlikely to be encouraged due to the unfavorable business environment. However, a few companies started their operations successfully in processing major crops, such as rice and cashew nuts for exports. If the agro-industry is well integrated within the country, it is believed that domestic added value would increase gradually.

Due to being labor intensive, the agricultural and handicraft sectors are believed to use a high level of domestic inputs, mainly labors.

*Sustainability of the possible exports:*

In order to ensure the sustainability of exports, it is important to engage local people in all aspects of the production process. The engagement of local SMEs in export activities would be key in the long-term. In Cambodia, most of the agricultural activities including farming and planting of some industrial crops are based on work done by family members. Tourism and handicraft silk sectors are two specific sectors that relate to the unique culture of the country and thus their export opportunities should remain sustainable. Unarguably, the sustainability of possible exports is equally linked to the opportunity of market access. As a member of the WTO and with the LDC status, Cambodian products are tradable in the WTO member countries with MFN treatment.

*Suggestions/comments from members of the project's NRG:*

Finally, the selection of sectors was made based on the suggestions and comments from the members of the project's NRG, who may have a better view of export diversification. Given their significant role in guiding the project process, their suggestions are worth taking into consideration. EIC, therefore, organized a meeting among the members of the project's NRG on 14 November 2006 to discuss ways forward for the project's implementation.

During the meeting, EIC presented the preliminary findings on five sectors (organic rice, cashew nuts, silk, motorcycle assembly and cotton) for discussion among members of the project's NRG. The five sectors were initially the results of extensive internal discussion among the research team. After a brief presentation on the above five sectors, all members at the meeting discussed the potential of each sector referring to two main indicators (employment generation and potential for export earning).

Some strongly recommended including rubber in the study instead of cotton. Others highlighted different issues regarding the proposed sectors. Some wished to drop motorcycle assembly from the list, given its small potential in employment generation. Some wished to extend the study to other sectors such as tourism and fishery. Finally, the members of the project's NRG came to a general consensus on five sectors, comprising of



organic rice, cashew nuts, rubber, silk, and tourism. Based on the subjunctive assessment made by the research team, the five selected sectors have a high potential to affect human development in a positive way although some of the criteria are not met at present.

**Table 7.8: Assessment of the Selected Sectors**

	<b>Organic Rice</b>	<b>Cashew Nuts</b>	<b>Rubber</b>	<b>Silk</b>	<b>Tourism</b>
Priority Sectors of the NES 2007-2010	H	L	L	H	H
Revealed Comparative Advantage	M	M	H	M	H
Potential for export earnings	H	H	H	M	H
Employment opportunities	M	H	M	H	H
Use of domestic inputs	H	M	H	M	M
Sustainability of possible exports	M	H	H	M	H
Suggestion from Members of NRG	H	H	H	H	H

**Source:** *Opinion survey among research team members.*

**Note:** *H=high/yes, M=medium, L=low/no*

## **Chapter 8**

### **Organic Rice**

#### **A Niche Market for Higher Farming Incomes**

Cambodia has a high potential for rice production, given its tropical climate and large cultivated area. In 2003, the country produced a surplus of about 500,000 tons of paddy, most of which were exported unofficially to neighboring countries Thailand and Vietnam. These unofficial exports are largely due to a lack of investment in the country's quality commercial milling sector. Cambodia's share of world paddy production to only reach 0.7 percent in 2001, while Thailand and Vietnam had paddy production shares of 4.5 percent and 5.4 percent respectively (EIC, 2004).

This indicates that Cambodia's rice export capacity remains relatively weak making it difficult for Cambodia to compete internationally with its neighboring countries for the export of conventional rice. Given the situation, Cambodia could enjoy exporting more rice with higher value addition if the niche markets are identified. Organic rice production could potentially help Cambodia gain more of the exporting market share as more and more people, especially in developed countries, are aware of health and environmental issues.

This chapter aims at identifying the potential of exporting Cambodian organic rice. The sector's value chain and SWOT analysis will be considered to have a clear understanding of the sector. The study's methodology is mostly based on literature reviews and secondary data from various organizations. The data used in this chapter has been collected through interviews with NGOs and private companies in the field.

#### **8.1. Global Market for Organic Products**

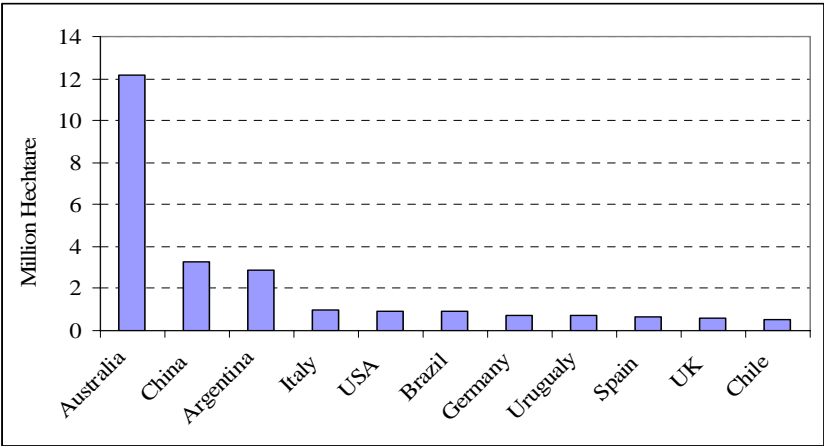
The world's retail sales of organic products increased remarkably from US\$10.5 billion in 1997 to about US\$19 billion in 2001 and around US\$23-US\$25 billion in 2003. The world's market for organic products is estimated to reach US\$27 billion in 2004 and experienced a high growth rate of 8-10 percent. North America has the highest growth rate of demand for organic products (Organic Monitor, 2006). This high growth rate is expected to continue, with the world's market for organic products surpassing US\$30 billion in 2005. According

to a recent study by the International Trade Centre (ITC), the international demand for organic rice greatly exceeds available supply.

**8.1.1. Production**

During the past few years, for reasons of health, environment and sustainability, more and more countries in the world tend to focus on organic agriculture. There are now around 120 countries practicing organic farming and more than 51 million hectares are currently under the organic management by at least 623,174 farms worldwide.

**Figure 8.1: The Ten Countries with Largest Area under Organic Management**



Source: FiBL-Survey 2005/2006.

The table above shows the ten countries with the largest area under organic management. They account for approximately 50 percent of worldwide organic farming. Currently, Australia has the largest organic farming area, with 12.1 million hectares or about 25 percent of the total area under organic management, followed by China and Argentina whose organic areas represent 3.5 million hectares and 2.8 million hectares respectively. The total organic area in Asia is approximately 4.1 million hectares, managed by almost 130,000 farms. The most significant countries producing organic products in Asia are China, India and Russia.

**8.1.2. Price Premium**

The price premium of organic products is quite significant compared to conventional products. According to the Foreign Agricultural Service of the US Department of Agriculture (USDA), the price premium on vegetable items is more than 50 percent, and on rice is approximately 60 percent in

most supermarkets that offer organic products in Bangkok, Thailand. Since rice quality varies greatly, the price premiums are also different. The consumer survey by USDA indicates that customers are willing to pay up to 15-20 percent more for organic products. The same survey also shows that farmers in Thailand get an average premium of more than 20 percent for their organic paddy at the farm gate.

## 8.2. Organic Rice Sector in Cambodia

Organic rice has gained popularity amongst the developed countries, especially those in the European Union and the United States, where the demand is noticeably high. Seeing this opportunity, an organic rice farming pilot project for export to international markets was launched by NGOs in Cambodia. The project started in 2003 and covers 11 districts in four provinces.

Provinces	District	Supported by
Kampong Thom	Stung Sen, Santuk, Kampong Svay, Staung	RDP of GTZ
Kampot	Chouk, Chumkiri	RDP of GTZ
Battambang	Thmakaul, Bavel, Maung Russei	Danida-IPM of Canada
Pursat	Bakan, Veal Veng	CCRD of Oxfam Québec

In 2004, CEDAC (Centre d'Etude et de Développement Agricole Cambodgien/ Cambodian Center for Study and Development in Agriculture) also launched a similar project in another four provinces including Takeo, Kampong Speu, Prey Veng, and Svay Rieng. This project aims only to satisfy domestic demand for organic rice and not for export. Although there are about 1,200 varieties of rice planted in Cambodia, only a few varieties have the potential for export, for example, Phkar Romdoul/Somali, Phkar Malis/Neang Malis. Many other varieties such as Phkar Knhey, Champar Meas, Kanhauk Pong, etc. are planted for domestic consumption.

### 8.2.1. Production

In order to convert from conventional rice farming to organic farming, it takes in general three years; that is, T1 for the first transitional year, T2 for the second, and T<sub>o</sub> for the Organic year. Since organic rice farming was launched in 2003, the production capacity is not yet enough to meet market demand. In 2005, the certified organic rice production reached 881 metric tons, cultivated on 560 ha.

The organic rice production is extremely minimal compared to the country's production capacity, which was approximately 6 million tons in 2005. In order to help its existing members to reach the organic year quickly, the association of organic rice farmers is restrictive in inviting new members, suggesting that the cultivated area of organic rice in 2006 is similar to 2005.

**Table 8.1: Cambodia's Rice Production in 2005**

Province	Organic Rice		Total Rice	
	Production (ton)	Cultivated Area (ha)	Production (ton)	Cultivated Area (ha)
Kampong Thom	563	415	321,534	156,074
Kampot	171	75	292,831	121,621
Battambang	30	8	603,221	238,760
Pursat	117	62	197,797	91,770
<b>Cambodia</b>	<b>881</b>	<b>560</b>	<b>5,986,179</b>	<b>2,438,037</b>

**Source:** CEDAC, *Report on the Inspection and Certification of Rice*, November 2005.

Beside marketing benefits and price premiums, organic rice farming may bring several advantages to farmers. Firstly, expenses on chemical fertilizer are reduced and the yield may increase gradually in the long run as there are no chemical elements in the soil. However, extensive labor work is required to prepare the organic manure and nursery.

### ***8.2.2. Local Demand and Export***

Regarding the domestic market, it is estimated that the potential demand for organic rice represents 1 percent of total domestic demand. Based on this estimation, the domestic demand for organic rice should reach roughly 20,000 tons per year (MAFF 2006). Therefore, the opportunity to capture the local niche market is considerable, since the current supply of organic rice is far below the potential demand. In general, as the price of organic rice is relatively high compared to conventional rice, only middle class and wealthy Cambodian consumers can afford organic rice. However, interviews with some private companies indicate that the local demand for organic rice is increasing gradually. According to CBCL, the company sold around 48 tons of chemical-free rice in 2005, while 35 tons were sold in the first semester of 2006. However, given the limited production, Cambodia has not yet exported organic rice to international markets.

It is noted that a number of countries are showing oversupplies in sectors such as organic meat and dairy, whilst other sectors like organic cereals and grains continue to suffer from product shortages. A reason for this is that much of the early converts to organic agriculture were dairy and cattle farmers whilst the conversion rate for arable crops has typically been low. In general, demands for organic products are concentrated in the most affluent countries because consumers have high purchasing power, which enables them to buy at the premium price in addition to which they are tend to be more concerned about the environment, health and sustainability.

Being a member of WTO, the world is open for Cambodian agricultural products including rice. Cambodia can benefit from preferential treatments in order to export its organic rice to the international market. For example, Cambodia's agricultural products can be exported duty free to the EU under the Everything but Arms initiative (EBA).

### **8.2.3. Prices of Organic Rice**

The premium for farm gate price depends on the status of conversion. For the first transitional year, there is no price premium for organic paddy over the conventional paddy. The farm gate price for organic paddy at this stage averages US\$144 per ton. This limits the incentive for farmers to convert from conventional farming to organic farming. However, the incentives could be foreseen during the second and third transitional years. In general, the price premium for the second transitional year is about 10 percent and that of the organic year reaches around 20 percent.

**Table 8.2: Price of Organic Rice**

	Price Premium	Price (US\$/Ton)
<b>Organic Paddy (Farm Gate Price)</b>		
T1	0%	144
T2	10%	158
To (Organic)	20%	173
<b>Organic Rice (Retail Price)</b>		
Unpackaged Organic Rice		470
Packaged Organic Rice		835

**Source:** Author, Based on interviews with CEDAC and CBCL, October 2006.

Based on interviews with CEDAC and CBCL, the unpackaged organic rice is sold at about US\$0.47/kg, an equivalent to US\$470/ton. This price is, to some extent, higher than the conventional product which is estimated at slightly over US\$400/ton for the same variety of rice. The price of packaged organic rice is even more significant, reaching around US\$835/ton, almost 80 percent higher than that of the unpackaged one.

### 8.3. Value Chain Analysis

#### *8.3.1. Market Structure*

All farmers who want to practice organic farming need to be members of the association so that they can ensure the quality of their organic products and to establish an internal control system that is a pre-condition for international certification. Basically, four major players exist at the domestic level in the value chain of organic farming. Depending on the destination of the final product, the current structure of the value chain may vary slightly as follows:

Farmer → Association → CBCL/CEDAC → Supermarket/Retailer

Farmer → Trader → Informal Exporter

After harvesting, farmers sell their organic paddy either to the association or traders. In the first case, the association sells paddy to private companies, for example, CBCL, which then mills and packages the rice. Finally, the packaged organic rice is distributed for sale in supermarkets in Phnom Penh and Siem Reap. However, there may be a side-selling problem, especially, when farmers are in urgent need for money for other purposes. In this case, farmers can sell directly to traders with no price premium for organic products and traders export the organic rice informally either to Vietnam or Thailand.

#### *8.3.2. Production Cost Profile*

Farmers: Organic rice farming is more labor intensive than conventional farming. On average, 52 man days are required for organic farming, as opposed to only about 42 man days for conventional farming. The difference is mainly that more labor work days are required to prepare the organic manure and nursery raising. Nonetheless, the difference in input cost is significant between organic and conventional farming because no

chemical fertilizer is needed and it therefore does not need to be applied. These two inputs account for about US\$40/ha or approximately 28 percent of the total production cost of paddy.

**Table 8.3: Cost Profile for Paddy Production (US\$/ha)**

	Conventional Paddy		Organic Paddy		Difference
	US\$/ha	% of Sales	US\$/ha	% of Sales	
Material/inputs	99	34%	59	17%	(40)
Labor (reported)	42	15%	59	17%	17
<b>Total Cost</b>	<b>141</b>	<b>49%</b>	<b>118</b>	<b>34%</b>	<b>(23)</b>
<b>Total man-days required</b>	<b>42 days</b>		<b>52 days</b>		
Yield* (ton/ha)	2		2		-
Sale (US\$/ton)	144		173		29
<b>Gross Income</b>	<b>288</b>	<b>100%</b>	<b>345</b>	<b>100%</b>	<b>57</b>
<b>Net Income</b>	<b>147</b>	<b>51%</b>	<b>228</b>	<b>66%</b>	<b>81</b>

**Source:** Interviews with CBCL for organic paddy and Cambodian Agrarian Structure Study for conventional paddy.

\* Yield of paddy production can be as low as 1.7 ton/ha during the wet season, and as high as 3.5 ton/ha during the dry season. However, to simplify the calculation an average yield of 2 ton/ha is assumed for both conventional and organic farming.

Usually, the yield during the transitional period (T1 and T2) is lower than the conventional one, but it will increase gradually in the long run. With the assumed yield of 2 ton/ha for both conventional and organic paddy, farmers could be better off to shift to organic farming because the production cost is less and the price of organic paddy is also higher. As a result, farmers could generate a net income of about US\$228/ha for organic paddy, while the same figure represents only US\$147/ha for conventional paddy production.

Traders/Processors: Currently, Cambodia Biological Company Ltd. (CBCL) is a private company supplying organic rice to all supermarkets in Phnom Penh and several in Siem Reap province. The company buys organic paddy from farmers' associations in the four pilot provinces and processes at the miller's, then packages at its office in Phnom Penh.

The analysis of the costs and benefits of processing proves that the cost of packaging is high, representing approximately 30 percent of total sales of packaged organic rice, while the milling cost is estimated at only 6 percent



of the selling price. Including the by product profit, the processor could make roughly 33 percent of the price. Because of small production size, the processor has to use labor-intensive packaging technology which causes high packaging cost. The current conversion rate of a milling machine in Cambodia is less than 55 percent. On the other hand, the cost of materials including plastic and utility cost is also significant, comprising about 14 percent of the selling price. If the milling quality is improved, the cost of packaged rice would be reduced and expenses on rice selection and grading will also decrease.

**Table 8.4: Milling and Packaging Cost for Organic Rice (US\$/ton)**

Items	Cost (US\$/ton)	% of Sales
Cost of paddy required for 1 ton of organic rice*	345	41%
Milling cost	66	8%
Milling	46	6%
Transport & loading fee	20	2%
Packaging cost	248	30%
Input (plastic, electricity, etc.)	120	14%
Labor (selection, packaging, etc.)	128	15%
By-product profit (broken rice, bran, etc.)*	103	12%
<b>Total Cost</b>	<b>659</b>	<b>79%</b>
<b>Selling Price</b>	<b>835</b>	<b>100%</b>
<b>Gross Margin</b>	<b>279</b>	<b>33%</b>

**Source:** Author, Calculation based on Interviews with CBCL, October 2006.

\* Based on CBCL's experience, the conversion rate is around 50 percent. The remaining 50 percent can be divided into 3 categories: 20 percent of broken rice sold at CR850/kg, 8 percent of bran sold at CR450/kg and other.

Exporters: Until recently, due to various reasons, there are only a few companies exporting chemical-free rice from Cambodia. Equally, the supply of organic rice is still limited as the organic rice farming project was just recently launched in 2003. In addition, most potential buyers may lack trust in business capacities and quality management as well as fulfillment of agreements as “delivery on time” of Cambodian producers and trade partners, which seems to be caused by inadequate trade facilitation measures, such as bureaucracy, low technology used at the border etc.

According to the study by Global Development Solution (GDS) conducted in June 2003 for the World Bank, the analysis of cost of rice exports to Hong Kong totaled US\$53/ton, about 37 percent of which are expenses for shipping and another 29 percent for customs and inspections.

Moreover, one stakeholder (CCRD) has found that exports of organic rice to foreign markets are risky and unprofitable because of the uncompetitive price and quality assurance. According to Community Cooperative for Rural Development (CCRD), it is very difficult to meet the requirements of buyers, due mainly to the lack of storage techniques, which could affect the quality of rice given the current complicated and long export procedures.

**Table 8.5: Cost of Rice Exports to Hong Kong**

	US\$/ton	%
Road (NR4)	6.5	12%
Customs/Cam control/Police inspection	15.3	29%
Vessel Loading fee	1.4	3%
Port Charges	10.2	19%
Shipping Charge (S.vill-Hong Kong)	14.9 - 19.5	37%
<b>Total</b>	<b>53.0</b>	<b>100%</b>

**Source:** World Bank, *Towards a private sector-Led Growth Strategy for Cambodia, 2003.*

Currently, Angkor Kasekam Roonroeung Co., Ltd. (AKR) is the only Cambodian firm that has successfully exported chemical-free rice of Neang Malis to several countries. In 2003-2004, the company's exports were 8,000 tons, double the 4,000 tons in 2001-2002. It should be noted that AKR is equipped with a modern milling machine, which meets international standard. Besides, the company does its own contract farming ensuring that the quality of rice is easily controlled.

## 8.4. SWOT Analysis

**Table 8.6: SWOT Analysis of Organic Agriculture in Cambodia**

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>- Large and productive arable land with low population density (72 inhabitants per km<sup>2</sup>).</li> <li>- Extensive under-utilized capacity to add value, e.g., organic rice, nuts, fruits, etc.</li> <li>- Making conversion to organic farming for export market relatively more profitable than conventional method of farming due to arable land are still virgins, not affected by chemical substances and the dominance of small-scale farming.</li> <li>- Growing demands and premium prices for organic products.</li> <li>- Financial support available at commune level to farmers producing organic agriculture.</li> </ul>	<ul style="list-style-type: none"> <li>- Inadequate farming experience, improper handling of crops, branding practices.</li> <li>- Lack of property right, grossly inadequate enforcement of land legislation and regulations.</li> <li>- Poor infrastructure and market information.</li> <li>- Lack of inter-industry/sector linkages and few facilities and/or silo, and policy impediments to vertical linkage within the sector.</li> <li>- Urgent need to develop and rehabilitate/modernize irrigation systems.</li> <li>- Inadequate, cumbersome and expensive credit facilities (limited intermediate-, short- and long-term facilities).</li> <li>- No FDI lead investors in the organic agro-business.</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>- Market access, e.g., China and other GSP granting countries, WTO, ASEAN AISP, and “EU Everything but Arms”.</li> <li>- Organic agriculture and agro-processing under Government consideration to become “lead” industry for export market, e.g., organic rice to EU under EBA, China early harvest, etc.</li> <li>- Government priority to strengthen trade facilitation system is underway.</li> <li>- Domestic production of seed provides new value retention and development of organic rice to meet increases export market demands.</li> <li>- Environmental/health concerns stimulating worldwide demand for organic products.</li> <li>- Opportunity to intensify organic production.</li> <li>- Synergies among donors and international aid agencies to assist development of rural private sector, e.g., World Bank, EU, ITC, AQIP, GTZ, AFD, CIRAD, etc.</li> </ul>	<ul style="list-style-type: none"> <li>- Performance of competitor countries in organic agriculture (i.e., Thailand, Vietnam, and the Philippines).</li> <li>- GMO crops enter the production supply chain.</li> <li>- Proliferation of chemical fertilizers, pesticides, insecticides, and other dangerous chemical among the illiterate farmers/producers.</li> <li>- Land speculation lock-out productive arable land in vicinity of major urban areas.</li> <li>- Smuggling and predatory practiced by those with political power/connection depress demand for domestic production and discourage innovation in modern farm practice.</li> <li>- Few entrepreneurs venture into the sector.</li> </ul>

**Source:** Ministry of Commerce, *Cambodian National Export Strategy 2007-2010, Final Draft*.

## 8.5. Impact on Employment

Data from CEDAC shows that there are 1,271 farmers involving in the four organic farming pilot projects in 2005. Given the fact that most Cambodian farmers practice family farming, organic rice farming does not seem to generate new paid job opportunities for rural workers in the classical sense. However, the fact that organic farming is 10-days more labor intensive would mean they have the possibility to increase the general employment level of family farms by up to 20 percent.

Moreover with high potential for export, additional employment could be generated along the value chain of the organic rice sector, especially at the processing and packaging stage. As indicated in the previous part, the labor cost of packaging accounts for around US\$128/ton. There are two main phases at the packaging stage: selection process where milled rice is graded and packaging where the oxygen is removed from the plastic in order to maintain the quality of rice and to avoid insect contamination.

In the first phase, it is estimated that about 40 man-days are required for selection of 1 ton of rice and another 10 man-days for packaging. In other words, one person can grade on average 25 kg per day, depending on the type of rice and each packager can finish up to 100 sacks of 1 kg of rice per day. In both cases, they could earn between US\$60 and US\$70 per month, well above the minimum salary of garment workers.

## 8.6. Concluding Remarks

Cambodia has a high potential for rice production. Traditional farming has been a common practice for many farmers. It may be more advantageous for Cambodia to start looking at the niche market which could create more value added. To respond to the increasing demand, Cambodia should specialize in organic products. Organic rice practice would be an interesting start for Cambodia since it would not only provide better income for farmers but also increase employment levels of rural households and create additional employment in processing if the whole sector is well integrated.

By converting to organic farming, farmers could increase their net income by more than 50 percent over the conventional farming. However, there remain several constraints which impede farmers from seeing the long-term benefits of organic farming. The long conversion period (two to three years) may probably be the main reason as most farmers only consider the

short-term benefits. Lack of institutional support is another factor, which discourages the promotion of organic farming. At the sectoral level, some initiatives could be effective to promote the organic rice sector:

Supporting the creation of a local agency to certify organic products: In the longer term, if Cambodia is to develop an organic sector, it may be useful that organic produce be certified locally. Doing so will not only increase consumer's confidence but also improve the image of Cambodian organic produces in international markets.

- *Improving the storage and packaging techniques:* To maintain the quality of paddy and rice, better techniques should be introduced to both the associations and processors. The cost of packaging is a little bit high since materials such as plastic are imported.
- *Encouraging warehouse receipts:* To avoid the problem of side selling, measures must be taken; that is, the farmer's association should ensure enough funds for buying organic paddy from farmers when they want to sell their produce immediately after harvesting. An example is the creation of trust fund by the association.
- *Supporting the development along the supply chain:* To respond to international market demands, the supply side must be stable. This suggests that investment in the agricultural sector should be encouraged, especially in milling capacity. It would be more competitive if the cost of milling is low and the milling machine can give good grade of rice. In order to attract investors, business information, technical support as well as fiscal incentive should be provided to stakeholders.
- *Establishing the law on contract farming:* In order to encourage farmers, contract farming should be encouraged. The participation of the private sector is necessary to effectively practice contract farming. In this context, there is a need to have a law on contract farming to protect Cambodian farmers.
- *Continuing the support of trade facilitation:* Many have complained about the complex and non-transparent export procedures. To promote the export of organic rice as well as other products, it is necessary to reduce the unnecessary procedures, regulations and informal payments related to importing and exporting.

- *Providing necessary support to agricultural cooperatives:* Necessary supports should be provided to farmer communities and agricultural cooperatives to strengthen farmers' bargaining positions vis-à-vis traders.



## Chapter 9

# Cashew Nuts: A Sector with High Potential for Value Addition

Cashew nuts have a favorable position among the world's agricultural commodities. They are grown almost exclusively in developing countries, primarily for export, with 95 percent of cashew nuts without shells exported to developed countries. The global cashew industry can be divided into 3 sections: raw cashew producing countries, processing countries and consuming countries. Data from FAOSTAT shows that the world's demand of cashew nuts increases from year to year with an average growth rate of 6-7 percent.

Cashew trees were introduced in Cambodia by the Portuguese. In 1967, Cambodia planted some 1,200 hectares of cashew crop with an estimated production of 400 tons per year (ABiC, 2005). At present, Cambodia is expanding its cultivated areas, from less than 20,000 hectare in 2001 to more than 60,000 hectares in 2005. According to a study by GTZ on "The Cambodian Cashew Industry in 2005", over 95 percent of Cambodia's raw cashew production has been exported informally to Vietnam in an unprocessed form.

This chapter aims at exploring the potential of the cashew sector in the Cambodian economy. The study is based on literature reviews and interviews with relevant stakeholders including government officials, cashew growers, processors, packaging enterprises and exporters.

### 9.1. The Global Cashew Market

#### *9.1.1. Raw Cashew Nuts*

Cashew nuts are grown commercially in more than 30 countries. The world production of raw cashew has increased remarkably from about 1.5 million tons in 1999 to about 2.3 million tons in 2004, mostly produced in developing countries. The main producer is Vietnam, with more than 0.8 million tons or about 36 percent of the world's production of cashew in 2004, with India following in second place in terms of production that year (FAO, 2006). However, production of raw cashew nuts in India has become stagnant in recent years while Vietnam is increasing its production of raw cashew nuts.



Cashew nuts are mostly grown in Asia especially in Vietnam, India and Indonesia and African countries, such as Kenya, Ghana, Mozambique, Nigeria etc,. Most of their raw productions are exported to the large processing countries, which include India, Vietnam and Brazil. Based on data compiled from FAOSTAT, Cote d'Ivoire ranked the top country exporting raw cashew nuts in 2004, followed by Tanzania and Guinea-Bissau. As for importation, India imports most of the world's raw cashew nuts. Being the largest processor country, India imported around 97 percent of total world imports in 2004. Most products are imported for processing to be re-exported to developed countries, especially to the US.

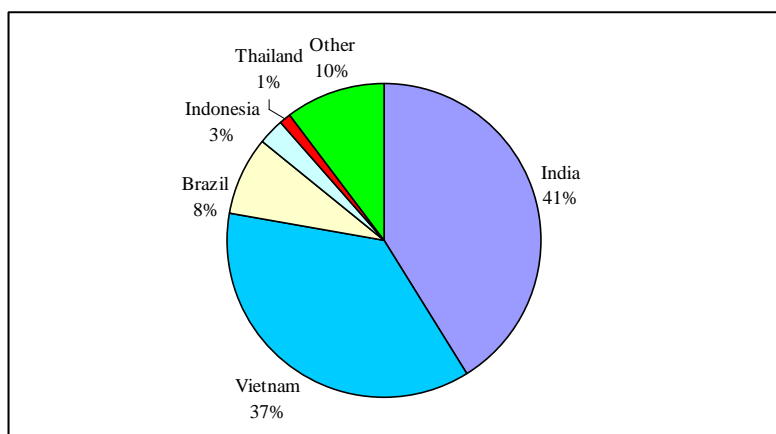
**Table 9.1: Main Producers and Traders of Raw Cashew Nuts in 2004 (000's tons)**

N°	Producers	Quantity	Exporters	Quantity	Importers	Quantity
1	Vietnam	826	Côte d'Ivoire	116	India	468
2	India	460	Tanzania	82	Brazil	-
3	Nigeria	213	Guinea-Bissau	81	Ghana	5
4	Brazil	182	Indonesia	56	United Arab Emirates	2
5	Indonesia	120	Benin	48	France	1
6	Tanzania	100	Mozambique	40	USA	0.8
7	Côte d'Ivoire	90	Ghana	31	Saudi Arabia	0.6
	<b>World*</b>	<b>2,267</b>		<b>492</b>		<b>481</b>

**Source:** Compiled from FAOSTAT, 2006.

\* The difference in world's imports and exports may result from the statistical discrepancy.

**Figure 9.1: Consumption of Raw Cashew Nuts in 2004**

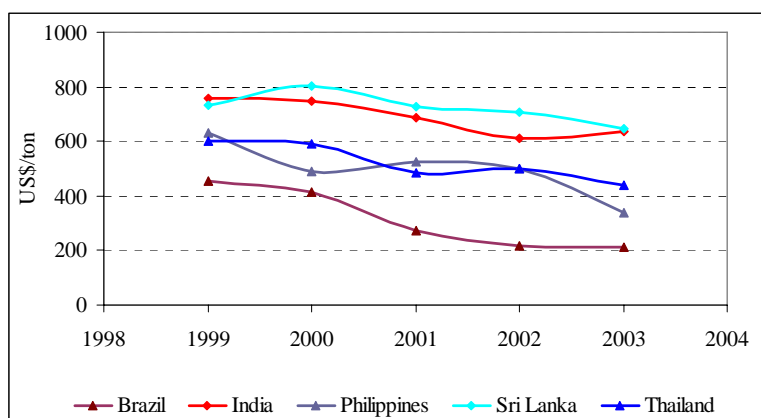


**Source:** Compiled from FAOSTAT, 2006.

According to FAOSTAT, India was the largest consuming country of raw cashew nuts amounting to 928,000 tons in 2004, followed by Vietnam about 826,000 tons, since those countries need raw cashew nuts for their processing. The two countries absorbed up to 78 percent of the world's production of raw cashew nuts. The remaining 22 percent is consumed by other producer countries such as Brazil (8 percent) and Indonesia (3 percent). Thailand, which is not among the top ten producers of raw cashew nuts, consumed roughly 1 percent of total production.

The price of raw cashew nuts varies from country to country, ranging from US\$200/ton in Brazil to US\$800/ton in Malaysia in 2003. In general, the price of raw cashew nuts has declined gradually. For example, the price in India, where the majority of raw cashew is consumed, decreased from US\$760/ton in 1999 to US\$635/ton in 2003. This downward trend is most likely the result of the increasing competition among producing countries, while production of raw cashew nuts has notably increased from 1.5 million to 2.3 million tons in 2004. However, as indicated in Figure 9.2, the price of cashew nuts with shells varies remarkably between one country and another.

**Figure 9.2: Prices of Cashew Nuts with Shells in Selected Countries**



Source: Compiled from FAOSTAT, 2006.

### 9.1.2. Cashew Nuts without shells

Export: Since the processing of raw cashew nuts is almost done in three countries, India, Vietnam, and Brazil, exports of cashew nuts without shells is almost entirely from these countries, according to FAO. Exports from the three countries account for about 95 percent of the world cashew processing industry. India's export of cashew kernels has been up from 92,000 tons in

1999 to 110,000 tons in 2004, while Vietnam has also sharply increased its export of kernels from 18,000 tons in 1999 to 105,000 tons in 2004.

**Import:** The world demand for cashew nuts has noticeably increased every year with the annual growth rate of 5-8 percent, according to FAO. Currently, the main importer of cashew nuts without shells is the US, amounting to about 131,000 tons in 2004 or about 50 percent of the world's imports (270,000 tons). The EU is the second world importer after the US.

**Consumption:** The top five consuming countries in the world are the US, India, Vietnam, Canada and Australia. With world consumption reaching 424,000 tons, the US and India absorb 30 percent and 18 percent of world consumption, respectively. As Cambodia has only one processing company, its production of cashew nuts without shells accounts for about only 200 tons per year, of which 80 percent of the production is exported to the US market, and the rest is sold domestically.

Demand for cashew nuts has been growing steadily and is expected to increase by 5 to 8 percent annually. The price of cashew nuts without shells has been fluctuating around US\$3,000 to US\$5,000/ton, due to the demand and supply condition in the world market.

**Table 9.2: Consumption of Cashew Nuts Without Shells in 2004 (000's tons)**

Nº	Countries	Production	Import	Export	Consumption
1	USA	0.05	131	2	129
2	India	186	0.9	110	77
3	Vietnam	165	-	105	60
4	Canada	0.12	12	0.2	12
5	Australia	-	12	0.2	11.6
<b>World*</b>		<b>453</b>	<b>270</b>	<b>299</b>	<b>424</b>

**Source:** Compiled from FAOSTAT, 2006.

*\* The difference in world's imports and exports may result from the statistical discrepancy.*

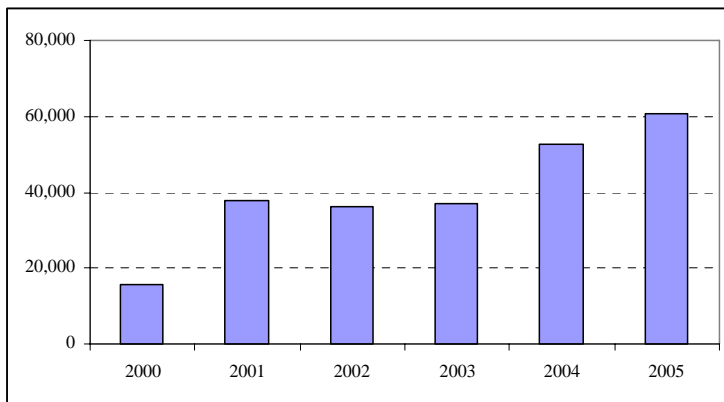
## 9.2. Cashew Sector in Cambodia

### 9.2.1. Raw Cashew Nuts

Most cashew planting in Cambodia is done by households with small-size lands and low yield. Total cultivated cashew areas reached only about 16,000

ha in 2000, increasing to more than 60,000 ha in 2005. Raw cashew nuts are mostly grown in Kampong Cham and Ratanakiri provinces. Cultivated areas in both provinces accounted for almost 65 percent of total cashew cultivated areas in 2005. With the current cultivated areas, annual production of raw cashew nuts is estimated to reach between 30,000 tons to 50,000 tons, of which 95 percent are exported informally to Vietnam. This level of production represents roughly 1.3 percent of the world's production (MAFF, 2005). However, it is expected to increase in coming years, due to the expansion of cultivated areas and the increasing demand for cashew nuts in Vietnam.

**Figure 9.3: Cultivated Area of Cashew Nuts in Cambodia (000's ha)**



**Source:** *Ministry of Agriculture, Forestry and Fishery.*

The price of raw cashew nuts in Cambodia is unstable. However, the price in the last few years has slightly increased. It increased from about US\$570/ton in 2003 to about US\$670/ton in 2004, and sharply increased to nearly US\$1,000/ton in 2005 due to a strong demand from Vietnamese processors to meet the shortfall in supply of raw cashew nuts in Vietnam. In 2006, the price of raw cashew nuts dropped to US\$600/ton.

It should be noted that the price of raw cashew nuts has fluctuated both in the Cambodian market and the world market. In 2005, at the end of season, the price of raw cashew nuts increased sharply to US\$1/kg. The farm gate price can be divided into three phases: early, middle and end. Price is low at the beginning of the harvest, since growers needing cash are anxious to sell. After this, prices tend to go up until Khmer New Year (mid-April), and then start to fall again, as people need cash. The price rises towards the end of the season as the supplies become limited.

**Table 9.3: Farm Gate Price of Cambodian  
Raw Cashew Nuts (US\$/ton)**

Season	2001	2002	2003	2004	2005
Early	250	200	300	375	800
Middle	450	450	375	325	875
End	800	500	600	550	1,025

**Source:** GTZ, *the Cambodian Cashew Industry, 2005*  
and interviews with collectors.

In the current state, the prices of Cambodian cashew nuts are generally set by Vietnamese buyers. Prices have remained competitive only because of competition between the Vietnamese buyers. However, the increase in production of raw cashew nuts in Vietnam might drive down the price of raw cashew nuts in Cambodia in the near future.

### ***9.2.2. Cashew Nuts without Shells***

The processing of cashew nuts in Cambodia is reportedly done by one company, Khmer Agricultural Product (KAP), in Kampong Cham with an installed capacity of 1,250 ton/year of raw materials. This represents not more than 5 percent of the country's production of raw cashew nuts. The remaining 95 percent are exported informally to Vietnam. The Cambodian processed capacity of cashew is still limited, with an estimated 190 ton of cashew nuts without shells in 2005. This is almost nothing compared to the world's consumption, which reached about 453,000 ton in 2004. The only enterprise in Cambodia produced 147 ton in 2003 and up to 189 ton in 2005.

In response to the increase in the price of raw cashew nuts and higher demand for cashew kernels in the world market, the price of cashew nuts without shells also increased remarkably in 2005. The price was up from US\$3,800/ton in 2004 to US\$5,000/ton in 2005. FOB price of cashew kernels decreased to US\$4,190/ton in July 2006, from US\$5,000/ton in early 2006 in Vietnam (MoC, 2006).

## **9.3. Value Chain Analysis**

### ***9.3.1. Market Structure***

A majority of cashew farmers operate small to medium-scale operations, ranging from 1 hectare to 200 hectares and averaging around 3-5

hectares. Usually, farmers sell their produce to local collectors in the village or commune. The local collectors consolidate the raw cashew nuts in the bags transported by motorcycle at the village or commune level, and sell them on to a local broker. The cashew is then sold to processors, either KAP or Vietnamese processors.

Agro Star is the biggest cashew plantation company in Cambodia, with cultivated areas of about 2,000 hectares. Besides exporting to Vietnam, its cashew productions are also sold to local processor, KAP. In general, the value chain of the Cambodian cashew industry is characterized as follows:

**Chain 1:** Farmers → Collectors → KAP

**Chain 2:** Agro Star → KAP

**Chain 3:** Farmers → Collectors → Local/Regional Brokers → Vietnamese Brokers → Vietnamese Processors

Chain 3 is the common chain for Cambodia's cashew industry. A local broker purchases from various collectors. The local broker may operate a small warehouse but most hold inventory for less than a week. Regional brokers purchase raw cashew nuts from local brokers. Given that Cambodia has only one raw cashew processor with a capacity of 1,250 ton of raw cashew nuts per year, around 95 percent of the annual nuts is purchased by Vietnamese brokers and exported for processing in Vietnam.

### ***9.3.2. Production Cost Profile***

*Smallholders:* Cashew planting is a long term investment. In general, the cycle of cashew nuts is around 15 to 30 years. Cashew trees normally start bearing after three years and become fully productive by the 10<sup>th</sup> year, where after they continue bearing for another 20 years. During the first three years, about US\$266/ha is needed for investment, of which 41 percent covers input cost. The investment cost for the first year is about twice as high as the following years.

**Table 9.4: Investment Costs of Cashew Plantation (US\$/ha):  
The Case of Smallholders in Ratanakiri**

Cost	Y1	Y2	Y3	Total
Input	74	35	0	109
Labor	85	46	26	157
Total	159	81	26	266

**Source:** Compiled from *Cambodian Agrarian Structure Study*, ABiC survey 2005.

According to the ABiC study in 2005 on cashew planting of smallholders in some provinces such as Rattanakiri, Kratie and Kampong Cham, the total production cost of raw cashew nuts during the maximum yield (10-15 years-old), on average, is about US\$103/ha of which input cost accounts for 17 percent and labor cost 83 percent. This cost varies from one area to another, as labor cost seems to vary by area, and fertilizer and maintenance are used varyingly. Assuming that the yield is 0.7 ton/ha and sold at the price of US\$600/ton, thus the gross income of raw cashew nuts is US\$420/ha. The net income at the production level is about US\$317/ha.

Large-scale plantation: According to Agro Star, the only large scale cashew plantation, total cost is about US\$208/ha during the harvesting ages. The costs include input cost (fertilizer, pesticide, etc.) and labor cost (weeding, harvesting, fertilizing etc.). Input and labor cost is about US\$118 and US\$90/ha respectively (See Table 9.5). These costs are higher than that for the smallholders, since the plantation needs to spend more on input and labor cost, while smallholders spend much less on fertilizer and maintenance. However, with the higher cost on production, the yield for plantation is higher than that of smallholders. It is noticeable that the net income for large-scale plantations is estimated at US\$332/ha, compared to US\$317/ha for smallholders.

**Table 9.5: Cost Profile for Cashew Plantation  
During the Maximum Yield Time\***

Description	Smallholder		Plantation		Difference
	US\$/ha	% of Sales	US\$/ha	% of Sales	
Material/Input	18	3%	118	20%	100
Labor	85	14%	90	15%	5
<b>Total Cost</b>	<b>103</b>	<b>17%</b>	<b>208</b>	<b>35%</b>	<b>105</b>
Yield (ton/ha)	0.7	0%	0.9	0%	0.2
Sale (US\$/ton)	600	100%	600	100%	0
<b>Gross Income</b>	<b>420</b>	<b>70%</b>	<b>540</b>	<b>90%</b>	<b>120</b>
<b>Net Income</b>	<b>317</b>	<b>53%</b>	<b>332</b>	<b>55%</b>	<b>15</b>

**Source:** Author, Calculation based on Cambodian Agrarian Structure Study and interviews with Agro Star.

\* The maximum yield time is between 10-15 years.

**Processors:** There is only one cashew processing company in Cambodia, Khmer Agricultural Product (KAP) located in Kampong Cham province. Only 3-5 percent of the entire raw cashew nuts have been processed by KAP. The enterprise has complained about the high production cost, poor management and lack of capital.

**Table 9.6: Processing Cost of Cashew Nuts (US\$/ton)**

Description	Cost
Raw cashew nuts*	3,000
Other input cost (Fuel, etc.)	425
Labor cost	425
<b>Total cost</b>	<b>3,850</b>
Sale	5,000
<b>Value Added</b>	<b>1,575</b>
<b>Net Income</b>	<b>1,150</b>

**Source:** Author, Calculation based on interviews with processor.

\* 1. Conversion ratio 5:1.

2. Price of raw cashew nuts = US\$600/ton.

According to interview with the processor, to obtain one ton of shelled cashew nuts, 5 tons of raw cashew nuts is needed. This makes up



about US\$3,000 cost of raw cashew nuts, assuming that the cost of raw cashewnuts averages US\$600/ton. Total labor cost to obtain one ton of cashew kernels (semi-product cashew nuts) is about US\$425. Therefore, the input will increase to about US\$3,425 including fuel cost and other costs. With the total cost of US\$3,850/ton, the net income amounts to about US\$1,150 per ton of processed cashew.

Packagers: Packaging of processed cashew is rare in Cambodia. Cambodia Biological is the only enterprise, which packages salted cashew nuts to be sold domestically. Considered as a small-scaled business, the enterprise produces final products of cashew kernels. According to interviews with the company, the total packaging cost of cashew kernels is about US\$5,711/ton and the retail sale of final products is estimated to reach US\$10,000/ton. On average the company can make a net income of around US\$4,289/ton. However, it should be noted that the analysis does not consider the export costs, which may place more burden if the products are produced for export.

**Table 9.7: Packaging Cost of Cashew Nuts  
(US\$/ton)**

Description	Cost
Cashew kernels	5,000
Other input (Plastics, oil, etc.)	586
Labor cost	125
<b>Total cost</b>	<b>5,711</b>
Sale*	10,000
<b>Value addition</b>	<b>4,414</b>
<b>Net income</b>	<b>4,289</b>

**Source:** Author, Calculation based on Interviews with Cambodia Biological.

\* The packaged cashew is priced at US\$3 for a 300g-package and US\$1.1 for a 100g-package. Overall, the return of one ton of packaged shelled cashew is about US\$10,000.

Although there seems to be a high return for the business, it appears that the company cannot make that much profit due to two reasons. Firstly, the domestic demand of packaged cashew nuts is still limited. Usually, only consumers with higher incomes can afford such a product. Secondly, the

products are subject to competition with imported products from other countries, especially Thailand and Vietnam, which tend to have more attractive packaging. As a result, the enterprise may only be able to sell 200 kg/month of the final product.

## 9.4. SWOT Analysis

**Table 9.8: SWOT Analysis of the Cambodian Cashew Industry**

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>- Commercially viable volumes of raw cashew nuts are already produced in Cambodia. (30,000 to 50,000 tons annually).</li> <li>- Internationally competitive labor cost. (US\$40 to US\$50 per month).</li> <li>- Dollar based economy, limiting currency risk.</li> <li>- High quality/High yield raw cashew nuts.</li> <li>- Relative low use of pesticides and herbicides.</li> </ul>	<ul style="list-style-type: none"> <li>- Inadequate and expensive credit facilities.</li> <li>- Inability to use assets other than real estate as collateral for long-term debt.</li> <li>- Limited off-season raw cashew nuts inventories available.</li> <li>- High transportation and energy costs.</li> <li>- Lack of market information.</li> <li>- Poor enforcement of contract and law.</li> <li>- Lengthy processing of export documentation and unpredictable export transaction costs.</li> <li>- No FDI lead investors in the processing business.</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>- Growth in the global market for organic products.</li> <li>- Growth in customer awareness and demand in “fair trade” and “origin based” product marketing.</li> <li>- Processing technology transfer is available from India.</li> <li>- Increasing global demand for cashew.</li> <li>- Development of differential pricing based upon the cutting yield of raw cashew nuts.</li> </ul>	<ul style="list-style-type: none"> <li>- Increased Vietnamese cashew plantings.</li> <li>- A high degree of agriculture risk is born by the Cambodian farmers.</li> <li>- African countries are starting to show interest in organic production.</li> <li>- Cambodian raw cashew nuts volumes are relatively small compared to global volumes, making Cambodia a “price taking” market.</li> <li>- Indian and Vietnamese raw cashew producers and processors have greater access to capital at lower costs.</li> <li>- Unable to import raw cashew nuts from other origins for processing in the “off-season”.</li> <li>- The perceived unfavorable business environment in the eyes of foreign investors.</li> </ul>

**Source:** Compiled from the *Cambodian Cashew Industry Study, 2005, GTZ.*

## 9.5. Competitiveness of Cashew Plantation in Cambodia

Production cost of raw cashew nuts: Production cost in Cambodia is lower than in Vietnam both for smallholders and large-scale plantation. Total cost during the maximum productivity (age 10-15) is about US\$103/ha for smallholders and about US\$200/ha for large-scale plantation, compared with

US\$330 for plantation in Vietnam during the same ages. In the form of plantation, labor cost in harvesting is US\$60/ha in Cambodia, compared with US\$150 in Vietnam, which account for 29 percent and 46 percent, respectively. The higher cost during harvesting seems to be caused by the higher yield in Vietnam than that in Cambodia.

Notably, fertilizer cost in Cambodia is US\$98/ha, higher than that in Vietnam, only US\$60, accounting for 46 percent and 18 percent respectively of the total cost. The higher cost on fertilizer appears to be caused by the higher price of fertilizers, which are mostly imported with tax from other countries. Nonetheless, cashew grown in Cambodia has a lower yield than in Vietnam but is comparable to other large producers such as India. Average yield of cashew nuts in Cambodia varies between 0.5 to 0.9 ton/ha, while Vietnam 1-1.5 ton/ha<sup>1</sup>.

**Table 9.9: Comparison of Cashew Plantation Cost in Cambodia and Vietnam**

Description	Cambodia		Vietnam		Diff.
	Cost (US\$/ha)	%	Cost (US\$/ha)	%	
Fertilizers	98	47%	60	18%	38
Pesticides	20	10%	12	4%	8
<b>Input Cost</b>	<b>118</b>	<b>57%</b>	<b>72</b>	<b>22%</b>	<b>46</b>
Weeding	26	13%	20	6%	6
Labor cost on fertilizer & pesticide	4	2%	60	18%	-56
Labor cost on harvesting	60	29%	150	45%	-90
Other	0	0%	28	8%	-28
<b>Labor Cost</b>	<b>90</b>	<b>43%</b>	<b>258</b>	<b>78%</b>	<b>-168</b>
<b>Total Cost</b>	<b>208</b>	<b>100%</b>	<b>330</b>	<b>100%</b>	<b>-122</b>
<b>Yield (ton/ha)</b>	<b>0.5-0.9</b>		<b>1-1.5</b>		

**Source:** Author, Calculation based on interviews with Agro Star and GTZ.

Processing costs: Processing capacity is very poor in Cambodia. However, it is worth noting that many countries such as Indonesia have not been successful in developing cashew processing industries. In Cambodia, the processing cost of one ton of cashew kernels amounts to about US\$850,

<sup>1</sup> In Dak Lak, Vietnam, cashew nut yield is: 0.1 to 1.5 ton/ha (Year 3-10: increasing productivity), 1.5 ton/ha (Year 11-20: Stable productivity); 1.4-1 ton/ha and 0.9 to 0.5 ton/ha respectively (Year 21-25 and 26-30: declining productivity).

including labor cost and fuel and other expenses, except inputs. However, the lower cost on electricity, gasoline and lower interest rates on loans in Vietnam might be the main reasons for lower prices of shelled cashew nuts in Vietnam than that in Cambodia. In addition, Vietnamese processors have other techniques in increasing the weight of shelled cashew nuts.

## **9.6. Economic Impact of Cashew Sector**

Cashew plantations also provide potential job opportunities for rural Cambodians. With plantation areas amounting to 60,874 ha across the country, the estimated income for cashew growers is about US\$21 million a year and it is believed that more than 12,000 people are currently employed in the sector.

Assuming that the conversion ratio is 5:1, the output of shelled cashew nuts would be around 6,000-10,000 tons per year. If processed domestically, this would provide an additional net income of about US\$10 million per year to Cambodians. Moreover, a great number of jobs would be newly generated in supporting sectors such as farm-village traders, district traders, provincial traders, factories and at ports. In Cambodia, these jobs would mostly be for women from rural areas.

In Cambodia, there are very few packaging enterprises. According to the data on cost and profits analysis, an additional net income of US\$36 million would be estimated if the entire Cambodian cashew kernels were packaged in Cambodia for both local and export markets. It could further generate additional employment for thousands of people.

## **9.7. Concluding Remarks**

In Cambodia, there is considerable interest in growing cashew nuts. The cashew sector in Cambodia has grown rapidly with the expansion of cultivated areas in many provinces. This growth is caused by the increase in world demand for cashew nuts with the growth rate of about 5-8 percent per year.

Demand for raw cashew nuts in Cambodia is currently limited to the Vietnamese demands for processing. Most of the raw cashew nuts collected in Cambodia are sent to Vietnam informally. The price of the raw cashew nuts seems to be set by Vietnamese traders, exposing Cambodian growers to a high level of risk. Since Vietnam is increasing its raw cashew nuts production in an effort to become self sufficient. It puts negative pricing pressure on the Cambodian raw cashew nuts as long as Vietnamese buyers

purchase almost the entire production of Cambodian raw cashew nuts. Therefore, in order to avoid this risk, developing strong Cambodian based processors is needed. Contract farming between local processors and growers in rural areas is also seen as a possible solution for a sustainable cashew development in Cambodia.

Finding from the study shows that cashew is a profitable crop for Cambodia, especially rural people, since it could offer an opportunity for generating jobs and income in terms of smallholders and large plantations. If Cambodian raw cashew nuts are domestically processed, it will potentially offer opportunity for employment generation, especially women in rural areas, and also contribute to economic development and reducing poverty in Cambodia.

Based on the study, a number of recommendations are suggested for the development of the Cambodian cashew sector.

- *Training growers on cashew growing techniques:* The productivity of cashew plantation in Cambodia is relatively lower than in neighboring countries. Thus, training growers in terms of selection of good seeds, maintenance, fertilizing, etc. could help to improve the cashew yield.
- *Promoting the growing of organic cashew nuts:* Organic agriculture is currently popular, mainly in developed countries. In this context, organic cashew nuts is seen as a potential for export in many international markets.
- *Promoting domestic cashew processing companies:* Cambodia has only a few cashew processing companies, which results in loss of local added value and employment generation. Therefore, incentives for local processing companies should be considered by the government to promote such companies within the country.
- *Improving access to capital with lower interest rate:* High interest rate on loan results in high production costs, which makes many growers and processors reluctant to get credit to expand their activities. Better access to capital with lower interest rate would encourage growers as well as processors to develop their activities.
- *Developing a market information and communication system:* Lack of information is likely to be a major constraint for many Cambodian cashew growers. Without the information, the prices appear to heavily depend on traders. Thus, developing an information and

communication system that can provide information related to price and demand on international markets would help Cambodian growers to have a better bargaining position with traders.

- *Diversifying export markets for both raw and processed cashew nuts:* While almost all the Cambodian raw cashew nuts are currently exported to Vietnam, it is necessary to diversify its export markets to avoid any downward pressure, especially when Vietnam is self-sufficient.
- *Branding and image building:* In the long term when Cambodia is able to export the processed cashew to consuming countries, it may be a useful strategy for Cambodia to build a good brand and image for its cashew. This would help increase the sector's added value.



## **Chapter 10**

### **Rubber: A Sector with High Potential for Export Earnings**

Rubber has long been regarded as an important industrial crop for Cambodia. This crop is grown mainly in Kampong Cham, Ratanakiri, Mondoldiri, Kratie and Kampong Chhnang provinces by state owned plantations, private owned plantations and small holder rubber plantations for natural rubber. In Cambodia, natural rubber is processed into dry rubber and then exported to other countries in the region, especially Vietnam. At present, the ability of the country to transform dry natural rubber into finished products that can be used domestically and internationally is still limited due to lack of investment, technology and a skilled labor force in the sector. Thus, Cambodia still has a long way to go in order to gain substantial benefit from the value addition of rubber.

Natural rubber is used as a raw material in the manufacturing of industrial products (conveyor belts, rubber rollers, etc.), automotive products (fan belts, radiator hoses, etc.), latex products (rubber gloves, toys hygienic products, etc.) and adhesives. The major users of natural rubber are the tire and footwear industries. Despite the importance of natural rubber and its potential for export to generate foreign earnings, it is not so clear known whether rubber plantations are a profitable industrial crop to be promoted for export as no comprehensive study has been made on the state of Cambodian rubber production, SWOT analysis, potential for export earnings, employment opportunities, and sustainability of possible exports. To fulfill this urgent need, EIC aims to conduct a study to generate information that could be used to highlight a new source of growth, particularly in the agriculture sector to supplement the garment industry.

#### **10.1. An Overview of the World Rubber Market**

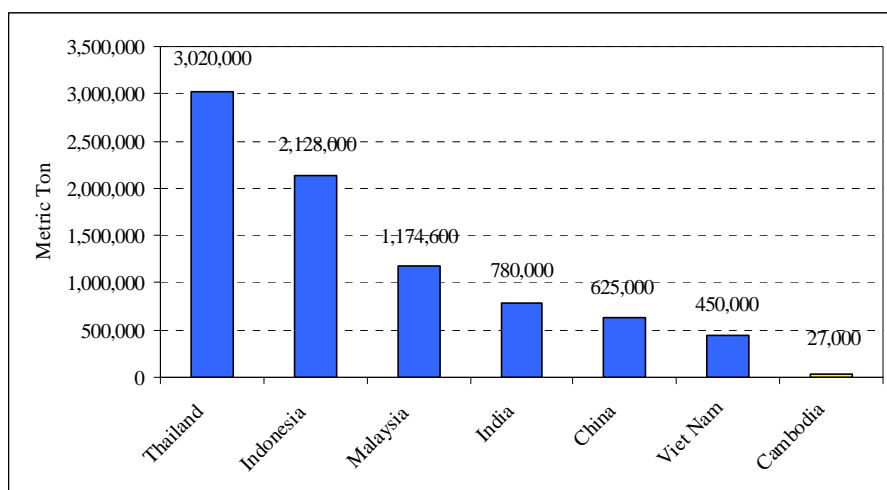
According to the International Rubber Study Group report, world natural rubber (NR) and synthetic rubber (SR) consumption is estimated to have increased to 20.9 million tons a year, in May 2006, its growth rate having stabilized in recent months at around 2 percent, after declining sharply in the second half of 2005. The recovery is largely due to developments in the EU and the Asia/Pacific region. The impact of a relatively sharp increase in NR



usage compared to SR demand is reflected in the trend of NR and SR consumption, which reached 8.8 and 12.1 million tons, respectively. World SR output is estimated to have risen to 12.2 million tons at a growth rate of 1.8 percent, while NR has moved up to 8.8 million tons, representing a growth of only 0.3 percent. A weak recovery in global NR output is mainly due to relatively low output in Thailand.

The top five rubber producing countries in the world are Thailand, Indonesia, Malaysia, India and China. Thailand alone produces around 3 million tons annually, being a key player in this industry, followed by Indonesia and Malaysia, respectively. These five countries produce around 85 percent of the world's natural rubber production. Vietnam ranks 6<sup>th</sup> in terms of natural rubber production, regarded as one of the world's large scale producers. Cambodia represents only 0.3 percent share of the world's natural rubber production, and ranks 16<sup>th</sup> among rubber producing nations. It is apparent that Cambodia has no/very little impact on the global rubber production.

**Figure 10.1: Top Natural Rubber Producers in 2005**



**Source:** Author, Compiled from FAOSTAT, 2006.

Concerning the consumption of rubber, Asia/Oceania is the biggest consumer accounting for about 5.5 million tons of world's natural rubber. At present, Asia is the leading natural rubber consumer followed by the EU, North America, Latin America, and other European and African countries, respectively. The most remarkable development in recent years has been the rapid rate of increase in imports by China. Malaysia imports mainly latex for

glove production by its rubber sector. Production in Malaysia is declining and China appears unable to raise its production to meet the demand.

**Table 10.1: World Natural Rubber Consumption (000's tons)**

Consumption	2004	%	2005	%
Africa	122	1.4%	120	1.3%
Asia/Oceania	5,154	6.0%	5,471	60.8%
European Union	1,294	15.1%	1,334	14.8%
Other Europe	196	2.3%	227	2.5%
North America	1,290	15.0%	1,316	14.6%
Latin America	522	6.1%	532	5.9%
<b>TOTAL</b>	<b>8579</b>	<b>100.0%</b>	<b>9000</b>	<b>100.0%</b>

**Source:** Author, Compiled from International Rubber Study Group, *Rubber Statistical Bulletin*, Nov-Dec, 2006 edition.

## 10.2. Rubber Industry in Cambodia

### 10.2.1. A Brief History

Rubber plantations were first introduced in the early 1920s by five colonial companies, mainly French, on the red soils of the Chup and Chamcar Leu plateaux, in Kompong Cham province. Until 1940, rubber trees covered about 28,000 hectares of industrial-scale plantation estates across the high-potential red earths and there were six factories producing 20,000 metric tons of rubber annually. From 1945 onwards, due to political instability and a shortage of qualified labor from Tonkin, the area's cultivation and production struggled to maintain pre-war levels.

Between 1953 and 1970, the French companies expanded their cultivated areas by a half, while the Cambodian state created many plantations and encouraged the development of smallholders and private plantations. This developed mainly near industrial-scale concessions in the traditional red soil area of Kamong Cham province. By the end of 1969, the areas cultivated with hevea reached 70,000 ha, nearly 70 percent of which were under the agro-industrial companies and one-quarter for private and smallholders' plantations. In 1969, production amounted to 52,000 tons of rubber, most of which was exported.

From 1970 to 1979, Cambodia experienced progressive occupation and became under the control of the Khmer Rouge. Foreign managers first retreated to the capital and exports maintained a certain stability, but foreign companies left Cambodia when the Khmer Rouge took control of Phnom Penh in 1974. In the late 1970s, much of the land given over to rubber cultivation was devastated and rubber production declined dramatically to 10,000 metric tones per year.<sup>2</sup>

While Cambodia gained more stability from 1980 to 1993, rubber plantations became better organized and controlled. However, the pace of replanting rubber trees was still slow, and the existing old rubber plantations aged over 30-70 years were extracted for latex. From 1993 until today, after the national election run by the United Nations, managerial system were improved; new planting programs to replace the very old existing plantations were installed. Until recently, over 60,000 hectares were occupied by rubber plantations.

### ***10.2.2. Current State of Rubber Industry in Cambodia***

At present, Cambodian rubber growers can be classified into three categories: (i) seven state-owned plantations; (ii) three private owned plantations and (iii) small holder rubber plantations for natural rubber. These three groups of rubber growers occupy over 60,000 ha of rubber plantations in which 39,228 ha are state-owned enterprises followed by 17,024 ha of small holders in Kampong Cham, Kratie and Kompong Thom provinces, and another 4,644 ha in Ratanakiri and Kampong Cham provinces are occupied by local investment companies.<sup>3</sup>

**Table 10.2: Statistics of Rubber Plantations in Cambodia in 2005**

<b>Rubber Plantation</b>	<b>Mature (ha)</b>	<b>Immature (ha)</b>	<b>Total (ha)</b>	<b>Percentage</b>
State Plantations	21,230	17,998	39,228	64%
Private Plantations	3,978	667	4,644	8%
Smallholder Plantations	5,381	11,643	17,024	28%
<b>Total</b>	<b>30,589</b>	<b>30,308</b>	<b>60,896</b>	<b>100%</b>

**Source:** *Department of Rubber Development, GDRP 2005.*

<sup>2</sup> SOFRECO & CEDAC. 2006. *Study on the Evolution of the Cambodian Rubber Sector*, Final report, pp 7.

<sup>3</sup> Khun Kakada. 2006. *Triple potential of beverculture in Cambodia*, Kyushu University, Japan. pp 2.

According to Tichit's report, 1981, Cambodia has a great potential of fertile red basaltic soil, around 716,600 ha which are the most favorable for the growth of rubber trees. This figure does not include many thousands of hectares of black and gray soils that are also suitable for rubber trees to grow in combination with a tropical climate and fertilizer utilization, the R&D activities in terms of high yielding clone selections, appropriate management systems for maximizing the productions, rubber tree growth assessment, rubber wood processing and the capacity of up take of CO<sub>2</sub> for the atmosphere in terms of environmental conservation. From this perspective, it is apparent that Cambodian rubber cultivated areas have not yet reached full potential, and it is thus worthwhile examining the current state of Cambodian rubber production, rubber consumption and its potential for export.

**Table 10.3: Cambodia's Exports of Dry Natural Rubber 2001-2005**

	2001	2002	2003	2004	2005
Quantity (Mt)	37,098	44,335	36,313	32,436	28,289
Value (000 US\$)	18,447	28,258	33,402	36,933	36,662
Unit Value (US\$)	497	637	920	1,139	1,270

**Source:** FAOSTAT for 2001-2004 and Customs & Exercise Department for 2005

Cambodia's export of dry natural rubber was up from about 37,000 tons in 2001 to more than 44,000 tons in 2002 but decreased remarkably to less than 30,000 tons in 2005. Nonetheless, the export value was on the rising trend during 2001-2005 due to the significant increase in the price of natural rubber. In 2005, the export value represented US\$36 million.

### ***10.2.3. Triple Potential of Rubber Plantation***

Rubber plantations provide three main benefits in today's lifestyle. Firstly, it offers latex to produce enormous industrial products. Secondly, it serves as an important source of wood based industries, and thirdly rubber plantations allow for the uptake of carbon dioxide.

Natural rubber is a vital agricultural commodity used in the manufacturing of a wide range of products. Its production plays a major role in the socio-economic fabric of many developing countries. Nowadays, the rubber sector has absorbed a substantial labor force, and created direct and indirect employment for approximately 40,000 people across Cambodia. Products made from natural rubber and latex products are essential for

modern life. However, according to an interview with GDRP officer, Cambodia could not process rubber wood into finished products, such as furniture, due mainly to the difficulty in finding buyers, exhaustion of old rubber trees in the near future and shortage of skilled workers and low technology. Currently, there are seven local private companies (12 factories) buying rubber wood and converting this wood material into semi-processed products. These products are then sold to Vietnam in order to transform these semi-processed products into finished products.

In Cambodia, rubber plantations, originally established for latex production, are currently regarded as an important source of timber for wood based industries. Technically, first tapping of rubber trees starts in the sixth year after planting and are kept up for 25 to 30 years of their life expectancy. After 30 years the trees see a decline in latex production. The trees are eventually removed for wood and replaced with new seedlings. Rubber wood is widely used in making furniture.

Until recently, rubber plantations attracted much attention for its potential ability in the uptake of carbon dioxide. In many ways similar to forests, rubber plantations have significantly contributed to sustaining the environment by saving natural reserves, taking up carbon dioxide from the atmosphere and preserving carbon in wood at least for 30 years during their economic life cycle. Based on the recent study “Triple Potential of Heveaculture in Cambodia” by Khun Kakada, the quantity of carbon dioxide absorbed by rubber trees at 25 years old is approximately 525 tons/ha with the increment of 21.17 tons/ha/year. The absorption of carbon dioxide could eventually become tradable in the near future with industrial countries buying CO<sub>2</sub> emission reduction certificates to comply with their Kyoto protocol commitments.

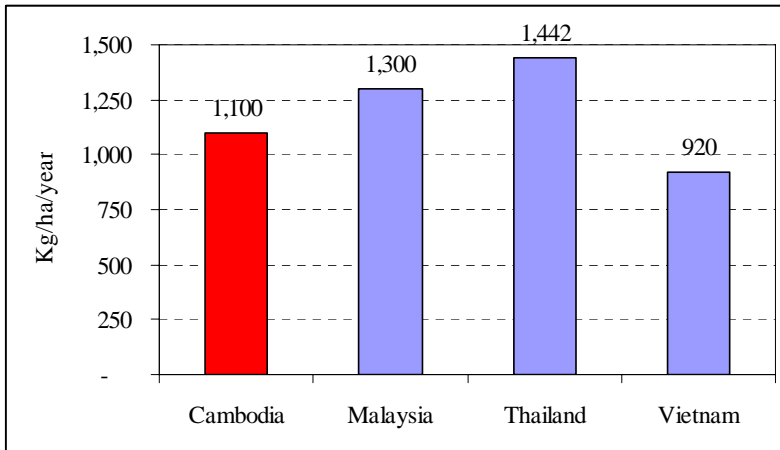
#### ***10.2.4. Natural Rubber Yield Potential***

One of the most significant opportunities for growth in Cambodian agriculture lies in rubber production. Current levels of production are relatively small compared to the mid-1960s.

In general, the average rubber yield in Cambodia is around 1,100 kg/ha per year based on calculation from 7 industrial rubber plantations in 2005. This yield attainment was lower than Thailand and Malaysia, which is around 1,400 kg/ha per year. However, Cambodian rubber yield is substantially higher than Vietnamese rubber yield. According to the recent

research, the average productivity per hectare is now up from 1,300 kg to 1,450 kg per annum. The amount of rubber production per hectare will be higher when there will be new and fully productive rubber plantations put into exploitation in 10 years.

**Figure 10.2: Yield of Natural Rubber Production by Selected Countries in 2004**



**Source:** GDRP, Malaysian Rubber Board, and Thai Rubber Association.

This low yield is the result of the management system on rubber plantations in terms of high yielding clone application during the 1980s. Since rubber yield is largely influenced by soil fertility, variety planted, and environmental condition, a simple interpretation based on rubber productivity per ha should be avoided to compare yield productivity with other countries.

#### ***10.2.5. Type of Rubber in Cambodia***

The clone GT 1 is well-known to experienced planters. It is easy to graft and tap with generally low susceptibility to disease and gives highly satisfactory production. Recently, under the project of AFD, another two clones have been introduced: RRIM 600 and PB 260. It is said that RRIM 600 is a good clone, but planters are weary since it produces unbalanced growth. In the case of PB 260, its potential production is higher than GT 1, but it requires an extremely high standard of tapping. This clone should therefore be treated with a certain precaution.

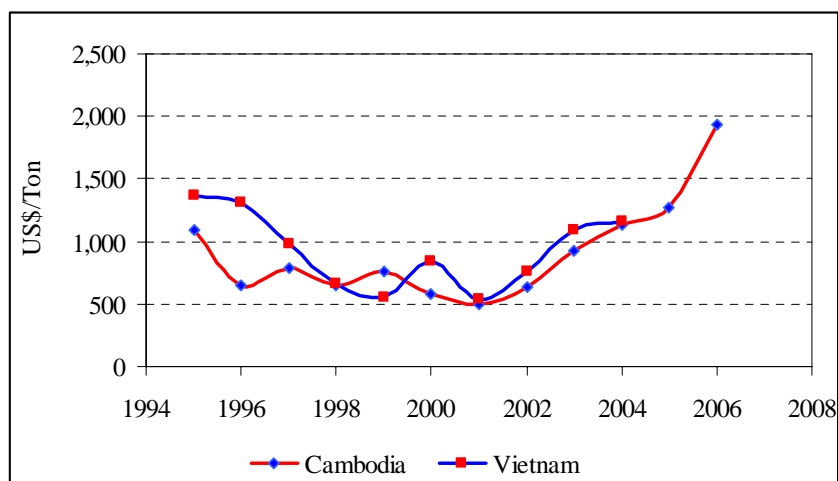
#### ***10.2.6. Trend in Natural Rubber Price***

Like other agricultural commodities, the price of natural rubber has experienced ups and downs influenced by demand and supply from the

international market. The price trend for the international rubber market has remarkably changed in the past. Natural rubber experienced a period of low pricing between 2000 and 2002. The cost of natural rubber is less than US\$650/ton. This level of price was not profitable for rubber growers and this situation seriously affected rubber planters. Fortunately, the price of natural rubber increased sharply in the last five years increasing from US\$497 in 2001 to UD\$1,270 in 2005. Furthermore, the price of rubber continues to increase remarkably in 2006. According to the latest data from the Customs and Excise Department, one ton of dry natural rubber price is around US\$1,900 and the future price trend remains favorable. There is no sign of a slowing down or an end of this growth.

In an attempt to understand the relationship between the Cambodian rubber price and the Vietnamese price, correlation analysis is used. The results show that there is a strong correlation between the two countries, with a correlation coefficient of 0.7. Figure 10.3 shows the price of Cambodian rubber and Vietnamese rubber price go up and down in the same direction. This situation probably reflects that Cambodian natural rubber relies heavily on the Vietnamese rubber market for export.

**Figure 10.3: Trend of Natural Rubber Price for Cambodia and Vietnam**



**Source:** Author, Compiled from FAOSTAT for 1994-2004 and calculated based on data from Customs and Excise Department for 2005-2006.

The demand for natural rubber will probably continue to grow. If the demand for rubber remains strong over the next five years and the price trend keeps going up, Cambodia's rubber industry will benefit greatly in the foreseeable future. This situation provides an excellent opportunity for

diversification and income generation. It could also make a substantial contribution towards attaining the objective of improving the standard of living and reducing poverty in the areas naturally suitable for rubber production.

### 10.3. Production Cost Profile of Rubber Plantation and Processing

#### 10.3.1. Cost and Benefit Analysis of Smallholder Rubber Plantations

Rubber planting is a long term investment and the starting cost of rubber plantations are high compared to other industrial crops. In general, the cycle of rubber is around 25 to 30 years. During the first five years, planters have to invest about US\$1,624 per hectare, 47 percent of which is the input costs and an investment cost for the first year is around twice as high as those in the following year.

**Table 10.4: Investment Costs of Rubber for the First Five Years (US\$/ha)**

Cost	Y1	Y2	Y3	Y4	Y5	Total
Input	356	112	78	85	125	756
Labor	339	195	130	111	93	868
Total	695	307	208	196	218	1,624

**Source:** Author, Compiled from General Directorate of Rubber Plantation (GDRP)

It is generally accepted that one of the solutions to reduce investment cost in the first few years is to introduce inter-cropping in rubber plantations. Soybean and mungbean can be regarded as suitable crops to grow between the first and third year since cassava absorbs fertility from soil partly affected by rubber trees. Intercropping can be done twice a year with an average yield of approximately 1 to 1.5 ton/ha. Given the fact that soybean price is 0.28US\$/kg, net income received from inter-crops from one hectare is around US\$250/year.

Rubber can be tapped from the sixth year onwards. During the first three years of tapping the yield of rubber is low, and from the following year onwards the yield is rather stable at approximately 1.5 tons of dry rubber per year. The rubber yield starts to decrease by the 25<sup>th</sup> year. On average, one hectare of rubber can generate an income of about US\$958 per annum. During the harvesting period, smallholders have to spend around US\$252 per year for maintenance and tapping. On the three-day basis, one worker can tap 3 hectares of rubber per month, with an average salary of US\$60.



By the 30<sup>th</sup> year, which is the end of the cycle of rubber plantation, planters can get additional revenue from old rubber trees. According to interviews with stakeholders, one rubber tree can be sold at US\$10 to US\$15. By using a new method of planting rubber trees, 555 trees/ha is recommended to rubber growers. Assuming that, due to unpredicted natural hazard, only 60 percent of total rubber trees remain at the end of cycle. As a result, smallholders can get approximately US\$3,330 from selling rubber trees. This additional income can be used as a source of finance for investing in the new cycle of rubber plantation.

Overall, it is reasonable to say, on the expenditure side, US\$7,912 is required to invest in day to day maintenance, input in 30 years time, and approximately US\$26,168 will be generated for a smallholder during the rubber life cycle if the price of dry rubber is constantly at US\$0.8/kg. For additional information, refer to Appendix A8.2 in this part II.

### **10.3.2. Processing Costs**

Based on a study on evolution of the Cambodian rubber sector report, the costs of factory processing are between US\$74/ton to 120US\$/ton. The same report also adds that the processing cost would be US\$70/ton in Vietnam, and nearer to US\$60/ton for Indonesian factory operators/exporters. The table below reveals the processing costs furnished by the factories of the plantation company.

**Table 10.5: Rubber Processing Costs**

<b>Factory</b>	<b>Riel/Kg</b>	<b>US\$/ton</b>
Boeng Ket	428	107.2
Chamcar Andong	484	121.2
Chup	295	73.9
Krek	274	68.7
Memot	445	111.5
Peam Cheang	368	92.3
Snuol	344	86.1
<b>Average</b>	<b>377</b>	<b>94.4</b>

**Source:** *SOFRECO & CEDAC, Study on the Evolution of the Cambodian Rubber Sector, Final Report, pp 96.*

In Cambodia, rubber processing is penalized by energy costs which are higher in Cambodia than in Vietnam, especially those linked to generator-produced electricity, and by a higher price for diesel in Cambodia. In this processing stage, natural rubber is converted into dry natural rubber so that Cambodia is able to pack and export dry natural rubber to other countries in the region. It is also important to note that the capacity of the country at the present time in processing and transforming dry natural rubber into finished products is very limited, owing to lack of investment, skilled labor and technology, as mentioned above.

#### **10.4. Constraints for the Cambodian Rubber Industry**

##### ***4.4.1. Constraints for Rubber Planters***

- *Lack of plant materials:* Most new and potential planters in the traditional rubber growing areas believe that the greatest restricting factor is the insufficient availability of high performance and certified plant materials. Materials available on the market, beside the AFD and company nurseries, are often sold without guarantee.
- *Security of land tenure:* Most planters claim to be owners of their Chamcar, especially those on small farms. Yet, they often do not possess official documents to testify this. A certain number have introduced an application for registration of their land for which they have received an acknowledgement.
- *Lack of technical support:* Evidently, technical support is insufficient but the large proportion of planters do not consider this factor as a serious obstacle. In the event they need technical assistance, they observe what is done in agro-industrial plantations or seek advice from friends or relatives working in the agro-industrial sector.
- *High and long term investment:* Rubber plantations can be regarded as a high and long term investment crop, taking more than five years to receive a return on investment. On average, all expenses associated with labor, input and maintenance are around US\$1,624/ha in the first five years before rubber trees start providing latex.
- *Low productivity:* At present, the current level of rubber yield attainment is lower than other regional countries. This low yield could be the result of the management system on rubber plantations in terms of high yielding clone application during the Civil War

period, and a large proportion of rubber trees are old. However, it is expected that the level of rubber production per hectare will be higher when there will be new and fully productive rubber plantations.

#### ***10.4.2. Constraints for Rubber Processing Factories***

- *High cost of fuel:* Given the fact that the price of gasoline in Cambodia is higher than neighboring countries, rubber processing factories, which consume diesel, run in an uncompetitive manner. This situation results in higher operating cost for Cambodian processing factories compared to operating costs of neighboring countries.
- *Processing capacities:* The factories operate at 50-80 percent of their capacity because of the insufficient supply of rubber, related to recent replanting on agro-industrial scale plantation estates. In 2004, the capacity of factories was estimated at 100,000 tons for the agro-industrial sector. There is an overcapacity of production for latex processing, but an under capacity for processing field coagula, especially with the development of village sector rubber production.

#### ***10.4.3. Constraints for Exporters***

- *Rubber discount price:* According to EIC July 2005 Economic Review, Cambodian rubber suffers a 20 percent discount price compared with global prices due to several factors. These factors include hidden margins and costs linked to the trade channel through Vietnam, irregularity of shipments and lack of technical standards of exported products. The lack of certification by an internationally recognized, accredited laboratory prevents Cambodian rubber from having broad market access. Cambodian rubber can not sell directly to end users and can find export markets only in Vietnam. The limited markets decrease bargaining power and force producers to sell below international prices.
- *Low level of rubber production:* Since Cambodia produces a small volume of the world's natural rubber production, it has neither bargaining power nor impact on international market prices. This situation puts the Cambodian rubber industry in a disadvantaged position compared with other larger producers in the region.

## 10.5. SWOT Analysis

**Table 10.6: SWOT Analysis of the Cambodian Rubber Industry**

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>- Good red soil available for future expansion of cultivated areas.</li> <li>- Relatively low cost of labor in rural areas.</li> <li>- Strong economic growth and rapid exports.</li> <li>- Strong commitment for Government and donor communities to promote crop diversification.</li> <li>- Favorable climate condition.</li> <li>- Resistant to rubber diseases, especially root disease.</li> </ul>	<ul style="list-style-type: none"> <li>- Uncompetitive productivity and insufficient rubber extension workers.</li> <li>- Low potential investment in rubber sector.</li> <li>- Lack of high skilled workers and professional staffs.</li> <li>- Land concentration.</li> <li>- Institutional and managerial weaknesses.</li> <li>- Not a member of International Rubber Associations (IRA).</li> <li>- Poor market information for small holder rubber plantations.</li> <li>- Inadequate investment for rubber research on high yield variety and processing.</li> <li>- Inadequate rural infrastructures and high transportation costs.</li> <li>- Long term industrial crop to receive Return on Investment.</li> <li>- Underdeveloped rural finance and limited access to credit.</li> <li>- High cost of utilities and interest rate.</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>- High rubber price in international market.</li> <li>- High chance to increase rubber yields.</li> <li>- World rubber consumption in an upward trend.</li> <li>- Better exportation procedures.</li> <li>- Expanding cultivated areas up to 716,600 ha.</li> <li>- RGC's commitment to promote export for foreign earning.</li> <li>- WTO and ASEAN membership.</li> <li>- Increasing value added price through certification of natural rubber.</li> <li>- Increasing an interest among potential foreign investors in rubber industry.</li> <li>- Employment generation for substantial labor forces.</li> <li>- Possible trading in carbon reduction under the Kyoto Protocol in the long run.</li> </ul>	<ul style="list-style-type: none"> <li>- Risks arising from competition from neighboring countries.</li> <li>- Price fluctuation and high risks investment.</li> <li>- Natural disasters and rubber diseases.</li> <li>- Slow development on agro-industries and processing.</li> <li>- Increased land price.</li> <li>- Political instability and unfavorable macroeconomic environment.</li> <li>- Inadequate investment from RGC and donor communities.</li> <li>- Lack of private sector/potential investors participation.</li> </ul>

**Source:** Author, Based on interviews with GDRP staff, 2006.

## 10.6. Employment opportunities

As of 2002, the seven state companies employed approximately 15,000 people, 66 percent of whom were rubber tapers, 22 percent office

workers and the rest of the employees were factory workers. It is generally accepted that between 1,500 and 2,000 of these jobs are more than what is needed and would be done away with in the divestiture process. In addition to state companies, an estimated 1,000 people were employed in three private companies, namely Tapao, Labansek and IRCC and 300 involved in private factories and workshops. The smallholders and private plantations, which grew around 20,000 ha in 2004, could generate about the equivalent of 10,000 full-time jobs in the plantation operations phase, at the rate of 2 ha of rubber trees per job created. Also, it is desirable to take into account the intermediaries (primary collectors, principles), and exporters, accounting for a few hundred jobs. The total employment directly involved in this sector can be estimated around 27,000. If subcontracting companies and seasonal work are included, the number of jobs is very probably close to 40,000.<sup>4</sup>

## 10.7. Concluding Remarks

Rubber is an industrial crop for export earning with a growing international demand. This crop is popularly grown in many provinces by state owned plantations, private owned plantations and smallholder rubber plantations for natural rubber occupying more than 60,000 ha. Based on estimations, this sector employs approximately 40,000 people throughout the country. The price of Cambodian natural rubber has experienced ups and downs influenced by supply and demand. The price trend for the rubber market has changed remarkably, with the price decreasing and increasing. In the last four years, the price of rubber has seen a continued increase.

Cambodia represents only 0.3 percent share of the world natural rubber producers and ranks 16<sup>th</sup> among rubber producing nations. It is apparent that Cambodia has very little impact on the global rubber production. Cambodian rubber industry faces many challenges ranging from a lack of planting materials, security of land tenure, shortage of technical supports, high and long term investment, low productivity, uncompetitive processing costs, lack of processing capacities, low level of production to rubber discount price. Furthermore, the costs of rubber processing are between US\$74-US\$120/ton, which is higher than other countries in the region, such as Vietnam (US\$70/ton) and Indonesia (US\$60/ton).

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<sup>4</sup> SOFRECO and CEDAC. 2006. *Study on the evolution of the Cambodian rubber sector*, Final report, Phnom Penh Cambodia. pp 10.

Despite the many challenges to overcome, potential market opportunities for the rubber sector exist if Cambodia could take effective action in removing rubber constraints at the planter, processor, and exporter levels. By successfully tackling these challenges, it is expected the Cambodian rubber planters could benefit substantially from favorable market opportunities since the demand for natural rubber is increasing from year to year, and its price has increased sharply in the last five years rising from US\$ 497/ton in 2001 to around US\$1,900/ton in 2006, and it is expected to continue to be in an upward trend. This situation provides an excellent opportunity for diversification and income generation. It could make a substantial contribution towards attaining the objective of improving the standard of living and reducing poverty in the areas naturally suitable for the rubber crop.

Strategies for promoting the rubber industry to be more competitive and profitable crop include:

- Promoting rubber research and extension activities to boost productivity and disseminate appropriate technology to rubber planters in relation to plant materials, land preparation, and technical advice, and check the plant material available in the market regularly to ensure the quality of inputs.
- Promoting quality control of Cambodian rubber, particularly by setting up a system of export specification and certification.
- Further improving security of land tenure by issuing land certificates.
- Improving access to long term rural credit and minimize interest rates.
- Promoting human resource capabilities at all levels, especially technical staff.
- Encouraging potential private investment in increasing cultivated areas, rubber processing and trading by creating favorable business environment.
- Monitoring the requirements of the foreign rubber market, analyze opportunities and threats, and recommend responses.
- Avoiding heavy dependency on a few countries for rubber export by assessing potential market opportunities from top rubber importer countries.



# Chapter 11

## Silk: A Sector with a High Potential for Rural Employment

Silk products are popular in many countries especially among people with higher incomes because silk products are more expensive and better quality than other products. Nowadays the silk market is increasing rapidly to satisfy international demand. In Cambodia, the hand woven silk industry is characterized as being strong-skill based due to the long traditional heritage and the uses of the best quality of golden silk yarn. Silk is presently identified as an area of comparative advantage that has potential export earnings and sustainability of possible exports, in addition to providing employment opportunities for rural women which is essential for poverty reduction.

This chapter attempts to provide a better understanding of Cambodia's silk market and explore ways to promote value addition for the silk sector, which will contribute to better human development in Cambodia.

### 11.1. Global Silk Market

#### 11.1.1. Production

The production of silk yarn occupies less than 0.2 percent<sup>5</sup> of the global textiles fiber market. In terms of production of raw silk, China was the biggest silk manufacturer with an output of an estimated 95,000 tons in 2004. The following major producers of raw silk were India (18,000 tons) and Vietnam (12,000 tons).

**Table 11.1: Raw Silk Production (000's ton)**

Country	1994	2001	2002	2003	2004
China	84	94	100	97	95
India	14	16	17	18	18
Viet Nam	1	10	12	12	12
Thailand	1	2	2	2	2
Turkmenistan	4	5	5	5	5

**Source:** Compiled from FAOSTAT.

<sup>5</sup> MoC. 2005. *Cambodia and WTO: A Guide for Business*.



Silk is mainly used in producer countries, such as India and China, the two main producers in the world. Based on the quantity of production and import-export, it is estimated that China consumes around 84,000 tons annually, followed by India (26,000 tons) and Vietnam (13,000 tons).

### 11.1.2. Imports and Exports

Raw Silk: India, the second largest producer of raw silk after China, is also the world's biggest importer of raw silk. India alone imported almost 8,000 tons of raw silk, worth more than US\$134 million in 2004. Italy and Japan are the second and third importers of raw silk. As for the export market, China is the world's biggest exporter. The export value of Chinese raw silk reached more than US\$200 million in 2004. Following in second place is Italy, whose silks based fashion products are found in the world market of raw silk.

**Table 11.2: Top Ten Raw Silk Traders in 2004**

N°	Importers			Exporters		
	Countries	Quantity (Tons)	Value (million US\$)	Countries	Quantity (Tons)	Value (million US\$)
1	India	7,948	134	China	11,288	214
2	Italy	1,983	45	Italy	801	14
3	Japan	1,581	36	Japan	688	10
4	Republic of Korea	1,338	27	Romania	482	9
5	Romania	939	15	Germany	137	3
6	Vietnam	495	11	India	71	2
7	France	181	5	Korea (DPR)	227	1
8	Germany	182	4	Uzbekistan	133	0.7
9	Turkey	194	4	Kyrgyzstan	56	0.3
10	China	382	2	Azerbaijan	15	0.3

**Source:** *Compiled from FOASTAT.*

Silk Products: The major importers of silk and silk products are shown in Table 11.3. France and Italy are major consumers of raw silk since both and other EU countries produce very high value silk fabrics for fashion garments and accessories while their import of finished silk fabrics and silk products are growing rapidly. The largest EU market for silk textiles, clothing and interior decoration fabrics is Germany. The US has no processing capacity, thus silk

fabrics and silk products need to be imported. Japan, whose domestic silk production declined over the past half century, relies presently on imported yarns and fabrics. The production of “Kimonos” accounted for approximately 50 percent of Japan's silk consumption. South Korea also has moved from dependence on a domestic silk sector to becoming a major importer.

**Table 11.3: Major Importers of Silk and Silk Products (million US\$)**

Importers <sup>6</sup>	Silk <sup>7</sup>	Fabric <sup>8</sup>	Blouses <sup>9</sup>	Handkerchief <sup>10</sup>	Shawls/scarves	Ties
US	258	252	353	6	51	175
Italy <sup>11</sup>	215	93	22	-	29	23
Japan	171	65	28	3	31	133
Hong Kong	170	134	68	0.5	13	22
Korea	132	86	2	-	4	11
France	109	71	24	2.5	44	49
Germany	94	58	20	2	19	41
Singapore	32	28	3.5	-	2.5	4

**Source:** *MoC, Cambodia and WTO: A Guide to Business, 2005.*

China is the world’s biggest exporter of silk, silk fabrics, and many silk products. In value terms, Chinese exports of silk products are closely followed by Italy, whose silk based fashion products are found in upper-market stores and boutiques throughout the world. Evidently, the value mid- and bottom-end markets exist in most industrial countries for oriental, “folkloric and artisan” silk products.

<sup>6</sup> 2003 except Korea (2002)

<sup>7</sup> Raw silk, silk waste, silk yarn and woven silk fabric

<sup>8</sup> Woven silk fabric (including *noil* silk and >85% silk blends)

<sup>9</sup> Women’s and girls blouses and shirts

<sup>10</sup> Handkerchiefs of silk or silk waste

<sup>11</sup> Includes EU intra-trade

**Table 11.4: Major Exporters of Silk and Silk Products (million US\$)**

Exporters <sup>12</sup>	Silk	Fabric	Blouses	Handkerchiefs	Shawls/scarves	Ties
China	824	405	226	3	48	138
Italy	304	272	38	2.9	82	336
India	271	262	25	-	27	-
Thailand	19	12	1.8	-	2.7	0.7

Source: MoC, Cambodia and WTO: *A Guide to Business*, 2005.

## 11.2. Silk Sector in Cambodia

### 11.2.1. Production

Cambodia has no significant private investment in raw silk production. The annual production of raw silk in the country is around 7-8 tons, produced mainly in Phnom Srok located in Banteay Meanchey province. Local production can satisfy only 2 percent of total domestic demand throughout the country. In Cambodia, annual consumption of raw silk is around 400 tons (PASS, 2005). In order to satisfy this demand, raw silks need to be imported from neighboring countries. Nowadays, 98 percent of raw silks are imported primarily from Vietnam to produce silk products for domestic needs.

Traditionally, raw silks are used to produce various types of products such as hol<sup>13</sup>, phamuong<sup>14</sup>, fabrics, scarves, and so on. Hol and Phamuong are two main types of silk fabric for local use while fabrics and scarves and other accessories are popular for tourists. Notably, silk fabrics are sold per meter, while Hols and Phamuong are sold by kben (4x1 meter).

<sup>12</sup> 2003, except India (2002)

<sup>13</sup> Hol or Cambodian ikat is a traditional fabric with many kinds of design, worn during celebrations by women of a certain age. It is sold by kben (4x1 meter), which allows the marking of a suit made of a corsage and a long skirt.

<sup>14</sup> Phamuong or Plain Silk is a plain fabric bearing sometimes a few patterns, also sold by kben. Young girl rather than older women wear it during celebrations.

**Table 11.5: Silk Fabric Production in Cambodia in 2004**

Name of Cluster	Production (meters)	Fabric Type
Koh Dach	237,168	Plain Silk
Prek Changkran	30,600	Ikat and Plain
Phnom Srok	2,368	Plain Silk
Phnom Penh	36,000	Ikat and Plain
Prek Anteah	66,720	Plain Silk
Takeo	17,664	Only Plain Silk (40% looms: Ikat and 60% looms; Ikat and Plain
<b>Total</b>	<b>390,520</b>	

**Source:** MoC, *Cambodia National Export Strategy 2007-2010, Final Draft*.

The local demand for silk has grown strongly, noticeable due to an increase in the number of active weavers, silk shops and retailers' stocks size. The biggest markets for silk products are located in Phnom Penh where there are around 200 retailers in six main markets including Central market, Russian market, Olympic market, Orussey market, Old market and Sorya shopping center. With the increasing number of silk associations, local weavers are offered fair prices and usually receive assistance in finding markets for their products.

The prices of silk products are found not to be far different between wholesale and retail. The price of Hol depends mostly on design and decorated style of fabric. It is known to be priced around US\$60-90 for wholesale and around US\$65-100 for retail. Phamuong, on the other hand, is far different from Hol since most weavers prefer weaving by mixing raw silk with cotton. But in some areas there remains weaving with 100 percent raw silk. Therefore, its price relies on the amount of raw silk used. The more raw silk is used, the higher the price of Phamuong.

### ***11.2.2. Imports and Exports***

**Imports:** In Cambodia, silk yarns are imported from Tân Chau, a Vietnamese province. The majority of imported silk is produced in Vietnam and a small proportion is produced in China and Uzbekistan. In all cases, the imports come from Vietnam, where the transportation and border crossings are done. Silk imports usually occur in an unofficial form<sup>15</sup>. The re-exports of

<sup>15</sup> In practice, the border police, the veterinary controllers and the local police collect some percentages on each load in exchange for less official payments.

silk to Thailand are not officially taxed neither; they follow a tortuous road as they come from Vietnam, pass through Cambodia and end up in Thailand. Nevertheless, the quantity of silk re-exported to Thailand has decreased sharply since the renewal of dissensions between the two countries. Today, the Vietnamese silk going to Thailand transits via Laos. Middlemen or wholesalers are major players for distributing silk products to the market. The biggest raw silk yarn wholesales are Chinese businessmen whose offices are located in Phnom Penh.

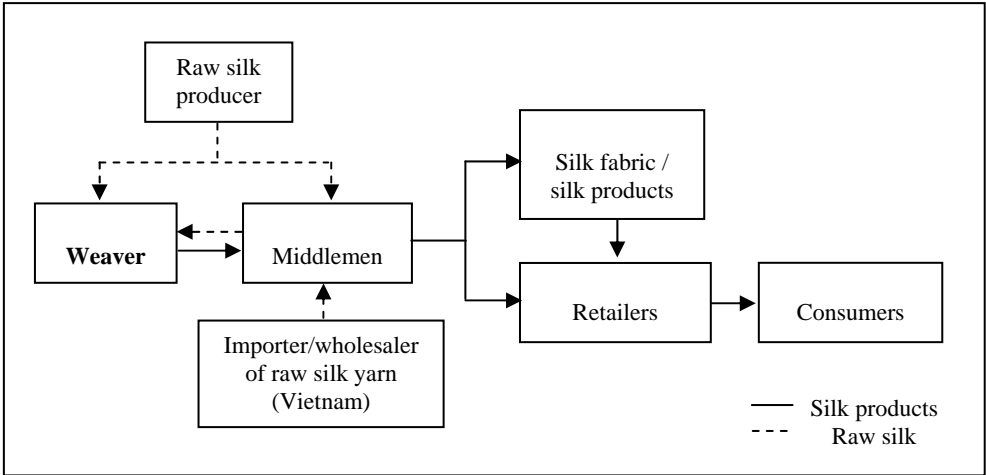
*Exports:* There is no official export statistics of Cambodian silk or silk products. Silk products are nowadays exported indirectly through tourists and expatriates. Moreover, silk associations and NGOs also participate in promoting silk products for export. Currently, small amounts of silk products are exported by the associations to the US, Switzerland, UK, Denmark, Japan, France and New Zealand.

### 11.3. Value Chain Analysis

#### 11.3.1. Market Structure

The market structure of the Cambodian silk sector can be illustrated as follows:

**Figure 11.1: Market Structure of the Cambodian Silk Sector**



**Source:** Interviews with Khmer Silk Village

Main players in the Cambodian silk industry are importers/wholesalers of silk yarn, weavers, middlemen, fabric wholesalers,

retailers and consumers. Wholesalers are important players who provide financial flow. Usually, they take a risk in granting credit to middlemen by raising the price of yarn. Middlemen can be divided into two types, contracted and non-contracted middlemen. The first group lends silk yarn to weavers in exchange for a portion of finished silk products, while the second group buys finished silk products from weavers without being involved in silk yarn sales. The sale of fabrics from middlemen to retailers is done on credit while to wholesalers it is done immediately in cash at a cheaper price.

### ***11.3.2. Production Cost Profile***

Raw Silk: In Cambodia, raw silks are produced by households. Due to the lack of technical know-how and capital, Cambodians produce raw silk in a traditional way. All the stages of the production process such as planting, breeding, reeling and dyeing are done manually. This process requires more time with low productivity and the quality of yarn is not as smooth and thin as producing by machine. However, some silk associations are trying to improve the quality of this hand-made product by providing technical skills and equipment.

**Table 11.6: Cost Profile of Raw Silk  
Production in Cambodia**

Items	Unit
<b>Initial investment (US\$/ha)</b>	<b>500</b>
Input (US\$/ha/year)*	5
Production (kg/ha/year)	40
Price (\$/kg)	24
<b>Gross Income (US\$/ha/year)</b>	<b>960</b>

**Source:** Author, Calculation based on interviews with Khmer Silk Villages.

*\* Input cost is spent only when the cocoon is not enough or farmers want to change type of silkworms. Otherwise they spend nothing on in years after.*

The initial investment of raw silk production is estimated at around US\$500 per hectare of plantation areas. This cost is for such inputs as mulberry trees, silkworms and other equipments, while labor costs can be hardly determined due to the family-based employment in the sector. Raw silk can be produced 8 times per year since cocoons are produced within 45 days

(excluding reeling). On average, around 40 kg of yarn can be produced annually with an average retail price of US\$24/kg. The annual incomes for raw silk producers or farmers are estimated at about the same level of garment workers but they could be better-off since silk producers usually work at home.

***Silk Products:*** Cambodian weavers normally produce different silk products according to weaving areas. Most products are Hol and Phamuong, which are Cambodian traditional fabrics. Their weaving productivity is low due to the use of handlooms. Spinning, reeling, warping and dying are undertaken by the family, including younger members, with labor time is not calculated as a cost. At present, there are two groups of weavers. First, those who have sufficient financial resources to buy raw material could make more profits. It is estimated that Hol weavers can earn an average of US\$80 per month, while Phamuong weavers can earn only US\$50-US\$60 per month. Secondly, both Hol and Phamuong weavers, whom middlemen lend raw silk in exchange for a portion of finished products, can make around US\$30 per month.

**Table 11.7: Cost Profile of Cambodian Silk Products**

Hol			Phamuong		
Items	Unit		Items	Unit	
	15 days	Per Month		3 days	Per Month
Production (kben)	1	2	Production (kben)	1	10
Price (\$/kben)	65	65	Price (\$/kben)	10	10
<b>Gross Income (\$)</b>	<b>65</b>	<b>130</b>	<b>Gross Income (\$)</b>	<b>10</b>	<b>100</b>
Input (\$/kben)	26	52	Input (\$/kben)	4	40
Labor (\$/kben)	14	28	Labor (\$/kben)	3	30
Total Cost (\$)	40	80	Total Cost (\$)	7	70
<b>Value Added (\$)</b>	<b>39</b>	<b>78</b>	<b>Value Added (\$)</b>	<b>6</b>	<b>60</b>
<b>Net income (\$)</b>	<b>25</b>	<b>50</b>	<b>Net income (\$)</b>	<b>3</b>	<b>30</b>

*Source: Author, Calculation based on interviews with Middlemen, October 2006.*

Compared to raw silk producers, weavers are able to earn a better income. The cost of initial investment of weaving is estimated at around US\$300, to be spent on input materials, tools and equipment such as loom, raw silk yarns, de-gumming tools, etc. This is also a major constraint for poor households who would otherwise start the weaving activity.

## 11.4. SWOT Analysis

**Table 11.8: SWOT Analysis of the Cambodian Silk Sector**

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>- Cambodian silk industry with handlooms is well equipped to handle small orders with short delivery schedules (60 percent of fabric is used within the country and 40 percent by tourists and expatriate Cambodians).</li> <li>- The country produces a unique type of ikat and silk fabrics, which are recognized by other silk weaving countries.</li> <li>- Being a natural fiber, silk enjoys increased patronage in the highly ecological and environmental conscious world.</li> <li>- Silk is exclusive and considered as a luxury item; it would therefore enjoy the support from the upper strata and growing middle class.</li> <li>- Hand woven silks are extremely popular in the west and export markets are wide open with no threats of quota like other fibers.</li> <li>- Silk is only less than 0.2 percent of the total textile fiber production and this percent share is expected to decrease with steep increase in production of other fibers. This situation would maintain an increase in demand for natural silk.</li> <li>- With light weight silk becoming popular for dress materials, showing continuous demand in export market.</li> </ul>	<ul style="list-style-type: none"> <li>- The silk industry in Cambodia in all sectors of production is highly decentralized and it is also as a cottage industry activity.</li> <li>- The decentralized nature of the industry has failed to attract the attention of business and commercial banks, resulting in poor financial support to the activity.</li> <li>- Dyers do not have the capacity to invest in adopting new technologies. The obsolete and outdated equipment used does not permit quality production and efficiency for cost control.</li> <li>- Being a highly labor intensive activity associated with poor technology cost control and quality control are difficult.</li> <li>- The high pricing of raw silk is a major problem in controlling costs.</li> <li>- Exporting enterprises are not positioned to the demand of innovative design and color combination and this could be a serious drawback in the ever changing trends and tastes in the export market.</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>- Silk as a natural fiber is more acceptable in both domestic and export markets. Cambodian silk industry rising to the occasion to provide a viable alternative to Vietnamese silk.</li> <li>- Silk is one of the specialty products which enjoy a minimum level of continuous demand worldwide if quality is ensured.</li> <li>- Export of silk products is on a steady increase, with conversion cost being very high in the western countries, tremendous opportunities exist in the export of silk products.</li> <li>- Inexpensive labor and there is room to improve inefficiencies in the supply and production chain.</li> <li>- The current domestic consumption of silk has a high potential for silk yarn production in the future.</li> </ul>	<ul style="list-style-type: none"> <li>- The inability of the silk industry to react to the changing needs in terms of quality in the domestic and export markets is a major area of concern.</li> <li>- Increasing awareness of quality in the international market could pose a serious threat unless appropriate interventions to meet the requirements are implemented.</li> <li>- The basic producers being financially weak may not be in a position to face the stiff challenges of the market in the coming years and with market demand for "better and better quality products at lower prices" is bound to exert a lot of pressure on the entire production activity.</li> <li>- Heavy dependence on imported silk yarn for exports is risky because any change in Vietnam's policy could jeopardize Cambodian silk activity and exports.</li> </ul>

**Source:** MoC, *Cambodia National Export Strategy 2007-2010, Final Draft.*



### 11.5. Competitiveness of the Cambodian Silk Sector

Silk produced in various parts of the world has different properties and textures. Chinese silk, for instance, tends to be smooth and satiny while Indian silk is softer with richer colors and a crinkled look. Thai silk is natural blended textures and patterns and Cambodian silk is well known to be the best quality of gold-colored yarn. Generally, the retail price of Cambodian yarn is estimated at around US\$24-US\$25/kg, similar to Vietnamese and Chinese silk.

Cambodian silk products face tough competition with other countries' products because they are produced as a handicraft by households, whilst other countries produce silk on a large scale with modern machinery. For instance, Cambodian weavers use traditional handlooms to produce Hol, Phamuong, scarves, fabrics, etc. while Thai produces similar products as Cambodia. There is a difference between the price of Cambodian and Thai silk products due to the labor cost, quality, productivity and time of production. However, the high quality and design style of Cambodian traditional fabrics (Hols) are known and used by local consumers.

Cambodian weavers rely on informal imports of yarns for weaving. This complicates the origin of Cambodian silk products. Cambodian silk products with local yarn are softer and better quality than Thai products because they can be hand washed, yet Thai products need to be dry-cleaned to keep the high quality. It is noted that Thailand and Vietnam cannot produce silk products such as Hol (traditional ikat) like Cambodia. In addition, tourists prefer buying traditional handmade products such as those found in Cambodia. Hence, the Cambodian ikat can tap a niche market, especially foreign tourists, since it is made from traditional fabric, which represents the Cambodian culture.

Nowadays, small quantities of Thai silk fabrics and clothing items enter the Cambodian market with low price. As for export markets, those countries with high potential for exports are already open to Cambodian silk products. For example, as long as Cambodian silk products can satisfy the origin requirements and technical standards then access to the EU market is subject to the EBA zero duty and no quota conditions. In the US market, Cambodian exports of silk fabrics and silk products will normally fall into the categories of handloom and traditional items which attract zero duty treatment while not being subject to remaining quota restraints. Both the Singapore and Hong Kong markets are duty free as well. Silk fabrics entering to South Korea will normally be subject to 13 percent MFN custom duties,

while scarves, ties and handkerchiefs are rated at 8 percent. South Korea also imposes a 10 percent VAT rate on imports<sup>16</sup>.

## **11.6. Economic Impact and Employment Generation**

### ***11.6.1. Economic Impact***

Raw silk production: The Cambodian silk yarn production has a high potential in the future because the quality and demand are high while the local supply is insufficient to meet the annual consumption. Moreover, in Cambodia, the large surface areas of land are unused (though access to land would have to be facilitated for small farmers) and most people in rural areas do not have full employment all year round. Additionally, Cambodian yarn is widely accepted by neighboring countries such as Thailand. According to Khmer Silk Villages, although the yarn colors of Cambodian and Thai silk are quite similar, Cambodian yarn is well recognized for its better quality. In order to meet the rule of origin requirements, local silk yarn needs to be promoted so that the quality and quantity can be improved to meet standards.

It is believed that if larger quantities of cocoon are produced locally, investment in the reeling, dyeing and spinning industry will follow. Currently, due to the shortage of technical skill and lack of irrigation in the mulberry plantation area, the mulberry plants provide insufficient leaves to silkworms and limited cocoons are produced. Beside, the use of pesticide on rice fields also negatively affects silkworms feeding because the worm is also a kind of insect.

Silk Products: There are many kinds of silk products. Hols and Phamuong are kinds of silk fabrics that have high potential for domestic use since they are traditional fabrics that Cambodian people wear during special occasions. Beside, silk shawls/scarves and other silk accessories are popular among tourists. Consequently, it is not only the issue of quality but also the issue of brand that are essential to promote the Cambodian silk products. With the increasing number of tourists into Cambodia, it is believed that the Cambodian handicraft silk products have a good opportunity.

### ***11.6.2. Employment Generation***

Silk production and weaving play a major role in reducing poverty and migration in rural areas by providing households a specific career with proper income in order to support or upgrade their living standard.

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<sup>16</sup> MoC. 2005. *Cambodia and WTO: A Guide to Business*.

Raw silk production: With approximately 237 hectares of current mulberry cultivated areas of land, around 700 people are estimated to have been employed to plant mulberry trees and feed silkworms for yarn production. In order to come up with the annual raw silk consumption of around 400 tons, the cultivated areas need to be expanded to probably 10,000 ha. If so, the number of people employed would reach an estimated 30,000.

**Table 11.9: Employment in Raw Silk Production**

Items	Unit	Current Status	Ideal Status
Cultivated Area (ha)	1	237	10,000
Production (kg/ha)	40	9,480	400,000
Employment (persons)	3	711	30,000
<b>Value Added (US\$)</b>	<b>955</b>	<b>226,335</b>	<b>9,550,000</b>

**Source:** Author, Projection based on interviews with Khmer Silk Villages.

Silk products (weaving): Overall, the Cambodian silk industry creates large numbers of employment opportunities for rural people. The number of active silk weavers increases to around 20,000 in 2005. Most silk producing activities are done in the form of family weaving, as the skills are passed on from generation to generation. Households can earn a better income from their weaving activities than farming.

## 11.7. Concluding Remarks

Cambodian silk production with the use of a handloom is minimal compared to neighboring countries such as Thailand, Vietnam, whose yarn is produced with high technology and standard. Nonetheless, Cambodian silk production participates in promoting living standards of households in rural areas. Although high quantities of silk yarns are imported from Vietnam in order to fulfill domestic demand, the silk sector provides significant employment opportunities for women in rural areas. However, there are many constraints faced by the sector. The major problem for silk producers or weavers is the poor access to financing for initial investment as well as for supporting materials. Due to the high quality and demand of silk, silk yarn production does have a high potential and demand for silk products will probably increase as the number of tourists increase gradually.

The suggested recommendations to support the development of the Cambodian silk sector are as follows:

- Developing a proper irrigation system in the mulberry plantation areas so that larger cocoons can be produced locally.
- Training farmers and weavers on techniques for planting, feeding, reeling, dyeing and weaving to improve the quality and productivity of Cambodian silk production.
- Establishing the Cambodian silk brand as a unique trade mark of high quality so that local and imported silk products can be distinguished.
- Participating more actively in international exhibitions and workshops in order to better promote Cambodian silk products on the international stage.
- Diversifying silk products by encouraging weavers to produce different kinds of silk products, such as silk handkerchiefs, silk shawls and scarves, silk ties etc. for tourists.
- Ensuring proper enforcement of contract and law between weavers and middlemen to reduce the price volatility of silk yarns as well as silk products and thus to promote weaving activities.
- Improving access to finance for silk producers and weavers by encouraging the MFIs to engage more actively in the silk sector.



## **Chapter 12**

### **Tourism: A growing Sector with a Potential for High Job Creation**

Cambodia has witnessed robust economic growth after it emerged from civil war. The economic growth rate of the country remained around 6 or 7 percent per year in the early 2000s, with the exceptional growth of around 13.4 percent in 2005 thanks to an increase in agriculture, which was boosted by the robust hike of paddy (43.6 percent).

However, this growth is based on a narrow basis. In other words, the national economy is enhanced by only three important sectors: the garment industry, agriculture and tourism. Most Cambodians depend largely on agriculture for employment and income generation. Nonetheless, Cambodia's agriculture is characterized by subsistence farming and uncertainty due to much dependence on weather conditions for its high annual yields as in 2002 and 2004 when the growth rate was 2.1 percent and 1.1 percent respectively, due to unfavorable weather conditions. Despite the end of the quota system, the garment industry continues to be a promising economic engine for the country. However, its future remains threatened by tougher competition on the global market and the membership of Vietnam to the WTO.

Tourism is by far the most promising locomotive for the growth of the economy. Besides its contribution of 13.4 percent to the country's GDP in 2005, tourist arrivals to Cambodia continued increasing with a growth rate of 18 percent for the first 10 months of 2006 compared to the same period in 2005. Despite the above growth, tourism in Cambodia faces a number of issues. Most noticeably is economic leakage and environmental degradation. Economic leakage in tourism deprives Cambodia from the sector's full benefits, while environmental degradation erodes the potential for the development of the country's eco-tourism.

Moreover, only three main areas are currently attractive to tourists; viz. Angkor-Siem Reap, Sihanouk Ville and Ratanakiri in the north-eastern part of the country, in spite of other potential areas for tourism. Thus, this chapter will explore other potential for tourism diversification.

## 12.1. Global Tourism Industry

### *12.1.1. Travel and Tourism's Contribution to the World Economy*

Travel and Tourism spending worldwide in 2005 was slightly more than US\$6 trillion, and it is expected to exceed US\$6.5 trillion over a ten year period from 2007 to 2016 with the annual growth of 4.5 percent, according to the Tourism Satellite Accounting Research. The industry represented 3.6 percent of the world's GDP in 2006. Its direct and indirect contribution, including tourism related business, to the world economy amounted to 10.3 percent of the total GDP, according to the Tourism Satellite Accounting Research. The Travel and Tourism industry generated around 2.5 million new jobs in 2006, which makes the jobs created by the industry amount to a total of 76.7 million, or 2.8 percent of world employment. Moreover, if indirect jobs created by the industry are included, the Travel and Tourism sector brought about around nearly 10 million new jobs in 2006, all representing 234.3 million jobs or 8.7 percent of world employment in 2006.

Furthermore, Travel and Tourism is the main economic engine for the economic growth of many countries, especially poor and developing countries, like Cambodia, Montenegro, China, Romania, Croatia, Vietnam, Latvia, Maldives and Albania. According to Mr. Jean-Claude Baumgarten, World Travel and Tourism Council (WTTC) President, "Global tourism activity is setting new records globally but what is really amazing is how smaller, developing countries like Montenegro, Romania, Namibia and Brunei are using Travel and Tourism as catalysts for broader economic development". In 2005, international tourism receipts for developing countries amounted to US\$203 billion. Based on the WTO statistics, tourism is one of the major export sectors of developing countries, and is the primary source of foreign exchange earnings in 46 out of the 49 LDCs.

### *12.1.2. International Tourist Arrivals*

2006 is the third year in the row for a global rebound in tourism after a decline in the number of international tourists traveling the world. According to the World Tourism Organization, the number of international tourists in 2005 was estimated at 808 million. This represents a growth rate of 5.5 percent from 766 million in 2004. In 2006, the growth rate was estimated at 4.6 percent in real terms, a bit lower than in 2005. However, for the first eight months of 2006, international tourists reached nearly 578 million,

higher than in the same period in 2005, which the number was around 553 million. “The year 2004 to 2006 will be seen as a period of significant growth for the industry. Although events like the Tsunami, bombings and hurricanes, as well as a major increase in the oil price, could have damaged demand, it appears that consumers are becoming resilient, and Travel and Tourism continues to be a significant part of everyday life.” said Mr. Richard Miller, Executive Vice President of WTTC.

**Table 12.1: International Tourist Arrivals by Region (million)**

	2000	2001	2002	2003	2004	2005
World	688	688	708	887	764	806
Europe	388	386	407	409	424	442
Asia and the Pacific	111	110	128	114	144	155
Americas	128	122	119	113	126	134
Africa	28	28	29	31	34	37
Middle East	25	25	28	30	36	39

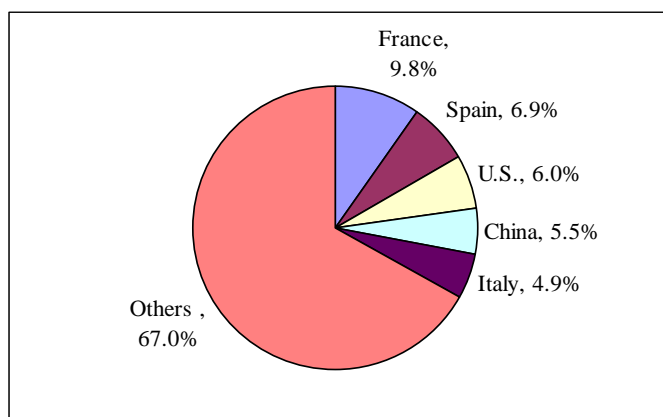
**Source:** World Tourism Organization.

Africa, whose growth rate was around 10.6 percent in 2006, represents the strongest growth in the world, which was followed by Asia and the Pacific and the Middle East, whose growth rate was 7.7 percent and 7.2 percent, respectively. However, Europe only grew by 3.4 percent, and was followed by North America, whose growth rate was 2.5 percent, due to poor performances in Canada and Mexico.

France remained the world's most visited destination for international tourists in 2004. This was followed by Spain and the United States. According to the World Tourism organization, France received around 75 million tourists, while Spain and the US welcomed about 52 million tourists and 46 million tourists, respectively. China ranked 4<sup>th</sup> as the world's most visited countries, visited by nearly 42 million tourists in 2004. Nearly 10 percent of international tourists visited France in 2004, while around 7 percent and 6 percent visited Spain and the U.S respectively. China obtained 5.5 percent of the world international tourists.



**Figure 12.1: World Top Tourism Destination in 2004**



**Source:** World Tourism Organization.

### ***12.1.3. Top Tourism Earners and Expenditures***

Ten countries in the world absorbed nearly US\$322 billion from the Travel and Tourism industry in 2004. This represents about 45 percent of the total travel and tourism spending in 2004. The US was the first tourism earner with an income of US\$74.5 billion. It was followed by Spain, France and Italy, which attracted about US\$45 billion, US\$41 billion, and US\$36 billion, respectively, in 2004. China ranked 7<sup>th</sup> ahead of Turkey, Austria and Australia. In 2004, more than 10 percent of the world tourism expenditure went to the US, while more than 6 percent and slightly below 6 percent went to Spain and France, respectively. The United Kingdom received nearly 4 percent of the receipts, followed by China, which obtained around 3.5 percent.

There were nearly 50 source countries that spent more than US\$2 billion on tourism abroad in 2005. Together they accounted for nearly US\$600 billion or 88 percent of total tourism spending abroad, according to UNWTO World Tourism Barometer. The Table above shows the 10 top ten countries that spent the most on travel and tourism in 2005. These ten countries together represent US\$367 billion, or 54 percent of the total tourism expenditure abroad. Germany had the most tourism expenditures, followed by the United States and the United Kingdom. The three countries together accounted for around 30 percent of the total tourism spending. In Asia, Japan was the country that spent the most on travel and tourism. The figure reached US\$37.5 billion in 2005 for Japan.

**Table 12.2: World's Top Tourism Earners and Expenditures  
(billion US\$)**

No.	Countries	2003	2004	2005
<b>Top Ten Earners</b>				
1	U.S.	64.3	74.5	n/a
2	Spain	39.6	45.2	n/a
3	France	36.6	40.8	n/a
4	Italy	31.2	35.7	n/a
5	Germany	23.1	27.7	n/a
6	UK	22.7	27.3	n/a
7	China	17.4	25.7	n/a
8	Turkey	13.2	15.9	n/a
9	Austria	14.0	15.4	n/a
10	Australia	10.3	13.0	n/a
<b>Top Ten Expenditures</b>				
1	Germany	64.7	71.0	72.7
2	United States	57.4	65.8	69.2
3	United Kingdom	47.9	56.5	59.6
4	Japan	28.8	38.2	37.5
5	France	23.4	28.6	31.2
6	Italy	20.6	20.5	22.4
7	China	15.2	19.1	21.8
8	Canada	13.4	15.9	18.4
9	Russian Federation	12.9	15.7	17.8
10	Netherlands	15.3	16.4	16.2

**Source:** UNWTO World Tourism Barometer, 2006.

#### ***12.1.4. Purposes and Mode of Travel and Tourism***

According to the World Tourism Organization, the primary purpose of travel and tourism in 2004 was for leisure and recreation, including holidays. The second purpose of international arrivals was to visit friends and relatives. Some tourists visited to receive international treatment, while others made pilgrimage to sacred places, as in Saudi Arabia. The number of tourists traveled with a business and professional purpose ranked 3<sup>rd</sup>. In 2004, more than 50 percent of tourists traveled for leisure, recreation, and holidays. Another 26 percent or so visited friends and relatives. Besides, some of this

group made religious visits to sacred places. Nearly 16 percent of tourists traveled for business and professional purposes.

**Table 12.3: Purposes of Visits and Means of Transportation in 2004**

Purposes of Visits	%	Means of Transportation	%
Leisure, recreation and holidays	50	By road and rail	49
VFR, health, religious, others	25	By air	43
Business, professional	16	By water	7
Unspecified	9	Unspecified	1
<b>Total</b>	<b>100</b>	<b>Total</b>	<b>100</b>

**Source:** *World Tourism Organization.*

Land and roads are still the most preferred means of transportation for tourists in 2004. According to World Tourism Organization figures, approximately 50 percent of the total international visits were made by land. Travel by road is the most common means of transportation for visitors. Air transportation has increased gradually since the 1990s. In 1990, around 37 percent of international tourists traveled by plane. This figure reached 42 percent in 2000, and more than 43 percent in 2004. The number of tourists traveled by water has leveled off since the 1990s. The figure remains around 7 percent per year. In 2004, approximately 56 million tourists used water transportation as their means of travel.

### ***12.1.5. Tourists' Trends and Prospects from 2007 to 2020***

Recently, there is a demand for customized holidays among international tourists. In spite of the decreasing number of working hours, tourists tend to take shorter stays when going on holiday but with the purpose of visiting a wider range of places. There has been a shift from active holidays to holidays as participative experience, which provides new knowledge. There is an increase in the number of tourists who visit friends and relatives; moreover, tourists prefer traveling by road to traveling by air due to safety concerns. For 2007, growth of international tourist arrivals is projected to be around half a percentage point lower than in 2006, according to the World Tourism Organization. It is projected to be around 4 percent, but still in the line with the forecast long-term annual growth rate of 4.1 percent through 2020.

UNWTO's *Tourism 2020 Vision* forecasts that international arrivals are expected to reach over 1.56 billion by 2020. Out of these worldwide arrivals in 2020, 1.2 billion will be intraregional arrivals and 0.4 billion will be long haul travelers. The total tourist arrivals by region show that by 2020 the top three receiving regions will be Europe (717 million tourists), East Asia and the Pacific (397 million tourists), and the Americas (282 million tourists), followed by Africa, the Middle East and South Asia. East Asia and the Pacific, South Asia, the Middle East and Africa are predicted record growths of over 5 percent per year, compared to the world average of 4.1 percent. The more mature regions, Europe and Americas, are anticipated to have lower than average growth rates. Europe will maintain the highest share of world arrivals, although there will be a decline from 60 percent in 1995 to 46 percent in 2020 (UNWTO, 2005).

## 12.2. Cambodian Tourism Industry

### 12.2.1. Contribution to the Economy

The tourism industry is important to Cambodia for its contribution to urban and rural economic development, and most importantly to poverty reduction. The industry today is based almost entirely on natural and cultural heritage resources. The tourism industry is capable of generating large employment numbers. It is estimated that in 2003, the sector employed a total of about 100,000 people, of which 32,500 were direct employments and 67,500 indirect employments. Cambodia's tourism sector generates more employments rather than the industry in Lao PDR; however it comes after Vietnam and Thailand.

**Table 12.4: Employment in Cambodian Tourism Industry in 2003**

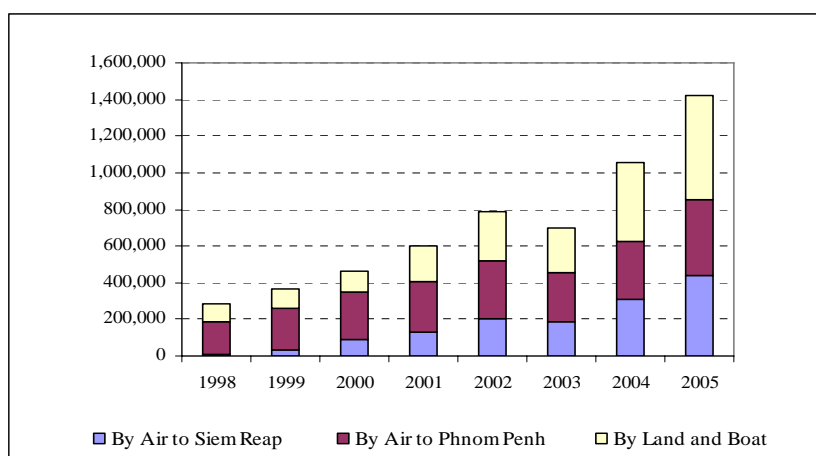
Countries	Direct Employment	Indirect Employment	Total Employment
<b>Cambodia</b>	<b>32,500</b>	<b>67,500</b>	<b>100,000</b>
Lao PDR	17,000	5,000	22,000
Vietnam	220,000	450,000	670,000
Thailand	1,411,000	439,000	1,850,000

**Source:** MoC, *Cambodia National Export Strategy 2007-2010, Final Draft*.

### 12.2.2. Characteristics of Tourist Arrivals to Cambodia

The number of domestic tourists in Cambodia increased from 1 million in 2002 to 5 million in 2005 and increased by 200 percent from 2002 to 2005. The growth of domestic tourist numbers in Cambodia depends on the improvement of people's incomes, domestic security, infrastructure development and more attractive tourist sites. As a result, the rapid development of domestic development in Cambodia could help to raise more revenue for the government and to boost local economies through the establishment of restaurants, shops, handicraft producers and so on.

**Figure 12.2: Number of Tourists Arrivals to Cambodia**



**Source:** Ministry of Tourism, *Annual Report on Tourism Statistics, 2005*.

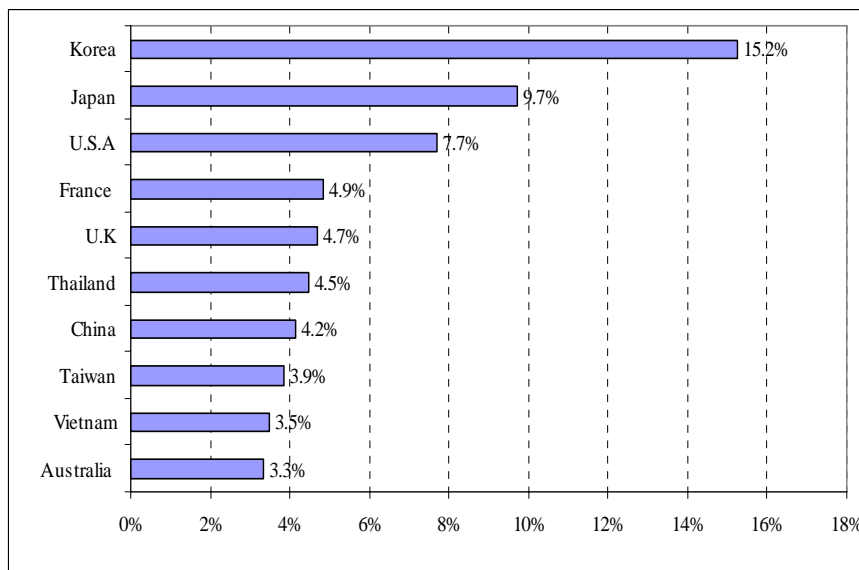
In late 1997, the government's Open Skies policy was introduced as a strategy to attract tourists, who visited other Asian countries, to Cambodia. This policy has helped create more employment, economic activities and development in the industry, particularly in Siem Reap. As a result, in Siem Reap the number of tourists grew from 0.2 million in 2002 to 0.4 million in 2005, which increased by 117 percent from 2002 to 2005. Meanwhile, the number of hotels in Siem Reap increased from 267 in 2002 to 317 in 2005.

- **Who Visits Cambodia?**

In 2005, the largest number of foreign tourists visiting Cambodia was from Asia and Oceania, which accounted for 40 percent of the total visitor arrivals. The number of tourists from European countries accounted for 22 percent and Asian countries 15 percent. Around 11 percent came from

America; 5 percent from Middle East and Africa. The rest went through Pheah Vihear province, next to Thailand, which accounted for 6 percent.

**Figure 12.3: Cambodia's Top Ten Tourism Markets in 2005**



**Source:** Ministry of Tourism, *Annual Report on Tourism Statistic, 2005*.

In 2005, the largest market for Cambodia's tourism sector was South Koreans, which accounted for 15.2 percent. The second market was Japan (9.7 percent) and the third market was U.S. (7.7 percent). However, in 2003 the first market of Cambodia tourism sector was Japan, which accounted for 12.6 percent, the second market was U.S. (9.4 percent) and the third market was South Korea (8.9 percent).

**Table 12.5: Percentage of Foreign Visitors by Purpose, 2005**

Type of tourists	%
Holiday tourist	97.15%
Business tourist	0.32%
Official tourist	0.16%
Visiting friends and relatives	0.16%
Others	2.21%
<b>Total</b>	<b>100%</b>

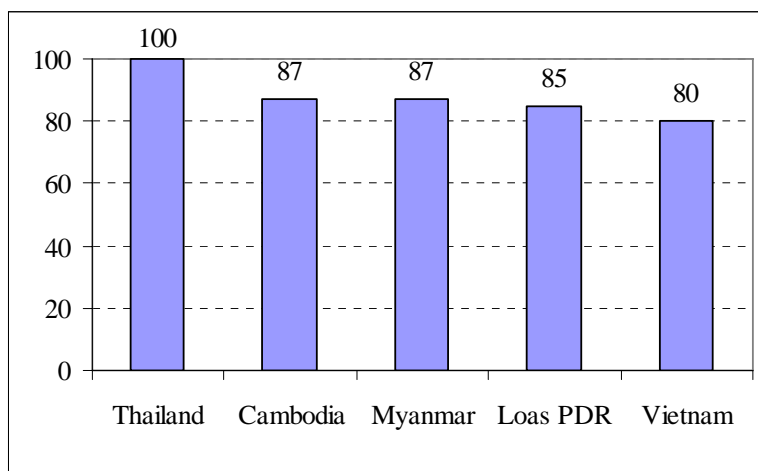
**Source:** Ministry of Tourism, *Annual Report on Tourism Statistics, 2005*.

Of the tourist arrivals in Cambodia, 51 percent are group tours and 49 percent are independent tourists. Out of these tourists, 97.15 percent are holiday tourists, 0.32 percent are business visitors, 0.16 percent are official tourists, 0.16 percent, visited their friends and relatives and the rest, 2.21 percent, arrived for others purposes.

- **Tourists' Spending**

According to the Cambodia National Export Strategy 2007-2010, the length of stay of tourists arriving to Cambodia on average is 6.3 days and total tourist day is 6.6 million days in 2004. The length of stay of tourists arriving to Cambodia is higher than in Loa PDR. But lower than in Myanmar, Thailand and Vietnam. According to the Ministry of Tourism, the length of stay of tourist in Cambodia on average is 6.3 days and the total tourist day is 8.9 million days in 2005. The expenditure of tourists arriving to Cambodia on average is US\$93 and the total expenditure was US\$832 million in 2005.

**Figure 12.4: Daily Average Tourist's Expenditure in 2004 (US\$)**



**Source:** MoC, *Cambodia National Export Strategy 2007-2010, Final Draft*.

Besides, the expenditure of tourists arriving in Cambodia on average is US\$87 and the total expenditure was US\$587 million in 2004. As a result, total expenditures of tourists arriving to Cambodia is higher than in Lao PDR and Myanmar but in lower than Thailand and Vietnam. The tourist's expenditure in Thailand is higher than Cambodia and other Greater Mekong Sub-region countries because of the great number of tourist arrivals and spending.

### **12.3. Potential Areas for Tourism Diversification**

Nowadays, there are three main tourist attractions that are able to attract tourists domestically and internationally. Among these three tourism places, Siem Reap is able to attract the largest number of tourists because it hosts Angkor Wat, which is very popular among domestic and overseas tourists. Sihanouk Ville, which is popular for its beautiful beaches, and the north-eastern area, which is famous for its attractions in Ratanakiri in particular, is competing for the second and third rank as main tourist attractions of Cambodia. It should be noted that there is much stronger tourism activity in Siem Reap than in other places, even in the two above sites, despite the fact that Cambodia has much more places to offer to tourists. Besides the main three tourist destinations, Cambodia has other potential areas in which tourism can be promoted.

#### ***12.3.1. Silk Production Areas***

There is a potential to promote silk production as a product for tourism. Cambodians have inherited the knowledge and experience in weaving silk from their ancestors. The process of silk production from start to finish is an attraction for tourists who want to get first hand experience of silk making.

There is potential to generate revenue from promoting some silk production areas as tourist attractions. Usually, those areas can offer home stay for tourists when they visit the places. Silk production is a long process, thus villagers could offer home stay of up to 7 days for tourists visiting their villages. Some silk production areas are Koh Dech District in Kandal Province, in Bati, Samraong, and Prey Kabbas District in Takeo Province.

#### ***12.3.2. Buddhism and Religious Tourism***

Cambodia has the potential to generate interest in its Buddhist culture to attract tourists who want to learn about Buddhism. Some pagodas in Phnom Penh, such as Wat Unalum, have the potential for tourism as a sacred place of Buddhism.

Besides, ancient temples converted for Buddhism could attract tourists if there is proper arrangement. Phnom Sompov Resort in Battambang Province is an example for tourists who are interested in Buddhism. Phnom Suntuk in Kompong Thom and Kam Pong Trach Resort



are also possible for this purposes. Mount Udong, which hosts the remains of Buddha, is very suitable for such a purpose. Promoting such places as tourist attractions will not only preserve and promote Buddhism but also enhance the economy of the residents living in those areas. Traleng Keng Pagoda in Lang Vek District in Kompong Chhnang is another potential place for Buddhism tourism.

### ***12.3.3. Khmer Rouge Historical and Commemoration Sites***

The Khmer Rouge Regime is notorious around the world. This interest is likely to increase through the medial attention the imminent “Khmer Rouge Trials” will attract internationally. Cambodia inherits some painful places from the regime, which have potential for tourism. Toul Sleng Museum and Cheung Ek Killing Filed are some examples of sites that have already seen some development. They could however be developed further into sites with a more formative character in order to serve the interests of tourists while at the same time preserving the commemorative character of such sites, which ask for a climate of respect by those who visit them. Until now, sites related to the Khmer Rouge regime have received considerable attention by tourists who are interested in Cambodia’s history and are eager to learn about the Pol Pot Regime. Ta Mok’s house, the former military commander under Khmer Rouge, is another example for a site of interest.

### ***12.3.4. Eco-tourism Attractions***

Cambodia has a great potential for eco-tourism thanks to its location in South East Asia, with a tropical climate that favors fauna and flora. The country has to offer seven national parks that offer spectacular views and interesting natural diversity.

The seven national parks are:

- Bokor Resort in Kompot Province
- Kirirom National Park in Kompong Speu Province
- Virachey Park in Ratankiri and Stung Treng Province
- Ream Park in Sihanouk Ville
- Butum Sakor National Park in Koh Kong Province

Besides, Cambodia has many waterfalls and there are ethnic minorities located in different mountain ranges. For example, Chambok, located in Kompong Speu Province, is another place suitable for eco-tourism. In Chamboke, there is a variety of different attractions including a 40 m high waterfall, nature walks and ox-cart rides. Tourist can also learn about the indigenous culture and a variety of plants and animals, besides enjoying the beauty of nature.

Besides Chamboke, there are Sek Sork resort in Banteay Meanchey Province, Boo Sra Waterfall, Sen Monoroum Waterfall in Mondolkiri and Yeak Loam Lake in Ratanakiri Province. Furthermore, there are many bird sanctuaries, which have the potential to attract avid bird watchers, such as Boeung Prek Lapouv in Takeo Province, and Phnom Somkos in Koh Kong.

### ***12.3.5. Mekong Dolphin Watching***

Along the Mekong River next to the Lao PDR border is the home of the Mekong's dolphins, a nearly extinct mammal. Kamy Resort in Kratie Province is the most suitable place for dolphin watching. Dolphin watching could also be considered as eco-tourism.

## **12.4. SWOT Analysis**

**Table 12.6: SWOT Analysis of the Cambodian Tourism Industry**

<b>Strengths</b>	<b>Weaknesses</b>
<ul style="list-style-type: none"> <li>- Rich in natural and cultural resources for tourism (beaches, forests, waterfalls, temples, songs, music, dances, traditions, ethnic minorities, etc.)</li> <li>- Safe and relatively peaceful environment (no threat from terrorism).</li> <li>- Cambodian people are friendly to foreigners.</li> <li>- Cambodia is located in the fast-growing region.</li> <li>- High-quality silks and handicraft for tourists.</li> </ul>	<ul style="list-style-type: none"> <li>- Poor supplying industry (e.g. agriculture).</li> <li>- Tourism law and regulation has not been passed by the assembly to govern the industry.</li> <li>- Lack of regulations and standards to rank hotels and restaurants.</li> <li>- Insufficient infrastructures, such as roads connected to tourist attractions.</li> <li>- Low capacity of airports to host large airplanes and to connect Cambodia to important outbound tourist countries.</li> <li>- Low skilled labor force and insufficient education in tourism.</li> <li>- Lack of information systems and insufficient data collection for policy development.</li> <li>- Insufficient and ineffective campaigns to attract tourists.</li> </ul>

Opportunities	Threats
<ul style="list-style-type: none"> <li>- Attraction of more tourists from Mekong Sub Region Cooperation.</li> <li>- Infrastructure improvement under Mekong Sub Regional Development.</li> <li>- Potential for home-stay tourism.</li> <li>- Potential for diversification into tourism areas, especially eco-tourism.</li> <li>- Attraction of more tourists-thanks to the improved image of Cambodia.</li> </ul>	<ul style="list-style-type: none"> <li>- Possibility of environmental degradation due to lack of proper sewage systems of hotels and restaurants, and littering.</li> <li>- Possibility of destruction of eco-tourism due to deforestation.</li> <li>- Possibility of political instability due to the forthcoming elections and instability in Thailand.</li> <li>- Threat from bird flu.</li> <li>- Uncertainty of the world economy, due to increasing oil price, and war against terrorism.</li> </ul>

**Source:** Authors, Based on interviews with staff of the Ministry of Tourism.

## 12.5. Issues and Challenges in Tourism

### 12.5.1. Economic Leakage

Economic leakage in tourism occurs when one country imports or uses products from other countries to support the demand of tourists in that country, which makes the tourist revenues flow out of the country to pay for imports. This performance keeps only a small proportion of tourist spending in the host country.

The tourism industry is important to Cambodia's economy primarily for employment generation and foreign currency earnings. Tourism contributes to rural development through job generation. Nonetheless, tourism industry is not boosting the Cambodia local economy as much as it could because of the issues in supply side. For example, most of the food to support the tourism sector is imported into Cambodia from Vietnam and Thailand. So to improve economic development in tourism sector, Cambodia should have measures to support domestic produces in this sector; especially, potential for supporting the development of the agricultural supply chain in Cambodia.

According to a study by MoC, the leakage multiplier of Cambodian tourism is 0.4, which is very high compared to Thailand, whose multiplier is only 0.035. Therefore, based on this study, in 2004, of the estimated incomes generated in tourism industry, Cambodia lost around US\$370 million by importing produces from neighboring countries.

**Table 12.7: Leakage Multiplier in Tourism in 2004**

GMS Countries	Leakage Multiplier
Cambodia	0.400
Laos PDR	0.400
Myanmar	0.400
Thailand	0.035
Vietnam	0.350

**Source:** MoC, *Cambodia National Export Strategies 2007-2010. Final Draft.*

#### **12.4.2. Infrastructure**

Although the government has focused on the rehabilitation of transport infrastructure by finding assistance from various international donors, Cambodia still has problems related to infrastructure access to tourism sites. These problems make tourists hesitate to visit these sites, due to time constraints and lack of comfort. Lack of road maintenance is the main source of the problems.

However, in order to facilitate the traveling of tourists who came to visit Cambodia, the Government is focusing on infrastructure; the government is developing the project to build National Road No. 6 (154.50 km) from Poi Pet to Siem Reap with funding from the Asian Development Bank. National Road No. 67 from Anlong Veng to Siem Reap is under construction. And the National Road No. 76 from Snoul to Sen Monorum in Mondulkiri will be constructed next year with Chinese funding. By the end of 2006, National Road No. 78 from Ratanakiri to Vietnam will be constructed. Furthermore; the government is seeking Korean funding to build National Road No. 3 from Phnom Penh to Kampot.

To facilitate the air transport for the tourism segment, the Government will develop two airports in Steung Treng and Ratanakiri. Another airport will also be built up in Sihanouk Ville. The government is planning a contract with Bangkok Airways to build Koh Kong airport, and Poi Pet airport is being planed as well, in order to transport visitors to Siem Reap and other areas.

### ***12.4.3. Environmental Issues***

Environment degradation can have negative impact on tourism development in Cambodia. The areas of greatest concern to the environment degradation are water pollution and deforestation. Water pollution is caused by the lack of sewage system in some hotels and restaurants, which drain polluted water into the rivers. Most of the hotels in Cambodia run their generators day and night and also have no waste water systems, which impact the environment. Furthermore, lack of rubbish bins, public toilets, and other facilities for tourists also affect the environment. Besides, illegal deforestation endangers the potential for ecotourism by destroying its authenticity and natural features.

To help preserve the country's environment for tourist attractions, the Government has strengthened and improved work related to natural resource management and environment protection, including the formulation of environment laws to ensure the good environmental practices for tourists.

### Box 12.1: Lessons Learned from Thai Tourism: Amazing Thailand

Thailand's promotion policy *Amazing Thailand* helped bring many tourists to the country. International tourist arrivals reached approximately 13 million in 2005. This success is the result of facility development in local communities within the country. Among a large number of factors that helps bring success to Thailand and keeps benefits for the Thais are noticed as follows:

- *Provision of good value for money:* Many visitors to Thailand are satisfied with the quality of services and goods that they purchase. They nurture the interest of coming back to Thailand after their first trip ends. This factor results from the excellent quality in product delivery and a broad range of natural and cultural heritage attractions. It should be noticed that Thailand excellent at converting low valued tourist products to high added value ones. Besides, this success cannot be dis-linked to those in friendly and quality-oriented hospitality staff.
- *Strong Promotional Campaign:* Thailand spends much money on marketing and promotion on tourism. It started from a wide variety of promotion policies ranging from promoting Thailand as the World's Paradise to Gateway to Asia and the hub for international education. Advertisement is also used exhaustively. Thailand is promoted on the air of the worldwide broadcasting stations, like CNN.
- *Excellent image on the global market:* Besides the best reputation for the quality of product, Thailand is regarded as one of the world's safe place for international recreation. Thailand is famous for democracy and respect for human right. The government of Thailand tries to ensure the high degree of political stability and peace. However, it remains to be seen to what extent Thailand's political stability is after the military coup d'état on 19 September 2006.
- *Excellent transportation, infrastructure, accommodation and restaurants:* Roads are connected to important tourist attractions in the country. Hotels and restaurant, serving many kinds of food with high international standards, are in place to provide service to tourists. Beside, Thailand's international airports hosts many air flights, and have the capacity to host large airplanes like Boeing 737. Moreover, Thai airlines such as Thai Airways International and Bangkok Airways play an even more important role in transporting international tourists to the country and the region.
- *Local Businesses to absorb the benefits of tourism:* Many tourism-related businesses are run by Thai investors, which make Thailand able to retain the money from the industry. The leakage multiplier in Thai tourism industry is much lower than other countries in the region.
- *Facilitation of travel to Thailand:* Thailand allows long-standing visitors in without visa and tourists can get visa on arrival.

**Source:** Tourism Authority of Thailand, *Positioning Thailand as a Quality Tourism Destination*, 2003.

## 12.6. Concluding Remarks

Tourism is a driving force for economic development in Cambodia. It has generated new employment and income-opportunities for young Cambodians. It has further improved the image of the country as a safe

tourist-destination and promoted Cambodian culture on the global stage. Cambodia is rich in tourism resources, both from nature and from its ancestor's inheritance. Cambodia has the potential for eco-tourism.

However, despite the yearly increasing tourist arrivals, the supply capacity is limited, thus causing economic leakage. In addition, environmental problems may result from an uncontrolled development of eco-tourism, thus resulting in the erosion of its own economic basis. Deforestation, pollution as well as the damage to the beauty and authenticity of a landscape, which is what tourists interested in ecotourism are looking for, could become major problems. Finally, the development of eco-tourism should be used as a strategy for preserving the country's unique natural environment and historic heritage. Creating jobs related to the natural environment and historic sites will increase the interest of the local population to protect these sites as they can gain benefits from them, especially from tourist expenditures. This will result in preserving these important resources not only for the tourists' sake, but also for the country's future generations.

Besides, there is not enough promotion of Cambodia as a world tourist attraction. Marketing campaigns are operating with only a few tools and activities as well as the policies to enhance the image of Cambodia on the global stage. There is not sufficient data and statistics for policy development and no research into specific sectors in tourism has been conducted so far. There is a lack of regulation and law aimed at leading the development in the tourism sector. No national standards are set for ranking hotels and restaurants, and there is the poor enforcement of environmental law able to prevent pollution caused by tourism-related businesses.

Thus, below are the suggested recommendations to address the above problems.

- Promoting Cambodia as a world tourist attraction by means of advertisement on worldwide broadcasting stations. It should be noted that so far Cambodia as a whole has not been promoted as a destination, instead only Siem Reap has been promoted. This, therefore, tends to limit visitors to Siem Reap leaving the rest of the tourist attractions unknown with only few tourists visiting them.
- Strengthening the capacity of the tourism-related authority in data collection and research in the area of tourism to obtain reliable and on-time data for policy development. Supporting research into

tourism specific areas is also worth doing to find the issues and solutions.

- Promoting tourism related services like air transport, postal/telecommunication services, etc. in view of increasing their availability and decreasing their cost.
- Preventing deforestation in protected areas with harsh punishment on those who violate the law. This policy helps protect the environment of the national parks, and thus preserve the authenticity of the attractions, which are important for eco-tourism.
- Enhancing the quality of local products, mainly agricultural products, to replace the imported products used in the tourism sector. NGOs, governments, and the donors play vital roles in supporting the development of such policies. This support helps to reduce, if not eliminate, economic leakage. Promoting Cambodian products, such as silks and handicrafts, to be bought by tourists, will also help generate more income for local producers.
- Passing tourism laws and regulations to regulate tourism-related businesses, like hotels and restaurants, to prevent environmental pollution from hotels and restaurants.
- Establishing standards for hotel and restaurant ranking, to gain trust from international tourists. A body that deals with these standards should also be established.





## Lessons Learned from the Five Sectors

The studies of the five sectors are interesting cases to gain insight into the possibility for export diversification of Cambodia. Given their nature, the five sectors could be grouped into three important categories where Cambodia has potential for export earnings and employment generation. Organic rice, cashew nuts and rubber are of agricultural nature while silk represents the handicraft sector. Lastly, tourism is considered as the most promising service sector in Cambodia.

In the current context, conventional rice production in Cambodia is unlikely to be more competitive than in neighboring countries, especially Thailand and Vietnam, which are among the world's top rice producers. It may be a useful strategy for Cambodia to look at a niche market for rice exports. The organic rice sector in developed countries could be such a niche. A high potential for expanding the production of organic rice exists and a significant impact on farmers' incomes can be expected. According to the study, by converting from conventional to organic farming, farmers could increase their income by more than 65 percent. However, many farmers do not recognize this potential, which is mainly caused by two factors. The conversion period between the two agricultural systems takes three years. Usually, rice farmers are not able or at least reluctant in taking the entrepreneurial risks connected to such long periods. The second factor is that organic rice production is more labor intensive than conventional rice farming.

The cashew is another food crop of interest to Cambodia because of its increasing demand on international markets. However, the cashew industry is being handicapped by a lack of investment in processing. Investing in both cashew planting and processing is worth considering since the business offers reasonable returns. Currently, the Cambodian cashew production is highly dependent on the Vietnamese market, with 95 percent of the raw cashews being exported informally to this market. Developing competitive Cambodian based processors is necessary to avoid such dependency and to retain added value in the economy. If the raw cashew nuts are domestically processed for export, it will contribute to the creation of thousands of new jobs in mainly rural areas.

Rubber is believed to be an important industrial crop with a high potential for export earning. The rubber plantation provides three main benefits in today's lifestyle. Firstly, it offers latex to be processed into

industrial products, mainly tire and footwear, which are very important for the lifestyles of people in industrialized countries. Secondly, it provides wood based industries with wood as a raw material. Thirdly, it allows for the uptake of carbon dioxide. However, rubber plantation is a long term investment and the starting cost is high compared to other industrial crops. This makes it difficult for an average rural household to consider converting its land to rubber plantation. Similar to cashew nuts, Cambodian natural rubber relies heavily on the Vietnamese rubber market for export. Nonetheless, if the demand for rubber remains strong over the next five years and the price trend keeps going up, Cambodia's rubber industry will benefit greatly in the foreseeable future.

Cambodian silk is mainly a handicraft produced by households while silk in neighboring countries, especially Thailand and Vietnam, is machine based using high technology and standards. Cambodian silk is well known for its gold-colored yarn. However, Around 98 percent of yarns used by Cambodian weavers are imported primarily from Vietnam. If raw silk is domestically produced to meet total demand for yarns, this will have a tremendous impact on livelihoods of those who depend on raw silk. Due to limited production capacity, Cambodian silk products can only satisfy the domestic market and expatriate Cambodians. Nonetheless, silk products are believed to have a high potential for export, especially through tourists and the identification of niche markets. Cambodian silk fabrics and products could normally be exported to the US and EU with duty-free and quota-free.

Cambodia's most promising service sector is tourism, which has brought about jobs and incomes for many young Cambodians and contributes significantly to the economic development. Being rich in tourism resources, ranging from historical heritages, to culture, tradition and natural resources, Cambodia has a high potential in tourism industry. Promoting the country's image on the global stage would help attract more tourists to Cambodia. However, environmental problems should be seriously tackled, e.g. air pollution or damage to the ecosystems in tourist areas. Also worth highlighting is the fact that the benefit distribution from tourism is uneven and skewed to the non-poor. Due to lack of education, skills, capital and social networks, the poor who are usually part of tourism related jobs, could end up earning just adequate incomes, only allowing them to cover their daily subsistence expenses and are therefore likely to remain poor. The foreign owned assets in many tourism related businesses is also a major reason of the low industrial backward linkage.

It has been clear that each of the above mentioned sectors have their own potential for export earnings, which is a good sign for Cambodia's diversification. In addition, all the five sectors could be fair trade goods or services towards achieving sustainable development. Promoting organic rice/cashew nuts, eco-tourism and rubber as tools to reduce CO2 are just some examples. Nonetheless, Cambodia seems to lack an effective mechanism to support domestic producers or processors. Local SMEs are unlikely to enjoy government-provided incentives like garment factories, which receive various forms of incentives including import tax exemption and holiday tax on profit.

This lack of effective mechanism results in a number of cross-cutting issues, which create a bottleneck for Cambodia to explore diversification potentials. Often faced by export-oriented sectors, these common problems include:

- *Lack of domestic investments along the value chain, mainly in agro-industry for agricultural produces.* This is probably a symptom of the unattractive investment environment in the sector and uncompetitive production costs of some processes.
- *Strong dependency on neighboring countries for exports.* These exports are often done informally, which create uncertainty for domestic producers in terms of both demand and price.
- *No international standard recognition.* In many cases, most Cambodian products cannot be exported directly to consumer markets in developed countries because the quality standard of Cambodian products is not recognized in those countries. Inadequate marketing on the global scale is another reason.
- *Low skill and lack of know-how of Cambodian labor forces.* Most Cambodians can only operate basic production techniques. Usually, they do not want to shift from one production to another for which they lack the technical know-how.
- *High transportation and export cost.* The transportation and export costs in Cambodia are too high for its products to be competitive. Though improved, bureaucracy and red-tape remain major challenges for Cambodian exporters.
- *Limited access to finance, especially in rural areas.* Many Cambodian households still find it hard to access financing to expand their earning activities.

Assets as collateral are needed to get financing from the bank or MFI and the interest rate is also relatively high.

- *Poor enforcement of rules and regulations to protect business.* This limits the willingness of investors to invest or expand their business activities in the country.

## Recommendations

In order to be able to develop an action plan and to effectively promote export diversification in Cambodia, a number of recommendations are worth highlighting. Based on the study's findings, suggested recommendations include:

- *Promoting the investment (domestic and foreign) in the Agro-Industry:* Private sector participation in agro-industry is crucial for two reasons. Firstly, it will absorb the surplus of raw agricultural produces, whose exports depend very much on neighboring countries. By promoting the sector, Cambodia would be able to export higher value-added products rather than raw materials. Secondly, agro-industrial development would have a strong impact on both economic and human development since it has strong linkage with the agriculture sector in which a large majority of the Cambodian population derives their living. In this context, the creation of a favorable business environment is a pre-requisite condition.
- *Providing incentives to promote local producers and processors:* While SMEs play a significant role in promoting economic development and contributing to human development, the government should consider arranging incentives for local producers. These incentives shall comprise of fiscal incentives and government subsidies, which are permitted by the WTO, so called “Green box” subsidies<sup>17</sup>.
- *Supporting the development of market information:* Better access to market information, such as demand and price, would help Cambodians in assessing potentials of international markets. This would allow them to capture more opportunities for production based on international trends.
- *Supporting the creation of an accreditation agency that is internationally recognized:* It is important to ensure that Cambodian products are internationally recognized for their quality so as to meet the requirements of some potential importing partners.
- *Marketing the good image of Cambodia as well as its products on the global stage:* This can be done through frequent participation in international

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<sup>17</sup> The green box is defined in Annex 2 of the WTO Agreement on Agriculture. In order to qualify, green box subsidies must not distort trade, or at most cause minimal distortion. They have to be government-funded (not by charging consumers higher prices) and must not involve price support.

trade exhibitions. Through marketing promotion, more people will be aware of the good image, in terms of both quality and uniqueness of Cambodian products. Niche markets could be possibly identified, which will allow Cambodian products to find an easier way into international markets.

- *Developing Human Capital:* Human resource development is key for sustainable development. Enhancing basic education, especially among women and girls, would increase their possibility to participate more in the country's development process at both the microeconomic and macroeconomic levels. The development of relevant skills is thus necessary to increase the productivity and catch up with the fast-growing demand. Technical support to Cambodian producers is also helpful to strengthen the supply capacity.
- *Continuing the support of trade facilitation:* more effective trade facilitation would provide incentive for local producers, especially MSMEs to engage more in exports. With a reduced export cost and quicker export process, the competitiveness of Cambodian products would be improved to some extent. Deregulation and removal of red tape will help improve the incentives for farmers as well as intermediaries to export through formal channels rather than informal ones as currently is so often the case.
- *Improving access to finance:* Better access to finance with a minimized interest rate will provide an opportunity for local producers to expand their business and thus improve their production capacity in terms of quantity and quality. A rural banking program operated by the national bank may be a useful tool to increase financial access opportunities for rural people since such a program has proved successful in some developing countries such as Indonesia.
- *Ensuring the enforcement of rules of laws and regulations:* Guaranteeing the rule of law is critical in the sense that it makes business people feel confident that their investments are secured by state institutions. This is particularly the case of ownership rights, but also of competition laws which ensure a fair and transparent competition among producers.
- *Developing favorable trade and industrial policy to promote export-oriented sectors:* Finally, government support through the development of a favorable policy environment constitutes an important factor for Cambodian producers as well as exporters to overcome the above-

mentioned cross-cutting problems. In addition, a stable macroeconomic environment is also crucial to promote export growth and foreign capital inflows. Therefore, sensible macroeconomic policies, such as keeping low inflation, stable real exchange rate, etc. are worth establishing.

The table below outlines the policy-action matrix with responsible agencies, expected outcomes and challenges in promoting the export-oriented sectors. While the cross-cutting issues need to be tackled, some actions may be on the priority list for some specific sectors. There is no doubt that the implementation of such policy-actions might be resourceful and require strong commitments from relevant agencies, especially from the government in making necessary reforms. In addition, most of the policy actions necessitate a joint effort between several line agencies and it might take time to yield the outcomes.

**Policy-Action Matrix to Promote Export-Oriented Sectors**

<b>Policy Recommendations</b>	<b>Key Responsible Bodies</b>	<b>Expected Outcomes</b>	<b>Challenges</b>
1. Promoting investment (domestic and foreign) in the agro-industry.	- MIME - MAFF	- Reducing dependency on neighboring countries for export of raw produces. - Retaining domestic added value. - Creating more employment for Cambodians.	- High risk perception of the private sector on the Cambodian business environment. - Relatively high cost of fuel, electricity, transportation and export.
2. Providing incentives to promote local producers and processors.	- MIME - MEF - MAFF	- Reducing dependency on neighboring countries for export. - Reducing production cost for farmers and processors.	- Non-transparent administrative procedures. - Low salary of civil servants.
3. Supporting the development of market information.	- MoC - MAFF - Farmers' associations	- Putting farmers in a better bargaining position vis-à-vis traders. - Informing farmers about the trends of demand and seasonality.	- Lack of financial and human resources. - Low education level of Cambodian farmers.



4. Supporting the creation of an accreditation agency that is internationally recognized.	<ul style="list-style-type: none"> <li>- MIME</li> <li>- MoC</li> <li>- Chamber of Commerce</li> </ul>	<ul style="list-style-type: none"> <li>- Being able to issue locally certification of standard compliance.</li> <li>- Reducing the cost of certification.</li> <li>- Increasing market access opportunities for Cambodian products.</li> </ul>	<ul style="list-style-type: none"> <li>- Lack of financial and human resources.</li> <li>- No relations with international accreditation agencies.</li> </ul>
5. Marketing the good image of Cambodia as well as its products on a global scale.	<ul style="list-style-type: none"> <li>- MFAIC</li> <li>- MoC</li> </ul>	<ul style="list-style-type: none"> <li>- Introducing Cambodia and its products to the world.</li> <li>- Increasing market access opportunity for Cambodian products.</li> </ul>	<ul style="list-style-type: none"> <li>- Lack of financial and human resources.</li> </ul>
6. Developing human capital.	<ul style="list-style-type: none"> <li>- MoEYS</li> </ul>	<ul style="list-style-type: none"> <li>- Increasing proportion of Cambodian population that can access basic education.</li> <li>- Equipping Cambodian with professional/ technical skills.</li> </ul>	<ul style="list-style-type: none"> <li>- Lack of financial and human resources.</li> <li>- Low salary of teachers.</li> </ul>
7. Continuing the support of trade facilitation.	<ul style="list-style-type: none"> <li>- MEF</li> <li>- MoC</li> </ul>	<ul style="list-style-type: none"> <li>- Facilitating market access for Cambodian products.</li> <li>- Reducing export costs.</li> <li>- Reducing informal exports.</li> </ul>	<ul style="list-style-type: none"> <li>- Lack of financial and human resources.</li> <li>- Low salary of civil servants.</li> </ul>
8. Improving access to capital with low interest rate.	<ul style="list-style-type: none"> <li>- NBC</li> <li>- Commercial banks/ MFIs</li> </ul>	<ul style="list-style-type: none"> <li>- Reducing production costs.</li> <li>- Encouraging SMEs to expand their businesses or activities.</li> </ul>	<ul style="list-style-type: none"> <li>- High risk perception of the private sector on the Cambodian business environment.</li> <li>- High transaction cost of commercial banks/MFIs.</li> </ul>
9. Ensuring the enforcement of laws and regulations.	<ul style="list-style-type: none"> <li>- MoJ</li> <li>- MoC-NAC</li> </ul>	<ul style="list-style-type: none"> <li>- Ensuring that all stakeholders (farmers, traders, etc.) are treated equally.</li> <li>- Attracting more foreign investors into the country.</li> </ul>	<ul style="list-style-type: none"> <li>- Low salary of civil servants.</li> </ul>
10. Developing favorable trade and industrial policies to promote export-oriented sectors.	<ul style="list-style-type: none"> <li>- MEF</li> <li>- NBC</li> <li>- MoC</li> </ul>	<ul style="list-style-type: none"> <li>- Achieving a stable macro-economy.</li> <li>- Attracting more investors into the country.</li> </ul>	<ul style="list-style-type: none"> <li>- Long-term process.</li> <li>- Lack of financial resources.</li> </ul>

## Concluding Remarks

Cambodia has a high opportunity for diversifying its exports. This potential is confirmed by the country's abundance in resources both human and natural resources. Beside the garment exports, Cambodia can focus on many products and service for export. The products with potential for diversification range from agricultural to manufactured goods in which Cambodia has a comparative advantage. In addition, the recent discovery of petrol and gas and other mineral resources such as bauxite and iron ore are other hopes for Cambodia's future diversification. In terms of services, the focus for export earnings is most promising when looking at the tourism industry, before shifting to other high skilled service sectors in the more distant future. Moreover, Cambodia, due to its WTO membership and LDC status, has a high potential to access international markets.

In order to gain a better insight into the possibility for diversification, the study has made in depth analysis of five identified sectors, comprising of organic rice, cashew nuts, rubber, silk and tourism. The analysis shows that all the five sectors have a high potential for export diversification and the promotion of human development. However the extent to which a positive impact will materialize, will depend on the possibility to integrate the value-chain of each sector at the domestic level.

Notwithstanding the high potential, these opportunities have not been fully exploited since export diversification is typically constrained by a number of structural problems, which create bottlenecks for export from Cambodia. These problems include: (i) lack of domestic investments in agro-industry, (ii) dependency on neighboring countries for exports (iii) no international standard recognition for Cambodian products (iv) low skill of labor and lack of know-how (v) high transportation and export cost (vi) limited access to finance and (vii) poor enforcement of rules and regulations. To overcome these challenges, a number of recommendations are suggested as follow:

- Promoting the investment in the Agro-Industry.
- Providing incentives to promote local producers and processors.
- Supporting the development of market information.

- Supporting the creation of an accreditation agency that is internationally recognized.
- Marketing the good image of Cambodia as well as its products on a global scale.
- Developing Human Capital.
- Continuing the support of trade facilitation.
- Improving access to finance.
- Ensuring the enforcement of rules of laws and regulations.
- Developing favorable trade and industrial policy to promote export-oriented sectors.

While specific constraints do hinder the development of the sectors discussed in this study, removing overall structural problems will help Cambodia to a much larger extent in exploring its own path towards diversification, which will in turn contribute to the better livelihoods of many Cambodians.

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**World Tourism Organisation:** <http://www.wttc.org>

**World Travel and Tourism Council:** <http://www.world-tourism.org>

## Appendix 5

### List of the Project's National Reference Group

	Name	Title	Organization
<b>Government and Parliament</b>			
1	H.E. Chea Cheth	Chairman	Commission on Economy, Finance Banking and Audit, Senate
2	H.E. Mrs Khloth Tong Phka	Chairwoman	Commission on Social Welfare and Women's Affaires, Senate
3	H.E. Mrs Ky Lum Ang	Chairwoman	Commission on Trade, National Assembly
4	H.E. Mrs Keth Sam Ath	Under Secretary of State	Ministry of Women's Affairs (MoWA)
5	H.E. Mr. Tuon Thavrak	Director General	Ministry of Planning (MoP)
<b>Donors</b>			
6	Mr. Hin Wisal	Trade and Private Sector Analyst	UNDP-Cambodia
7	Mr. James Brew	Project Manager	International Finance Corporation (IFC)
8	Mr. Chea Huot	Country Economist	World Bank Cambodia
<b>Private Sector</b>			
9	Mr. Kim Savuth	President	Rice Miller Association
10	Mr. Ken Loo	General Secretary	Garment Manufacturer Association in Cambodia (GMAC)
11	Mr. Diep Leng	Deputy Director General	Phnom Prenh Chamber of Commerce
<b>NGOs, CSOs, Academic</b>			
12	Mr. Sok Hach	Director	Economic Institute of Cambodia
13	Mr. Chan Vuthy	Researcher	Economic Institute of Cambodia
14	Mr. Ros Khemara	Trade and Economic project officer	NGO Forum
15	Mr. Chea Mony	President	Free Trade Union of Workers of the Kingdom of Cambodia
16	Mr. Ath Thorn	President	Coalition of Cambodian Apparel Workers Democratic Unions
17	Mr. Ky Soklim	Reporter	Cambodge Soir





## Appendix 6

### Organic Rice

**Table A6.1: Status of Organic Rice Production in Cambodia**

Province	Transitional Year	2005		2006	
		Cultivated Area (ha)	Certified Production (ton)	Cultivated Area (ha)	Certified Production (ton)
Kampong Thom	T1	41	32	95	291
	T2	84	114	34	13
	To	415	563	248	136
Kampot	T1	316	599	22	488
	T2	187	395	210	89
	To	75	171	155	121
Battambang	T1	20	55	46	211
	T2	24	83	11	29
	To	8	30	36	43
Pursat	T1	12	30	97	419
	T2	182	542	41	24
	To	62	117	276	199
Total	T1	389	716	260	1,408
	T2	477	1,134	296	153
	To	560	881	715	500
<b>Grand Total</b>		<b>1,426</b>	<b>2,731</b>	<b>1,271</b>	<b>2,062</b>

**Source:** CEDAC. *External Inspection Report 2005-2006.*

**Table A6.2: Number of Farmers, Participating in Organic Rice Production**

Province	2005	2006
Kampong Thom	546	319
Kampot	420	309
Battambang	112	45
Pursat	193	233
<b>Total</b>	1,271	906

**Source:** CEDAC. *External Inspection Report 2005-2006.*

**Table A6.3: Cost Profile for Paddy Production**

	Unit	Conventional Paddy		Organic Paddy		Diff.
		Qty	US\$/ha	Qty	US\$/ha	
<b>Material/input Cost</b>			<b>99</b>		<b>59</b>	<b>(40)</b>
Seed	kg	80.0	12	80.0	12	-
Fertilizer	kg	100.0	34	-	-	(34)
Organic manure	ton	0.5	13	0.5	13	-
Chemical	litter	1.0	6	-	-	(6)
Land preparation	ha	1.0	35	1.0	35	-
Irrigation (pump hire)	hrs	-	-	-	-	-
Transport to mill	ton	-	-	-	-	-

<b>Labor Cost</b>			<b>42</b>		<b>59</b>	<b>17</b>
Land preparation	m/d	2.0	2	2.0	2	0
Organic manure	m/d	1.0	1	6.0	7	6
Fertilizer application	m/d	1.0	1	-	-	(1)
Nursery raising	m/d	10.0	10	15.0	17	7
Transplanting	m/d	12.0	12	12.0	14	2
Weeding	m/d	2.0	2	4.0	5	3
Chemical application	m/d	1.0	1	-	-	(1)
Irrigation/ water mg't	m/d	2.0	2	2.0	2	0
Harvesting	m/d	9.0	9	9.0	10	1
Threshing	m/d	2.0	2	2.0	2	0
<b>Total Cost</b>			<b>141</b>		<b>118</b>	<b>(23)</b>
<b>Total man days required</b>		<b>42.0</b>		<b>52.0</b>		-
Yield* (ton/ha)			2		2	-
Sale (US\$/ton)			144		173	29
<b>Gross Income</b>			<b>288</b>		<b>345</b>	<b>57</b>
<b>Net Income</b>			<b>147</b>		<b>228</b>	<b>81</b>

**Source:** *Cambodian Agrarian Structure Study for Conventional Paddy and Interviews with traders.*

**Note:** 1. To simplify the calculation, an average yield of 2 ton/ha is assumed for both conventional and organic paddy production. Yield of paddy production can be as low as 1.7 ton/ha in wet season and as high as 3.5 ton/ha in dry season.

2. US\$1 = 4000 Riel



## Appendix 7

### Cashew Nuts

**Table A7.1: Cultivated Areas by Selected Province (ha)**

Province	2001	2002	2003	2004	2005
Banteay Meanchey	427	1	8	75	206
Battambang	42	38	46	75	75
Kampong Cham	10,872	10,758	17,136	17,736	17,765
Kampong Chhnang	379	226	198	264	264
Kampong Speu	236	1,086	276	331	331
Kampong Thom	1,016	2,744	6,371	7,515	7,515
Kampot	5,796	305	576	612	612
Kandal	10	32	32	16	16
Kep	-	25	127	17	17
Koh Kong	873	894	608	964	1,486
Kratie	228	1,295	2,377	1,912	1,912
Mondolkiri	380	380	500	629	3,190
Oddar Meanchey	-	-	61	71	71
Pailin	-	5	-	-	-
Phnom Penh	2	2	5	2	2
Preah Vihear	132	18	100	445	570
Prey Veng	84	69	232	135	135
Pursat	326	334	445	750	750
Ratanakiri	15,848	16,485	6,505	16,990	21,562
Siem Reap	416	390	425	2,779	2,795
Sihanoukville	4	11	103	-	-
Stung Treng	83	81	253	260	328
Svay Rieng	312	136	581	265	306
Takeo	207	970	175	966	966
<b>Total</b>	<b>37,673</b>	<b>36,285</b>	<b>37,140</b>	<b>52,809</b>	<b>60,874</b>

**Source:** Ministry of Agriculture, Forestry and Fishery.

**Table A7.2: Investment Cost of Cashew Plantation in  
Ratanakiri-Smallholders 10 year Rotation**

Item	Unit	Year 1	Year 2	Year 3
<b>Production</b>	t	0	0	0.7
<b>Benefits</b>	US\$	<b>0</b>	<b>0</b>	<b>420</b>
<b>Input Costs</b>	US\$	<b>74</b>	<b>35</b>	<b>0</b>
Seedlings	US\$	4	0	0
Fertilizer	US\$	0	0	0
Chemical	US\$	35	35	0
Land preparation	US\$	35	0	0
<b>Total labor cost</b>	US\$	<b>86</b>	<b>46</b>	<b>26</b>
Total labor units	m/d	69	37	21
Planting	m/d	32	0	0
Weeding	m/d	21	21	0
Maintenance	m/d	16	16	6
Harvesting	m/d	0	0	11
Transportation	m/d	0	0	4
<b>Total Cost</b>	US\$	<b>160</b>	<b>81</b>	<b>26</b>
<b>Revenue</b>	US\$	<b>-160</b>	<b>-81</b>	<b>394</b>

**Source:** *Compile from Report on the Cambodian Agrarian Structure Study, August 2005.*

- Note:**
3. US\$793.75/ton seed price and 0.005t/ha
  4. US\$17.5/ha (presumably draft power use)-two operations= US\$35/ha
  5. Wage rate = US\$1.25/md

**Table A7.3: Production Cost of Cashew Plantation in Cambodia**

Item	Cost (US\$/ha)	% of Total cost
Fertilizers	98	47%
Pesticides	20	10%
<b>Input Cost</b>	<b>118</b>	<b>57%</b>
Weeding	26	13%
Labor cost on fertilizer & pesticide	4	2%
Labor cost on harvesting	60	29%
Other	0	0%
<b>Labor Cost</b>	<b>90</b>	<b>43%</b>
<b>Total Cost</b>	<b>208</b>	<b>100%</b>
<b>Yield (ton/ha)</b>	<b>0.9</b>	

**Source:** Author, Calculation based on interviews with Agro Star-Cashew Plantation Company and GTZ.

**Table A7.4: Cashew Processing Cost (US\$/ton of Cashew Kernels)**

Description	Cost (US\$/ton)	% of Total Cost
Raw cashew nuts*	3,000	78%
Other input cost (Fuel, etc.)	425	11%
<b>Input Cost</b>	<b>3,425</b>	<b>89%</b>
<b>Labor cost (\$)</b>	<b>425</b>	<b>11%</b>
<b>Total cost (\$)</b>	<b>3,850</b>	<b>100%</b>

**Source:** Author, Calculation based on interviews with KAP.

- Note:**
1. Conversion ratio 5:1 (5 ton of raw cashew nuts = 1 ton of cashew kernels).
  2. Price of raw cashew nuts: US\$600/ton.



**Table A7.5: Cashew Packaging Cost (US\$/ton of Cashew Kernels)**

Item	Cost (US\$/ton)	% of Total Cost	Remarks
Cashew Kernels	5000	87.6%	US\$5,000/ton
Sunflower oil	150	2.6%	2 liters/20kg
Salt	6	0.1%	0.3 kg/20kg
Brand	200	3.5%	US\$0.06/0.3kg
Plastic	230	4.0%	US\$0.07/0.3kg
<b>Input Cost</b>	<b>5586</b>	<b>97.8%</b>	
<b>Labor</b>	<b>125</b>	<b>2.2%</b>	US\$2.5/20kg
<b>Total cost</b>	<b>5711</b>	<b>100.0%</b>	

**Source:** Author, Calculation based on interviews with Cambodia Biological Company, October 2006.

## Appendix 8

### Rubber

**Table A8.1: Status of Rubber Production in Cambodia**

<b>Year</b>	<b>Cultivated Tapping (ha)</b>	<b>Dry Rubber (T)</b>	<b>Processing (T)</b>	<b>Kreb Rubber (T)</b>	<b>Replantation (ha)</b>
<b>1992</b>	50,891	28,312	0	0	0
<b>1993</b>	43,334	29,667	22,345	0	161
<b>1994</b>	42,575	30,585	19,067	18,596	216
<b>1995</b>	44,522	35,427	31,052	30,284	525
<b>1996</b>	44,400	43,890	42,079	45,100	1,138
<b>1997</b>	43,475	31,900	35,000	31,600	968
<b>1998</b>	40,585	34,280	36,210	34,756	1,155
<b>1999</b>	39,718	45,262	46,215	3,727	1,044
<b>2000</b>	34,095	42,370	42,007	40,067	1,798
<b>2001</b>	33,590	38,653	42,219	35,873	2,492
<b>2002</b>	29,119	32,704	38,911	36,774	2,959
<b>2003</b>	29,479	32,489	34,176	32,764	2,847
<b>2004</b>	23,787	26,056	30,611	26,029	4,454

**Source:** Ministry of Agriculture, Forestry and Fishery. 2006. *Statistics of Rubber*.



**Table A8.2: Investment Cost of 1 ha Smallholder Rubber Plantation (US\$) (1/2)**

Note	Items	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15
	<b>Profit</b>															
1	Yield	0	0	0	0	0	700	1,000	1,300	1,500	1,500	1,500	1,500	1,500	1,500	1,500
2	Price	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
	Profit	0	0	0	0	0	560	800	1,040	1,200	1,200	1,200	1,200	1,200	1,200	1,200
3	Inter-crops	250	250	250												
4	Rubber trees															
	<b>Total profit</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>0</b>	<b>0</b>	<b>560</b>	<b>800</b>	<b>1,040</b>	<b>1,200</b>	<b>1,200</b>	<b>1,200</b>	<b>1,200</b>	<b>1,200</b>	<b>1,200</b>	<b>1,200</b>
	<b>Cost</b>															
	Labor															
5	Planting	226	14													
6	Maintenance	113	181	130	111	93	32	32	32	32	32	32	0	0	0	0
7	Harvesting	0	0	0	0	0	240	240	240	240	240	240	240	240	240	240
	<b>Input</b>															
8	Plants	293	49	0	0	0	0									
	Fertilizer	40	40	60	80	120	0									
9	Chemicals	23	23	18	5	5	5	5	5	5	5	5	0	0	0	0
	Harvesting materials	0	0	0	0	0	66									
	Total labor	339	195	130	111	93	272	272	272	272	272	272	240	240	240	240
	Total input	356	112	78	85	125	71	5	5	5	5	5	0	0	0	0
	<b>Total cost</b>	<b>695</b>	<b>307</b>	<b>208</b>	<b>196</b>	<b>218</b>	<b>343</b>	<b>277</b>	<b>277</b>	<b>277</b>	<b>277</b>	<b>277</b>	<b>240</b>	<b>240</b>	<b>240</b>	<b>240</b>
	<b>Revenue</b>	<b>-445</b>	<b>-57</b>	<b>42</b>	<b>-196</b>	<b>-218</b>	<b>217</b>	<b>523</b>	<b>763</b>	<b>923</b>	<b>923</b>	<b>923</b>	<b>960</b>	<b>960</b>	<b>960</b>	<b>960</b>

**Source:** EIC (2006), compiled from General Directorate of Rubber Plantation.

Note: The calculation is based on the average investment cost of smallholders in Memot, Dambe, Tropang Russey, and Chamcar Leu districts

- 
- 1 The yield (dry rubber) obtained from interview. Dry rubber = 50% coagulum. (DRC 50)
  - 2 Price of dry rubber = 2\* price of coagulum. Coagulum price varies from 1,500-2,500 riel/kg. The recent price of coagulum is 1,600 riel/kg.
  - 3 Intercropping can be done twice a year during the first three years, with at least 1ton/ha and 1,100 riel/kg. The cost is assumed to be US\$150/ha. (Soybean & Mungbean)
  - 4 Rubber trees sold in the 30th year for 40,000 riel/tree, suppose that 60% of rubber trees remain.
  - 5 Planting includes: Land preparation, sticking, digging hole, gardening
  - 6 Maintenance includes: Weeding, fertilizer application, plant replacement, suckering, treatments
  - 7 Harvesting expense: US\$20/month/ha, 1 worker@3ha/month
  - 8 Plants: grafted & replaced plants, transport of plants
  - 9 Chemicals: all kinds of chemical used during the cycle, suppose from year 6 onwards the expense is US\$5/year

**Appendix A8.2: Investment Cost of 1 ha Smallholder Rubber Plantation (US\$) (2/2)**

Note	Items	Y16	Y17	Y18	Y19	Y20	Y21	Y22	Y23	Y24	Y25	Y26	Y27	Y28	Y29	Y30
	<b>Profit</b>															
1	Yield	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,200	1,200	1,200	1,200	1,200
2	Price	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
	Profit	1,440	1,440	1,440	1,440	1,440	1,440	1,440	1,440	1,440	1,440	960	960	960	960	960
3	Inter-crops															
4	Rubber trees															3,330
	<b>Total profit</b>	<b>1,440</b>	<b>1,440</b>	<b>1,440</b>	<b>1,440</b>	<b>1,440</b>	<b>1,440</b>	<b>1,440</b>	<b>1,440</b>	<b>1,440</b>	<b>1,440</b>	<b>960</b>	<b>960</b>	<b>960</b>	<b>960</b>	<b>4,290</b>
	<b>Cost</b>															
	Labor															
5	Planting															
6	Maintenance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Harvesting	240	240	240	240	240	240	240	240	240	240	240	240	240	240	240
	Input															
8	Plants															
	Fertilizer															
9	Chemicals	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Harvesting materials															
	Total labor	240	240	240	240	240	240	240	240	240	240	240	240	240	240	240
	Total input	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	<b>Total cost</b>	<b>240</b>	<b>240</b>	<b>240</b>	<b>240</b>	<b>240</b>	<b>240</b>	<b>240</b>	<b>240</b>	<b>240</b>	<b>240</b>	<b>240</b>	<b>240</b>	<b>240</b>	<b>240</b>	<b>240</b>
	<b>Revenue</b>	<b>1,200</b>	<b>1,200</b>	<b>1,200</b>	<b>1,200</b>	<b>1,200</b>	<b>1,200</b>	<b>1,200</b>	<b>1,200</b>	<b>1,200</b>	<b>1,200</b>	<b>720</b>	<b>720</b>	<b>720</b>	<b>720</b>	<b>4,050</b>

**Source:** EIC (2006), compiled from General Directorate of Rubber Plantation.

Note: The calculation is based on the average investment cost of smallholders in Memot, Dambe, Tropang Russey, and Chamcar Leu districts

- 
- 1 The yield (dry rubber) obtained from interview. Dry rubber = 50% coagulum. (DRC 50)
  - 2 Price of dry rubber = 2\* price of coagulum. Coagulum price varies from 1,500-2,500 riel/kg. The recent price of coagulum is 1,600 riel/kg.
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  - 7 Harvesting expense: US\$20/month/ha, 1 worker@3ha/month
  - 8 Plants: grafted & replaced plants, transport of plants
  - 9 Chemicals: all kinds of chemical used during the cycle, suppose from year 6 onwards the expense is US\$5/year

# **Part III**

## **Trade and Industrial Policy Environment in Cambodia**





## Introduction

As has been clearly demonstrated in part II “*Export Diversification and Value Addition in Cambodia*”, the five sectors, namely organic rice, cashew nuts, rubber, silk and tourism have a high potential to be connected to export markets. The first three sectors are agricultural produces, while the fourth and fifth ones belong to the handicraft and service sectors. The development of these sectors through a focused export strategy would support their sustainable development as well as create new employment, generate rural income and reduce poverty, thereby contributing to the achievement of human development objectives.

Nevertheless, these sectors will not develop on their own, and preserving the *status quo* would mean the continued loss of value addition, employment opportunities and rural income, as well as a slowing the pace of poverty reduction. Instead, the development of these sectors demands practical policies that are implemented effectively. These policies should be designed to address constraints applying to both supply and demand. The supply side refers to policies at the domestic level, while the demand side refers to trade negotiations with trading partners.

This study identifies supply-side constraints, and then proposes policies at the domestic level aimed at overcoming those constraints. It is the third study in a series, following an initial study on “*Cambodia’s Garment Industry Post-ATC: Human Development Impact Assessment*” and a second study entitled “*Export Diversification and Value Addition in Cambodia.*”

The constraints identified along with accompanying policy recommendations are organized here through two approaches. The first is a cross-sector approach which groups constraints and policy recommendations across all five sectors. The second approach is a sector-specific approach. It is appropriate to note that both approaches are equally important and reinforce one another. Therefore, policy recommendations already discussed in the cross-sector section will not be restated in the sector-specific sections. To what extent each potential sector develops will depend on to what extent both cross-sector and sector-specific recommendations are successfully implemented. Their effective execution will further encourage the development of the economy as a whole as a result of multiplier and spillover effects.

To this end, the report aims to answer the following questions:

- Why is Cambodia exporting raw products and re-importing final products?
- Why do sectors with potential exports continue to lose their value addition?
- What supply-side constraints are hindering export competitiveness and value addition in potential sectors?
- What domestic policies can effectively address the constraints on export diversification and value addition in potential sectors?

The report is organized into three main chapters. The first chapter provides an assessment of the trade and industrial policy environment in Cambodia by using a number of indicators developed by various organizations. The second chapter discusses constraints that commonly hinder development across the selected sectors. Policy recommendations are then proposed to address these constraints. The third chapter details the constraints and proposed policy recommendations applicable to individual sectors. Finally, the report concludes its findings and answers the above research questions.

## **Chapter 13**

### **Trade and Industrial Policy Environment in Cambodia: An Assessment**

The investment and business environment plays a crucial role in fostering private sector growth, which is the main engine of socio-economic development. Countries with better investment and business climates have experienced faster private sector growth. There are different organizations which have developed indicators for assessing national investment and business climates.

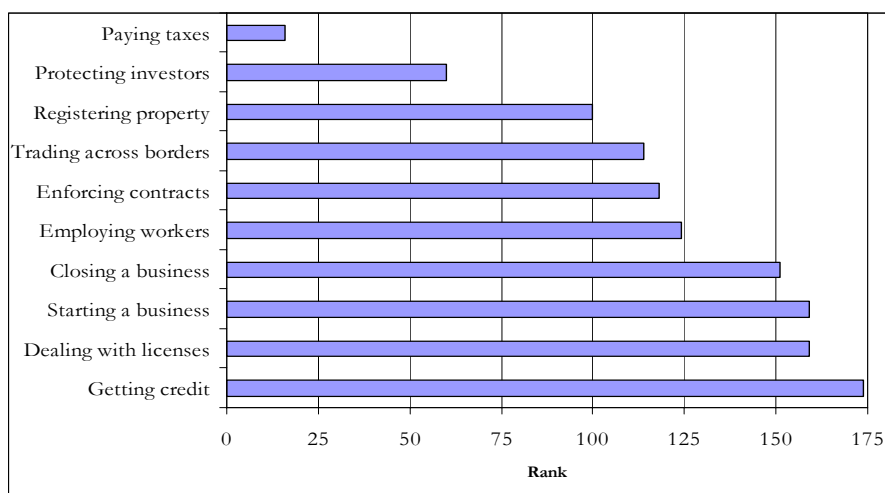
This chapter provides an assessment on the trade and industry policy environment in Cambodia based on three sources: the study on doing business by the World Bank, the Global Competitiveness of the World Economic Forum and the opinion survey on the most problematic factors for doing business in Cambodia by the Economic Institute of Cambodia (EIC). These three studies provide not only Cambodia's ranking in the world in terms of investment and business environment, but also what reforms Cambodia should prioritize to overcome its challenges.

#### **13.1. Doing Business in Cambodia**

The annual report of doing business, co-sponsored by the World Bank and IFC, provides a global ranking on the ease of doing business in numerous countries. The report presents quantitative indicators on business regulations and the protection of property rights in each nation. Ten indicators of business environment are examined in this report: starting a business, dealing with licenses, employing workers, registering property, getting credit, protecting investors, paying taxes, trading across borders, enforcing contracts and closing a business (See Appendix 9 for detailed information on each indicator). These indicators are used to analyze economic outcomes and identify what reforms have worked, where and why.

Cambodia's overall ranking of doing business was 143 out of 175 countries in 2006, though ranking in specific areas varies according to the following chart (Figure 13.1).

**Figure 13.1: Indicators of Doing Business in Cambodia in 2006**



**Source:** *The World Bank, "Doing Business" 2006.*

Cambodia scores best in ease of paying taxes (16<sup>th</sup>). Cambodia's total tax rate as percentage of profit is as low as 22.3 percent, compared with the East Asia & Pacific region and OECD country averages of 42.2 percent and 47.8 percent respectively. This low total tax rate results mainly from the fact that investors in Cambodia pay lower labour taxes and contributions relative to the East Asia & Pacific region and OECD countries.

Cambodia was ranked 60<sup>th</sup> in terms of protecting investors. This indicator measures the transparency of transactions, liability for self-dealing, shareholders' ability to sue officers and directors for misconduct, and strength of investor protection.

The country was ranked from 100<sup>th</sup> upwards for other indicators, marking weaknesses in existing regulations and law enforcement as well as existence of procedural and administrative bottlenecks.

Interestingly, getting credit in Cambodia was ranked as second worst on the list (174<sup>th</sup>). The ranking was based on the sum of the strength of legal right index and the depth of credit information index. The strength of the legal right index measures the degree to which collateral and bankruptcy laws protect the rights of borrowers and lenders, thus facilitating lending. The legal rights index evaluates the design of collateral and bankruptcy laws. Cambodia scored 0 out of 10 on this legal rights index.

Cambodia likewise scored a 0 on the credit information index which, measures rules affecting the scope, accessibility and quality of credit information available through either public or credit registry agencies.

**Table 13.1: Ease of Getting Credits**

Indicators	Cambodia	Region*	OECD
Legal right index (0-10)	0	5.0	6.3
Credit information index (0-10)	0	4.4	5.0

**Source:** *The World Bank, Doing Business 2006.*

\* Region refers to East Asia & Pacific region.

## 13.2. Competitiveness of Cambodia

The World Economic Forum (WEF) annually ranks the countries' competitiveness based on an opinion survey with leading companies in participating countries. In 2006, Cambodia ranked 103<sup>rd</sup> out of 125 countries, behind all other participating countries in East Asia and the Pacific region, except Timor-Leste (122<sup>nd</sup>). This competitiveness ranking was determined by nine pillars, gathered into three main groups: basic requirements, efficiency enhancers, and innovation and sophistication (Table 13.2).

**Table 13.2: Countries' Ranks in the Global Competitiveness Index 2006-2007**

	Bangladesh	Cambodia	China	Indonesia	Thailand	Vietnam
<b>GCI 2006</b>	<b>99</b>	<b>103</b>	<b>54</b>	<b>50</b>	<b>35</b>	<b>77</b>
<b>Basic Requirements</b>	<b>96</b>	<b>100</b>	<b>44</b>	<b>68</b>	<b>38</b>	<b>71</b>
1-Institutions	121	95	80	52	40	74
2-Infrastructure	117	97	60	89	38	83
3-Macroeconomy	47	101	6	57	28	53
4-Health & Primary Education	90	98	55	72	84	56
<b>Efficiency Enhancers</b>	<b>108</b>	<b>110</b>	<b>71</b>	<b>50</b>	<b>43</b>	<b>83</b>
5-Higher education & training	108	110	77	53	42	90
6-Market efficiency	83	99	56	27	31	73
7-Technological readiness	114	105	75	72	48	85
<b>Innovation Factors</b>	<b>104</b>	<b>102</b>	<b>57</b>	<b>41</b>	<b>36</b>	<b>81</b>
8-Business sophistication	96	100	65	42	40	86
9-Innovation	109	98	46	37	33	75

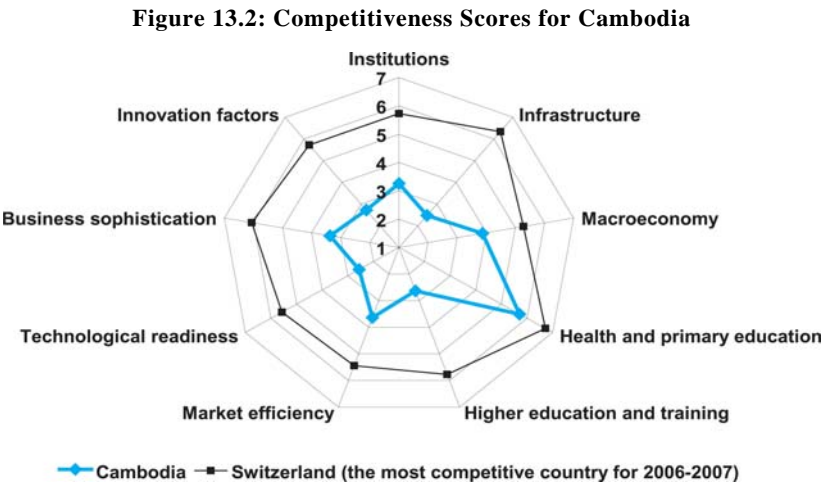
**Source:** *WEF, Global Competitiveness Report 2006-2007.*

Basic requirements for growth comprise four pillars: public and private institutions, infrastructure, macro economy and health and primary education. The WEF considers all of these to be critical elements for maintaining national competitiveness in countries at a similar stage of development to Cambodia. Under these criteria, Cambodia is unlikely to outperform other benchmarked countries such as Bangladesh, China, Indonesia, Thailand and Vietnam, all of which received higher scores in every category.

The group of efficiency enhancers for growth measures how a country builds upon its productivity gains in a more sophisticated economic framework. This factor is formed by three pillars: higher education and training, market efficiency and technological readiness. In this context, Cambodia and Bangladesh stood close to each other, but far behind other benchmarked countries.

The last group of innovation and sophistication includes two pillars: business sophistication in production processes and innovation. Both Cambodia and Bangladesh have a long way to go before achieving high scores in these areas. China and Vietnam are moving forward while Thailand and Indonesia are pioneering in this area.

Comparing scores across pillars revealed that four pillars have higher deficiencies than others. Those include infrastructure, higher education and training, technological readiness and innovation factors. These pillars received scores below 3 (Figure 13.2). Scores range from 1 to 7, with higher scores indicating better performance.

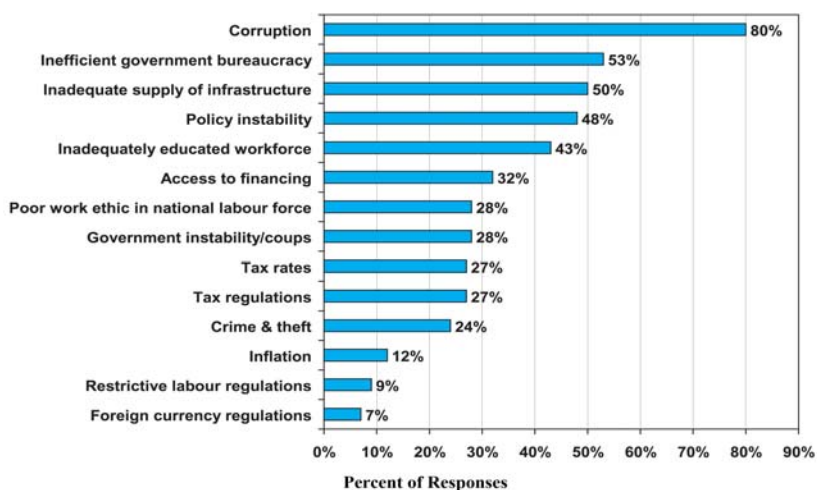


Source: WEF, *Global Competitiveness Report 2006-2007*.

### 13.3. Most Problematic Factors of Doing Business in Cambodia

EIC conducts an annual executive opinion survey with over 100 business executives to understand the factors impeding private sector growth. From a list of 14 factors cited in Figure 13.3, respondents are asked to select the five most problematic factors for doing business in Cambodia. The results of the latest survey in 2006 revealed that an overwhelming 80 percent of executives interviewed acknowledge corruption among the five most problematic factors of doing business in Cambodia. Corrupt practices have been observed in connection with the use of public services and, more specifically, with receiving judicial decisions and import-export permits. Inefficient government bureaucracy is identified as the second major constraint for their business, followed by inadequate supply of infrastructure, policy instability and an inadequately educated workforce.

**Figure 13.3: Most Problematic Factors for Doing Business in Cambodia**

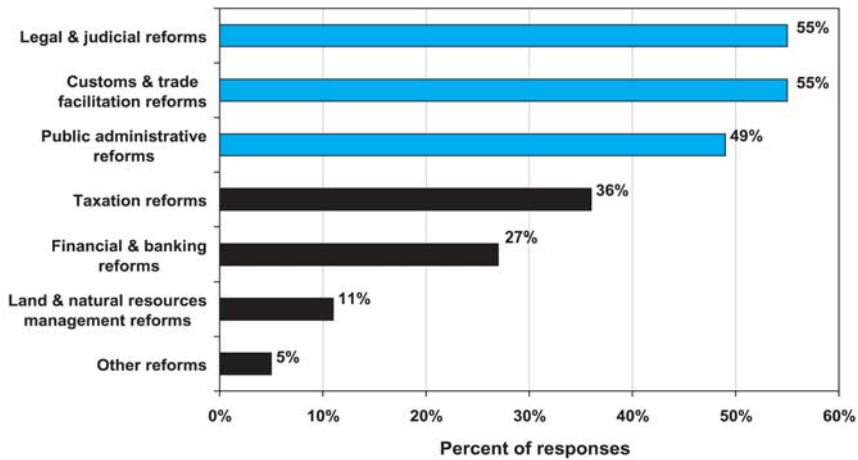


**Source:** EIC, *Executive Opinion Survey 2006-2007 in Cambodia*.

The same respondents were also asked to provide opinions on what priority reforms should be made to improve the business environment. From the list of seven reform areas, respondents were asked to select the three reforms most critical for their businesses. The results from the 2006 survey suggest that legal and judicial reforms, custom and trade reforms, and public administrative reforms are the top priorities.



**Figure 13.4: Critical Reform for Business in Cambodia**



**Source:** EIC, *Executive Opinion Survey 2006-2007 in Cambodia*.

#### **13.4. Government's Actions to Improve Trade and Industry Policy Environment**

The Royal Government of Cambodia has made impressive efforts to improve the business and investment environment in the country. The ultimate objectives are to promote trade and investment for job creation, poverty reduction and better living standards for Cambodian people.

The Government, with assistance from development partners, has formulated a number of policies and strategies to meet these needs. Major policies which have been implemented or are being developed are summarized in Box 13.1.

### **Box 13.1: Government's Major Policies Relevant to the Improvement of Trade and Industrial Policy Environment in Cambodia**

#### **1. The Royal Government's Rectangular Strategy**

The Rectangular Strategy, a political platform for the third mandate of the RGC, focuses strongly on administrative, legal and judicial reform, and fighting corruption. The Rectangular Strategy has four main angles: i) Enhancement of agriculture sector; ii) Further rehabilitation and construction of physical infrastructure; iii) Private sector development and employment generation; and iv) Capacity building and human resource development.

#### **2. National Strategic Development Plan 2006-2010**

The National Strategic Development Plan 2006-2010 is a single, overarching document containing the Government's goals and strategies to reduce poverty and to achieve other objectives set by various policy documents including the Cambodian Millennium Development Goals, and the Socio-Economic Development Plans, National Poverty Reduction Strategy and Governance Action Plans. Based largely on the Rectangular Strategy, this plan has multiple objectives including developing the private sector, physical infrastructure, and quality of education. It also deals with eliminating corruption to improve governance.

#### **3. SME Development Framework**

The Royal Government of Cambodia developed an SME Framework in 2005 to promote SME activities in the market economy. The framework identifies the main obstacles to SME in relation to the legal and regulatory framework, access to finance, and support services in the form of private sector business development services. It also lays out actions to be taken to deal with these main obstacles.

#### **4. Cambodia's Diagnostic Trade Integration Study**

The Ministry of Commerce, with support from the UNDP, has been conducting a Diagnostic Trade Integration Study (DTIS) since 2006. The DTIS has a number of objectives: i) Identify and assess export potentials; ii) Develop sustainable human resources; iii) Strengthen the legal and institutional environment for competitiveness; iv) Remove constraints to development; and v) Propose tools for implementation.

#### **5. The Twelve-Point Plan to Improve Investment Climate and Trade Facilitation**

The Prime Minister appointed a Special Inter-Ministerial Task Force (SITF) to respond to the findings of the Investment Climate Assessment. In June 2004, the SITF defined and integrated a program of reform to reduce unofficial costs and clearance times while increasing public revenue. This was articulated in twelve immediate objectives. It determined to create a cross-agency Reform Team, consolidate inspection mandates across agencies, introduce selective inspection based on risk criteria, reduce documents to a Single Administrative Document, introduce a Single Window process, and reengineer and automate procedures.

#### **6. Trade Facilitation and Competitiveness Project 2005-2009**

The Cambodia Trade Facilitation and Competitiveness Project, funded by the World Bank, aims to support the recipient's strategy to promote economic growth by reducing transaction costs associated with trade and investment, introducing transparency in investment processes, and facilitating access of enterprises to export markets. The project consists of the following four components: i) Trade facilitation; ii) Export market access fund; iii) Private participation in infrastructure and investment; and iv) Legal transparency.

#### **7. National Export Strategy 2007-2010**

The Internal Trade Center (ITC) is assisting the Ministry of Commerce to prepare a National Export Strategy for 2007-2010. The document identifies constraints and proposes strategies for export development in several sectors including garment and textile, fisheries, organic agriculture, silk and tourism.

**Source:** *EIC, compiled from various sources*



## **Chapter 14**

### **Cross-Sector Approach: Constraints and Policy Recommendations across Five Sectors**

This chapter identifies the major issues which are impeding or will impede the development of the five selected sectors and proposes policy recommendations to overcome these constraints. It provides a broad overview of limitations across all five sectors, before assessing specific impediments related to each individual sector in Chapter 15.

In the context of this study, seven major issues are identified in order to examine how they are obstructing or will obstruct the development of each sector. The selection of these issues is based on the contents of various academic papers as well as consultations with stakeholders. In particular, the initial analysis of “Cambodia’s Garment Industry Post-ATC: Human Development Impact Assessment” and the subsequent study on “Cambodia’s Export Diversification and Value Addition” have been incorporated into this report.

The seven major issues are:

- i) Fuel prices
- ii) Access to credit
- iii) Infrastructure
- iv) Investment incentives
- v) Anti-competitive practices
- vi) Trade facilitation and governance
- vii) Standards and certifications

Clearly these significant issues are not only reducing the competitiveness of individual sectors, but also that of the country as a whole.

#### **14.1. Fuel Prices**

Cambodia imports most of its gasoline and diesel from Singapore. The retail prices of these fuels in Cambodia, which play such an important role in

the supporting industries of the various sectors, are much higher than in neighboring countries Thailand and Vietnam. The inflated price of gasoline and diesel is diminishing cost competitiveness at various stages of the value chain, such as processing and transportation. It is a major factor leading investors to consider putting their assets into countries with more favorable fuel prices than Cambodia's. By January 2007, the retail price of regular gasoline in Cambodia was US\$0.96 per liter, while in Thailand and Vietnam it was only US\$0.68 and US\$0.65 respectively. Likewise, the January 2007 retail price of regular diesel was US\$0.79 per liter in Cambodia, but only US\$0.57 and US\$0.55 in Thailand and Vietnam. The retail prices are based on average spot prices.

Figure 14.1 demonstrates clearly comparative price structures in the three countries. Import costs at Singapore FOB are US\$0.39 and US\$0.42 per liter for gasoline and diesel respectively, which are the same prices as those fuels at refinery cost in Thailand. For the sake of comparability US\$0.03 per liter may be added to the import costs of gasoline and diesel in Cambodia's case. This sum is considered to be the transportation cost from Singapore to Cambodia's port. Thus, Cambodia's import costs (CIF) go up to US\$0.42 and US\$0.45 per liter for gasoline and diesel respectively.

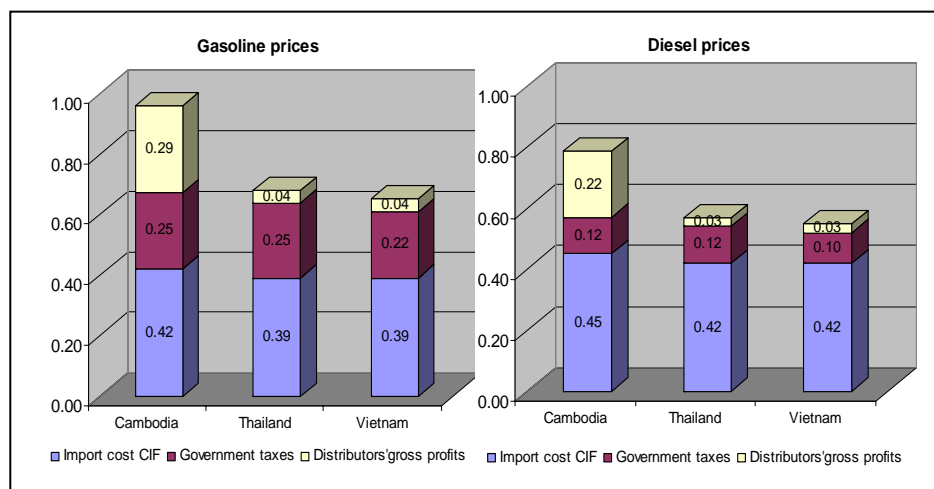
Based on various government sources, we estimate the amount of tax received by the state from gasoline and diesel sales in Cambodia to be US\$0.25 per liter and US\$0.12 per liter respectively. Official data from Thailand revealed similar rates of government taxation to those in Cambodia. It is important to note that we have included in this calculation all charges levied by the state of Thailand; for example, oil funds and conservation funds.

In the case of Vietnam, only retail prices were available for the study, owing to a lack of official sources relating to government taxation and refinery costs. Thus, we make an assumption that price structures in Vietnam are similar to those in Thailand, in terms of refinery costs and distributors' gross profits.

Figure 14.1 shows that the major factor causing the significant differences in prices between Cambodia and neighboring countries is the distributors' gross profits. Distributors' gross profits in Cambodia are estimated at US\$0.29 per liter for gasoline and US\$0.22 per liter for diesel. In Thailand and Vietnam, distributors' gross profits are estimated at US\$0.04 per liter and US\$0.03 per liter for gasoline and diesel respectively. The gross distributors' profits are derived from retail prices minus import costs and government taxation.

In spite of the aforementioned lack of official sources, we estimate that Vietnamese government taxes levied on gasoline and diesel are lower than those in Cambodia and Thailand.

**Figure 14.1: Price Structure of Fuels in Cambodia, Thailand and Vietnam in January 2007 (US\$ Per Liter)**



**Source:** EIC, compiled from Cambodian government sources, Energy Information Administration (USA), Energy Policy and Planning Office (Thailand), Interviews with fuel importers, and EIC estimates.

**\*Note:** Vietnamese refinery cost and distributors' gross profits are assumed equivalent of Thailand's due to lack of public information.

## Policy Recommendations

It is clear that policies to deal with government taxes and particularly competition are urgently needed in order to reduce fuel prices. It is also recommended to explore the possibility of alternative sources of energy.

First, the Government could consider reducing the taxes they levy on both gasoline and diesel to at least the same level as those in Vietnam. This option would of course pose a challenge for the government since it would decrease state revenues in the short-term.

Next, the Government should reduce the gross profit margins of distributors by fostering increased competition. Competition laws and policies should be well established and effectively enforced.<sup>1</sup> The Government has already made a commitment to the WTO regarding establishing such laws.

<sup>1</sup> There is draft version of competition law which was recently prepared by Ministry of Commerce.

Once the law and policy have been established, their implementation should be carried out by an effective competition authority or committee.

The Government should also establish an Energy Policy and Planning Office (EPPO) such as in Thailand, responsible for monitoring prices on a daily basis. The information gathered by this system could be posted on its website. Price structures (past, present and forecasted) including import costs, government taxes and distributors' gross profits could also be made available. This would result in greater competition among distributors and would prove attractive for investors.

Lastly, the Government should consider exploring the possibility of alternative sources of energy which are particularly beneficial for consumers. In Cambodia, two feasible alternative sources are bio-fuels and hydropower. The country already has raw materials such as sugar cane, palm oil and cassava which can be turned into bio-fuels. Likewise, Cambodia has a number of hydropower sites that can generate substantial electricity. However, few hydropower sites are currently exploited.<sup>2</sup> The critical challenge lies in how to attract investments in both areas.

In this early stage, the bio-fuel and hydropower development program should be developed and executed by a particular committee. A specific package of incentive policies should be prepared to support such an ambitious program. Those policies would include matters relating to the cultivation of land, infrastructure, processing, marketing and funding.

## **14.2. Access to Credit**

The inability of SMEs and farmers to access credit under favorable conditions is a further constraint to export growth. This is mainly due to high interest rates and a lack of collateral. It is noteworthy that commercial banks grant relatively large loans with strict conditions regarding collateral which act as the barriers for SMEs and farmers. By contrast, MFIs provide comparatively small loans with more relaxed strictures on collateral. Commercial banks are concentrated in the capital city and major provinces, while MFIs may be found more evenly spread throughout rural areas.

In some areas the availability even of MFIs is also limited. Some farmers requiring credit to purchase production inputs are suffering because

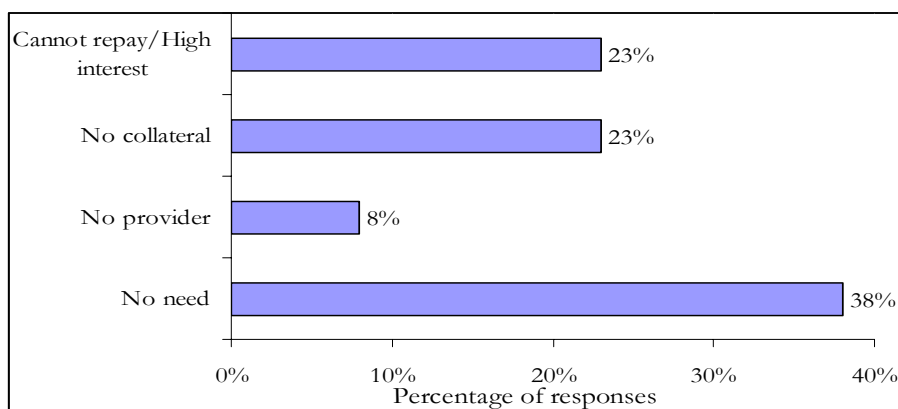
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<sup>2</sup> Based on EAC, it is estimated that hydropower in Cambodia can potentially produce about 10,000 megawatts of electricity, but currently only about 13 megawatts are exploited from just two hydropower sites. Presently, 13 hydropower sites are identified, which are equivalent to about 2,000 megawatts.

of the lack of formal credit providers. Many of them have no choice but to utilize the informal credit services offered by money lenders, which are as a rule extremely expensive, or even exploitative.

Figure 14.2 evidently confirms that farmers in need of credit face barriers to formal access due to three outstanding reasons: high interest (23 percent), lack of collateral (23 percent) and no formal credit providers (8 percent).

**Figure 14.2: Reasons for Not Taking Formal Credit**



**Source:** EIC's survey of farmers (September-December 2005).

The interest rates charged by MFIs have declined from about 10 percent per month to between 3-3.5 percent per month. However, even following this decline, the interest on such loans remains high by international standards and relative to business profitability in rural areas.<sup>3</sup>

Table 14.1 lists the factors responsible for the currently high interest rates. Operating costs, accounting for between 18 to 20 percent of the outstanding portfolio, are inflated by the high unit cost of operation associated with small loans, poor infrastructure and the high cost of energy.

<sup>3</sup> EIC (2006): "Microfinance as a Tool for Poverty Reduction in Cambodia". Economic Review Vol. 11, March 2006. Phnom Penh, Economic Institute of Cambodia.



**Table 14.1: Average Costs of MFIs in Cambodia**

Item	Costs ( Percentage of outstanding portfolio )
Operating costs	18-20
Cost of funding	6-8
Inflation	3-4
Loan loss	2-3
<b>Total cost</b>	<b>29-35</b>

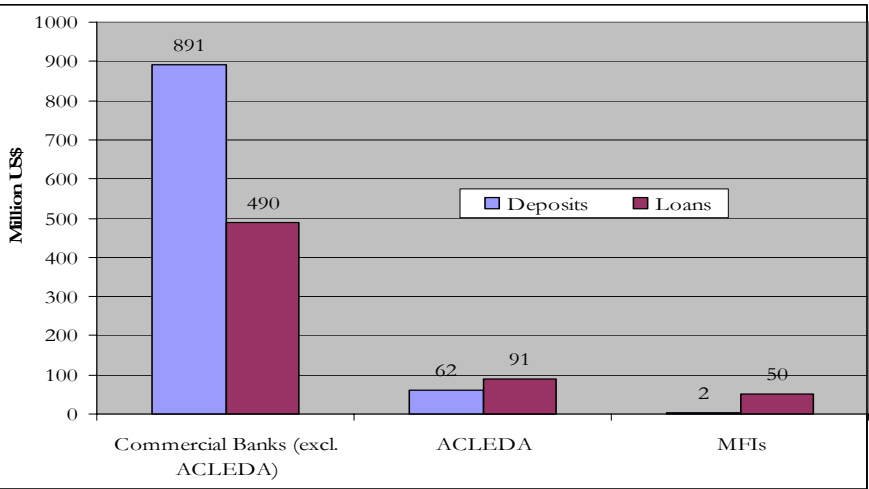
**Source:** *Cambodian Microfinance Association (2006)*

The high cost of funding can be explained by the fact that MFIs are heavily dependent on external funding. Most MFIs borrow from abroad paying, on average, interest of around 10 to 12 percent per annum, including withholding tax on payments. The interest rate is high due to high country risk premiums, while banks in other countries with lower country risk premiums enjoy a lower interest rate. MFIs have failed to shift to local funding sources. Local savings represent only about four percent of MFIs' loan portfolio, while local savings in commercial banks significantly exceed loans. Lack of confidence in microfinance institutions is the main reason behind this failure. Consequently, MFIs have been unable to utilize the commercial banks' excess deposits (Figure 14.3). As a result, Cambodia still pays millions of dollars per annum to foreign investors for external funding sources.

In 2000, ADB approved US\$20 million under the Rural Credit and Savings project aiming at on-lending to agricultural and other income-generating activities of the rural poor. The Rural Development Bank (RDB) has been commissioned to manage these funds and provide loans to MFIs. MFIs then on-lend to smaller borrowers. RDB is a public financial institution and an autonomous organization authorized to process all banking operations and loan services. However, slow disbursement led to the cancellation of US\$14.8 million of the loan in December 2002. The slow disbursement was caused by several factors. First, due strict requirements set by ADB, RDB has only three eligible clients. Second, RDB charged an annual interest rate of 12 percent on US dollar loans, including four percent for its services.<sup>4</sup> Its loans were therefore unattractive to eligible borrowers who have access to external funds.

<sup>4</sup> ADB (July, 2003), "Program Performance Audit Report on the Agriculture Sector Program in Cambodia".

**Figure 14.3: Commercial Banks' Excess Deposits and MFIs' Funding Shortfall**



**Source:** NBC (2006), "Microfinance," January 2006.

**Note:** ACLEDA is a commercial bank that also provides small loans to SMEs and individuals. It was upgraded from MFI status in December 2003.

As a general rule in Cambodia, only real estate may be used as collateral for loans. There is no commodity-based collateral system in place, which contrasts unfavorably with many other countries where systems of this nature are often well developed.

**Policy Recommendations**

The policy recommendations suggest several possible ways of reducing interest rates and some alternative options regarding loan collateral.

***Reducing Interest Rates***

If the current transaction model (Figure 14.4) is examined closely it will become clear that interest rates could be reduced substantially by cutting out intermediaries. At the national level, Cambodia is wasting millions of dollars of its own money. Figure 14.4 shows that the NBC receives interest at a rate of 5.44 percent per annum (SIBOR rate) on its deposits in overseas banks.<sup>5</sup> However, MFIs pay interest at rates between 10-12 percent (including withholding tax<sup>6</sup>) on the money they borrow from foreign investors. Thus, it is estimated that the country is losing up to 6.56 percent in

<sup>5</sup> Singapore Inter-Bank Offer Rate (SIBOR) = 5.44 percent per annum is based on spot value on 30 January 2007.

<sup>6</sup> Withholding tax is 14 percent of interest payment.

interest per annum on its own money. It is worth noting that commercial banks are not permitted to invest their clients' deposits overseas.<sup>7</sup> Instead they are allowed to place their excess deposits at NBC, for which they receive interest at 4.1 percent per annum.<sup>8</sup> Figure 14.4 also shows the transactions among local financial actors which are not yet optimized.

Three alternative models are proposed in Figure 14.5. All involve removing foreign intermediaries, such as overseas banks, from the equation. In Alternative 1, the commercial banks would need to increase the amount of money they lent to SMEs and individuals, and local savings and deposits with MFIs should be optimized. SME's access to loans from commercial banks can be achieved through fulfilling several necessary conditions including the establishment of an effective SME financial reporting system and the development of a credit information system. Increased local savings and deposits with MFI can be done through building strong images of the institution to win public trust, thereby promoting marketing on savings and deposit accounts and diversifying saving and deposit options.

Given the current excess deposits held by commercial banks, Alternative 2 recommends that a substantial portion of local savings and deposits are shifted from these to MFIs. Alternatives 1 and 2 are both intended to eliminate the wasteful system whereby the NBC invests Cambodian people's money overseas at a low interest rate, while MFIs are compelled to borrow funds from foreign banks at inflated interest rates. Potentially, both alternatives could reduce the current interest rate deficit by up to 7.9 percent per annum. The implementation of Alternative 2 would require substantial trust-building between the commercial banks and MFIs. A special guarantee arrangement between MFIs and commercial banks would need to be initiated, in order to minimize the risks faced by the banks. Inter-bank markets should also be established. In addition, the NBC could intervene by putting in place the legislation which would require the commercial banks to provide a minimum loan to MFIs at a favorable interest rate.

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<sup>7</sup> According to Prakas on "Source against deposits for domestic investments of financial institutions" issued on 28<sup>th</sup> August 1998, by National Bank of Cambodia (NBC).

<sup>8</sup> According to Prakas on "Determining interest rate for fixed-term deposit at National Bank of Cambodia" issued on 9<sup>th</sup> January 2003, by NBC, commercial banks receive interest rates at 6/8 of SIBOR for deposits at NBC. 6/8 of SIBOR is equal to 4.1 percent based on spot value on 30 January 2007.

Alternative 3 recommends that instead of investing outside the country, the NBC should consider increasing the loans it provides to MFIs, with less strict conditions.<sup>9</sup>

### ***Commodity-Based Collateral System***

In Cambodia, only real estate can be used as collateral for obtaining credit. A commodity-based collateral system is not yet developed in the country, by which agricultural products, for instance, could be used as vehicle to access financing. This is common practice in many countries. Cambodia could consider the following practices already tried in other nations.

With proper warehousing and collateral system management system in place, farmers or traders can use their commodities to make deposits or accounts expressed in kilos and tons of produce that they have deposited in a safe warehouse where they receive warehouse receipts as evidence of their commodity deposits. Farmers or traders then use warehouse receipts to obtain cash in banks. This system allows farmers greater control over making decisions, because they are no longer forced to sell directly after harvesting at the prevailing price in order to meet their cash flow needs. Instead, they can store their produce to wait for a better time and also obtain financing against their stocks.<sup>10</sup>

Similar arrangements could ideally be initiated in Cambodia via commercial banks, MFIs, SMEs and/or warehouse owners. Warehouses would have to begin accepting commodity deposits from SMEs and farmers. Then SMEs and farmers could utilize warehouse receipts as collateral to access credit from banks.

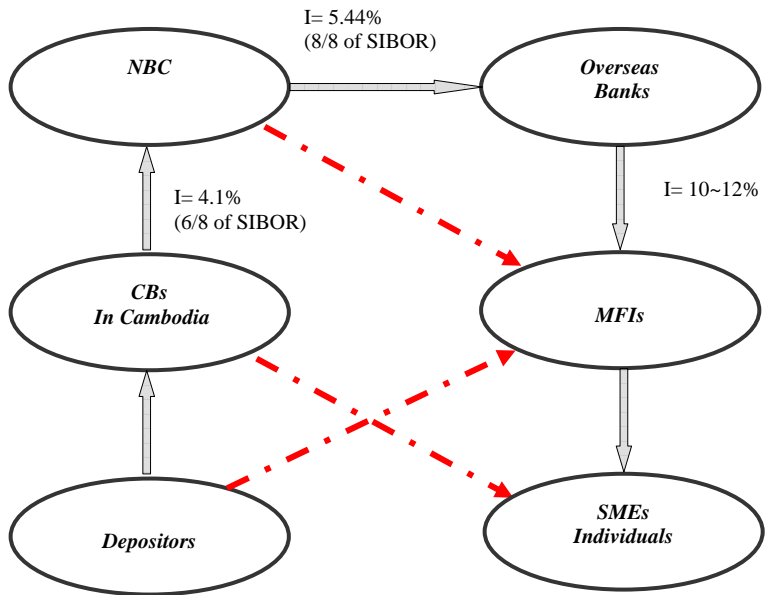
Though this initiative is typically driven by the private sector, in Cambodia it would need some minimal support from the Government and donors. The Government should introduce new legislation, such as a Warehouse Receipt Act, to provide a clear legal and regularity framework for the system. It should ensure that laws and regulations that exist are equitably enforced. Donors could play a role in supporting technical assistance and establishing dialogues with the private sector regarding this initiative.

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<sup>9</sup> The consultation with NBC revealed that it currently provides loans to only two MFIs at a 6% interest rate (in Cambodian Riel) per annum, with very strict and special conditions. The CMA also cited that conditions should be less strict.

<sup>10</sup> Adapted from "Report of the Expert Meeting on Financing Commodity-Based Trade and Development: Innovative Financing Mechanisms" UNCTAD, November 2004, Geneva.

**Figure 14.4: Current Model of Loan vs. Deposit Transactions in Cambodia**



**Source:** EIC, compiled from NBC, CMA and EICs estimates.

— ➔ : Transactions not yet optimized

*NBC: National Bank of Cambodia*

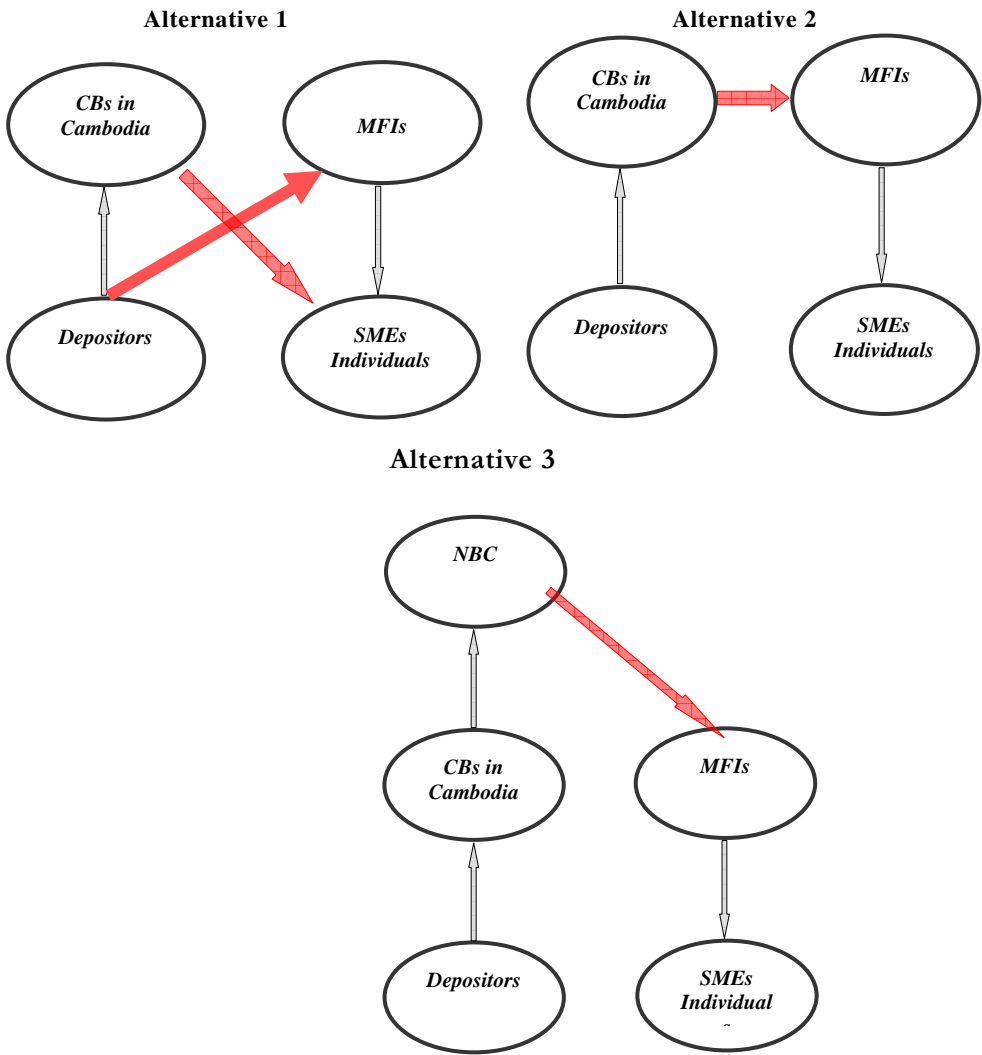
*CB: Commercial Banks*

*MFI: Microfinance Institutions*

*SME: Small and Medium Enterprises*

*Individuals - includes farmers*

Figure 14.5: Alternative Models of Loan vs. Deposit Transactions in Cambodia



Source: EIC based on various sources and consultations.

➡ : Transactions to be established and optimized.

### 14.3. Infrastructure

Infrastructure plays an important role in connecting all players along the value chain. Favorable infrastructure facilitates linkages among farmers, producers, processors and exporters, thereby reducing transaction costs, while poor infrastructure presents a key obstacle.

Cambodia's infrastructure is commonly cited as being unfavorable and a hindrance to increased trade and industrial development. Roads, railways and waterways suffer from insufficient maintenance, degradation from floods, and a chronic lack of investment, all in the face of increasing usage. Cambodia has the most poorly developed road network in the region, with the smallest percentage of paved roads.<sup>11</sup> Other infrastructure services such as access to electricity, telephony and the internet are also limited compared to other countries in South-East Asia (Table 14.2).

**Table 14.2: Infrastructure in South East Asia**

	Electricity Access (%)	Telephone Access (%)	Paved Roads (%)
<b>Cambodia</b>	<b>17</b>	<b>8</b>	<b>7.3</b>
Indonesia	55	13	58
Malaysia	97	62	76
Philippines	79	31	22
Thailand	84	50	97
Vietnam	81	9	25

**Source:** EIC, compiled from ADB et al (2005) "Connecting East Asia", JICA's study "The Road to Development in the Kingdom of Cambodia" (July 2006), Annual report of MPTC (2006).

In addition, a private sector opinion survey conducted by the World Economic Forum also revealed that the quality of Cambodia's infrastructure, including railways, port facilities, the postal system and telecommunications, is perceived as being poorer than that enjoyed by regional competitors, such as China, India, Indonesia, Thailand and Vietnam (Table 14.3).

<sup>11</sup> The World Bank, Investment Climate Assessment and Reform Strategy (August, 2004), P. 27.

**Table 14.3: Private Sector Perception on Infrastructure Quality**

(1 = Underdeveloped, 7 = The Best in the World)

	General infrastructure	Railroads	Port facilities	Power supply	Postal system	Telecom
Bangladesh	2.7	2.6	2.6	2.3	2.7	2.5
<b>Cambodia</b>	<b>2.4</b>	<b>1.5</b>	<b>2.7</b>	<b>2.6</b>	<b>2.7</b>	<b>4.7</b>
China	3.2	3.6	3.6	3.7	5.0	5.5
India	2.9	4.2	3.1	3.3	4.9	6.3
Indonesia	3.3	3.1	3.3	3.6	4.1	4.4
Vietnam	2.6	2.3	2.8	3.5	5.3	5.8

**Source:** WEF, *Executive Opinion Survey 2006-2007*.

## Policy Recommendations

Infrastructure improvements require the intervention of the Government and donors. Private sector participation through various models such as Build-Operate-Transfer (BOT) has to be encouraged.

The initiation of pro-competition policies or laws could help to increase the level of competition among service providers, in sectors such as electricity, telecommunications and the internet. The consequences of this increased competition would be lower prices and improved services. The existence of competition laws would ensure that there was no collusion or cartel formation among service providers.

In terms of physical infrastructure such as roads, the Government and donors should focus on regions where the five potential sectors dealt with in this study are mobilizing their businesses. These prioritized provinces include Kampong Cham, Ratanakiri, Kampong Thom and Kampot.

Cambodia has land borders with three countries: Laos, Thailand and Vietnam. The country's current trade in goods with its neighboring countries is substantial, especially with Vietnam and Thailand. Some of Cambodia's exports are transited via Vietnam. The roads connecting the neighboring countries are economically crucial. Thus, in addition to the above geographic areas, priority should also be given to building roads between the three



countries through various border crossing points (Table 14.4). The facilitation of goods movement through those crossing points is not only beneficial for Cambodia's trade, but would also speed up integration of the region. All four countries are already members of ASEAN and the Greater Mekong Sub-region (GMS).

**Table 14.4: Cambodia International Overland Border Crossings**

Countries	Crossing Points
Cambodia-Laos*	Dom Kralor-Voeung Kam
Cambodia-Thailand*	Poitpet-Aranyaprathet
Cambodia-Thailand*	Cham Yeam-Hat Lek
Cambodia-Thailand	O'Smach-Chong Jom
Cambodia-Thailand	Anlong Veng-Chong Sa Ngam
Cambodia-Thailand	Phsar Prom-Ban Pakard
Cambodia-Thailand	Daun Lem-Ban Laem
Cambodia-Vietnam*	Bavet-Moc Bai
Cambodia-Vietnam	Kaam Samnor-Ving Xuong
Cambodia-Vietnam	Phnom Den-Tinh Bien
Cambodia-Vietnam	Trapeang Phlong-Xa Mat
Cambodia-Vietnam	Prek Chak-Xa Xia

**Source:** EIC compiled from various sources.

**Note:** \* Refers to more important crossing points identified by Framework Agreement on Facilitating Cross- Border Transport of Agreement (CBTA) under GMS framework.

An investment allowance scheme could be considered as a way of enticing agro-processing companies to upgrade the infrastructure around their factories. This type of incentive scheme promotes private sector infrastructure development in areas where industry will benefit from such improvements.

#### 14.4. Investment Incentives

Thus far, existing investment incentives provided both to local and foreign investors do not appear to have succeeded in encouraging investment in the agricultural and agro-processing industries of the potential sectors. By

contrast, similar strategies have helped to promote investment in the garment and tourism sectors. Why should this be the case?

Investors in Cambodia are able to benefit greatly from incentives stipulated in the investment law (1994), its amendment (2003) and its subsequent sub-decrees. These include tax holidays, reduced corporate income tax (CIT) after the expiration of the tax holiday period, as well as import duty and VAT exemption (Box 14.1). The incentive package is coordinated by the Council for the Development of Cambodia (CDC).

#### **Box 14.1: Overview of Cambodia's Investment Incentives**

##### ***Investment sectors to which incentives shall apply (selected)***

1. Crop production  
Paddy farming greater than 1,000 ha.  
All types of cash crops greater than 500 ha.  
Vegetable greater than 50 ha.
2. Manufacture and processing of foods & related product investments
  - Capital investment greater than US\$ 500,000
3. Manufacture of furniture & fixtures
  - Capital investment greater than US\$ 500,000
4. Manufacture of rubber & miscellaneous plastics
  - Capital investment greater than US\$ 500,000
5. Hotel construction
  - Three star classification or higher

##### ***Tax incentives***

1. Tax holiday
  - Either: 6-9 years starting in first year of sales
  - Or: 3-6 years from the last day of the tax year immediately preceding the tax year in which profits are first derived
  - 5-years loss carry forward
2. Reduced corporate income tax (CIT) after tax holiday period
  - After tax holiday: 9% (Qualified Investment Project-QIP) for first five years and 20% thereafter
  - Instead of tax holiday: 40% special depreciation for QIP not using tax holiday period
3. Import duties and VAT exemption
  - 100% on inputs for qualified sectors
  - VAT exemption for both inputs and sales of supporting industries to export-oriented garment and footwear sectors.

**Source:** Cambodia Investment Law (1994&2003) and IMF country report No. 06/265.

Incentives such as these have been highly successful in bringing investment to the garment, construction, and tourism sectors, which have been impressive in terms of job generation and poverty reduction. Unarguably, the success of these sectors can also be attributed to the fact that

they are demand driven. Garment export markets were easily accessible to Cambodian products as a result of the quota systems granted by the US, and GSP under Everything But Arms (EBA) program, granted by the EU. Likewise, a boom in tourist arrivals has led to an increasingly high demand for hotel and restaurant construction. Thus, investment in these sectors is being driven by both the high level of demand and the expectation of quick and high returns. In this situation incentive schemes are likely to play rather more of a facilitation role, while accruing additional benefits for investors.

By contrast, other candidates such as the agricultural sector do not seem to be so attractive to investors. There are several reasons behind this failure. In current investment law, incentive packages are applied in an identical manner to all sectors, rather than differentiating between them on a sector by sector basis, as occurs in other countries such as Malaysia.<sup>12</sup> As a result, investors naturally seek to put their money into sectors with quick and high returns such as the garment and tourist industries, rather than sectors with low and slow returns as in the agricultural sector. In addition, due to the minimum requirements in terms of investment capital or assets stipulated for entitlement to the benefits, the incentive schemes appear to exclude the SMEs which make up the bulk of the agricultural sector.

Moreover, incentives like tax holidays and reduced CIT have a number of disadvantages. Because tax holidays provide exemption from the payment of revenue on profits regardless of their amount, the most profitable sectors will obviously be the most attractive. It attracts short-term projects and footloose industries, which tend to exit the country at the end of the holiday period. Firms investing in long-lasting enterprises, which may not succeed in fully recovering their start-up costs before the expiration of the tax holiday, stand to benefit less from such schemes, if at all. They are unlikely to promote investment in desirable sectors of the economy, or be of much assistance to infant industries.

## **Policy Recommendations**

New investment incentive schemes should be introduced in order to develop the potential sectors. These packages should be designed to encourage investment by specific sectors, rather than the current “one size fits all” policy. All actors in each of the sectors ought to benefit from the incentives that are offered. Those incentives should include investment

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<sup>12</sup> Tax incentives in Malaysia: <http://www.treasury.gov.my/index.php?ch=15&lang=eng>

allowances, infrastructure allowances, and deduction incentives for activities such as training or R&D. For instance, investment allowances deducted from corporate income tax could provide up to 100 percent of capital expenditure for a minimum level of investment. Imports of fertilizers and other inputs should be exempted from import duties. Infrastructure allowances would encourage enterprises to build the infrastructure they need in order to facilitate their transportation requirements from remote areas.

Some examples of investment incentive schemes by sectors are highlighted in Box. 14.2, based on a compilation of practices applied in several countries such as Malaysia. These models should be considered for potential sectors. Nevertheless, it is worth noting that there has not yet been any cost-benefit analysis of this proposal in the Cambodian context.

**Box 14.2: Some Examples of Investment Incentive Schemes by Sectors**

**Agriculture**

1. Investment allowance
2. Infrastructure allowance
3. Reinvestment allowance
4. Single deduction on pre-operating training expenses
5. Double deduction incentives for research and development
6. Double deduction incentives for training
7. Double deduction for export promotion expenses
8. Tax exemption for value increased exports
9. Duty exemption on machinery, equipment, raw materials & components for:
  - Manufacturing research activities
  - Training activities
  - Environmental protection
10. Investment tax allowance for companies investing in storage, cold chain facilities and other related services
11. Single deduction on expenses incurred in obtaining quality system certification and accreditation

**Tourism**

1. Investment allowance
2. Infrastructure allowance
3. Double deduction incentives for training
4. Double deduction for overseas promotion expenses
5. Double deduction on approved trade fairs
6. Single deduction on cultural performance
7. Tax exemption for tour operators
8. Tax exemption for promoting international conferences
9. Incentives for domestic tourists
10. Incentives for bringing foreign tourists

## 14.5. Anti-Competitive Practices

The World Bank has pointed out a number of anti-competitive practices prevalent in Cambodia, based on a survey of local firms. A majority of the firms surveyed identified unfair or informal competition as at least a moderate problem. Firms indicated a number of ways in which they viewed the economic playing field as uneven (Table 14.5).

**Table 14.5: Practices of Competitors as Obstacles to Own Firm**

Practices of Unfair or Informal Competition (% finding it a “major” or “very severe” obstacle)	All firms	Micro	SME	Large	Exporter	Non-exporter
Conspire to limit access to markets/suppliers	34.4	34.2	34.4	36.7	41.8	33.0
Receive subsidies (including toleration of arrears)	31.8	31.6	31.1	34.2	38.0	30.7
Violate copyrights, patents or trademarks	31.4	31.6	39.5	38.0	40.5	30.0
Don't pay duties or observe trade regulations	25.0	22.8	25.1	34.2	40.5	22.8
Avoid sales tax (VAT and others)	22.5	16.2	25.7	35.4	40.5	19.1
Avoid labour taxes/regulations	20.7	14.0	26.2	30.4	40.5	17.0

**Source:** Cambodia: Seizing Global Opportunity, World Bank, 2004.

Out of a variety of suggested potential anti-competitive practices, over a third of firms confirmed that a competitor conspiring to limit their access to markets and suppliers was a major or very severe problem. This suggests that dominant firms can act with some impunity to prevent the entry of potential rivals into the marketplace.

32 percent of respondents identified the issue of government subsidies granted to their competitors, or the state’s toleration of certain firms’ tax arrears as at least a major problem, suggesting that the authorities may not treat all firms equally.

31 percent of the companies surveyed claimed that the violation of their intellectual property rights posed at least a major constraint. Interviews

indicated that part of this problem lies in the prevalence of fake or fraudulent products, which can undermine retailers' relationships with increasingly quality-conscious consumers.

The larger exporters, who are more likely to have foreign ownership and be subject to more regulatory scrutiny, are dramatically more inclined than non-exporters to identify unfair or informal competition as a major or very severe constraint. This difference is especially striking with regard to competitors' violations of intellectual property rights, failure to pay duties or observe trade regulations, avoidance of taxes, and non-compliance with labor regulations and taxes.

A perception survey of policy makers, businessmen and consumers, carried out by EIC<sup>13</sup> in 2005, also revealed the widespread existence of anti-competitive practices in the country, indicating that several sectors such as petroleum, telecommunications, and public utilities, are particularly badly affected. These anti-competitive practices take various forms, such as collective price fixing, exclusive dealing, collusive tendering and erecting entry barriers.

## **Policy Recommendations**

The above findings suggest that anti-competitive practices have a strong potential to distort private sector development. In order to overcome this distortion, it is recommended that a national competition policy and law be well established, and effectively implemented. Such a competition policy and law is crucial as a means of dealing with the anti-competitive practices of many local firms. It would also ensure that markets functioned efficiently and effectively in the best interests of consumers. With proper competition policies, lower prices and greater product choice become available for all consumers, the industrial sector included.

A draft law should be prepared by the MoC in consultation with stakeholders. Once the law has been adopted, a competition authority will need to be established in order to effectively enforce it. The role of such a competition authority will prove essential in terms of discharging the responsibilities stipulated in the competition law and in bringing about its desired benefits. In this case, the Government would consider what form of competition authority should be established to implement the law/policy

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<sup>13</sup> EIC, "Country report on the Competition Scenario in Cambodia", May 2005.

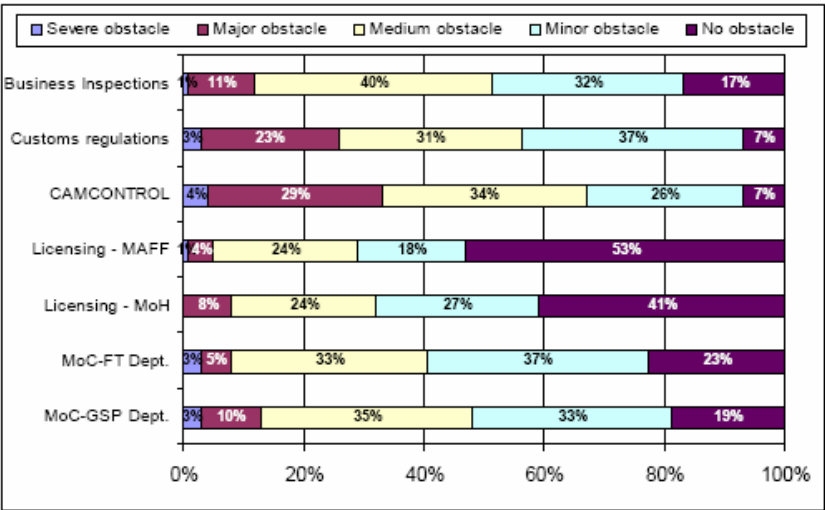
effectively. The competition authority could take the form of an Ombudsman, an authority under a relevant ministry or an autonomous competition authority.

### 14.6. Trade Facilitation and Governance

Key stakeholders continue to cite deficiencies in trade facilitation as a major obstacle facing the development of trade in the potential sectors. However, most agree that some progress has been made, as a result of efforts made by the Government and donor community, particularly since the Investment Climate study conducted in 2003.

Administrative procedures and trade document requirements imposed by Government agencies are perceived as burdensome by many stakeholders. Exporters and importers also tend to regard government measures intended to ensure the enforcement of trade regulations as obstacles facing their operations. In 2005, EMC’s interview survey of 120 importers and exporters demonstrated the severity of the obstacles imposed by various trade-related government agencies. These obstacles take various forms, such as inspection, customs regulations, and licensing (Figure 14.6).

**Figure 14.6: Severity of Obstacles Imposed by Trade-Related Government Agencies**

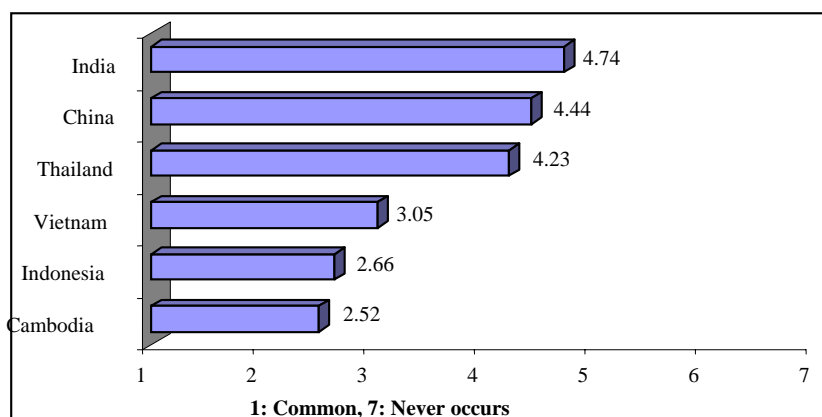


**Source:** Trade Facilitation and Competitiveness Project: Performance Measurement System, Emerging Markets Consulting (EMC), August 2005.

**Note:** CAMCONROL stands for Cambodia Import Export Inspection and Fraud Repression Department under Ministry of Commerce.

Exporters and importers also cited dealing with several different agencies in order to obtain export and import permits as a further obstacle. This problem, combined with a lack of transparency and integrity, leaves room for the existence of corruption. A cross-country comparison within the Asian region revealed that Cambodian exporters are at a considerable disadvantage as a result of having to pay bribes to corrupt officials in order to gain the requisite import and export permits (Figure 14.7).

**Figure 14.7: Frequency of Informal Payments  
Connected to Import and Export Permits**



Source: WEF, *Executive Opinion Survey 2006-2007*.

## Policy Recommendations

The objective of these policy recommendations is to reduce the level of import-export documentation procedures, inspections, and work duplication among border agencies, as well as the level of bribery and corruption associated with those processes. In this context, it is important to improve trade facilitation and governance through approaches of both “at the border” measures, such as Single Window System (SWS) for custom formalities, and “behind the border” measures such as Special Economic Zones (SEZs). There have already been a number of initiatives aiming at improving this situation, such as the Twelve-Point Plan and the Trade Facilitation and Competitiveness Project (Box. 13.1). Priority should now be given to speeding up their implementation.

In terms of “at the border” measures, the Government and donor community have introduced several initiatives including the ASYCUDA-World system, SWS and risk-management practices. The implementation of



these practices will result in greatly shortening clearance time, reducing paperwork and inspections, and eliminating work duplications among border agencies.

The implementation of ASYCUDA is progressing well.<sup>14</sup> The government has decided to delay implementing SWS, but will follow the ASEAN Single Window schedule which requires Cambodia to complete implementation by 2012. The risk management concept has already been endorsed by the government.<sup>15</sup> Nevertheless, it has not yet been implemented due to slow progress in the preparation of service level agreements (SLAs) and memorandums of understanding (MOUs) among border agencies.<sup>16</sup> This will require the assistance of various donors. Assistance will also be required in order to train operational staff in these new procedures at various control points.

#### **Box 14.3: The Concept of Risk Management**

In the context of Cambodia, a management proposal, to have a primary border agency and policy agencies.

##### **Primary Border Agency**

Customs and Excise Department will have overall responsibility for administering controls relating to the import and export of goods, and will exercise specific control on behalf of policy agencies. This will eliminate duplication of inspections at control points.

##### **Policy Agencies**

MoC, MoH, MAFF and MIME will have overall policy responsibility for particular commodities or products such as garments, food, agricultural products, pharmaceuticals and pesticides. They will be required to establish clear operational procedures for CED which spell out how these particular commodities must be dealt with during the import or export clearance process.

**Source:** Extract from “Policy and Strategy to Facilitate Trade through Risk Management”, draft report, 18 May 2005.

In the short term, it is also suggested that there should be an agreed process, laid out in published maps and guidelines, to which all parties to the trade process should adhere. The official fees associated with each process should also be published where necessary.

A “behind the border” measure to improve trade facilitation is to accelerate the development of SEZs. A number of zones have already been established and governed by a sub-decree. The full law is under preparation.

<sup>14</sup> This judgment is stipulated in the World Bank’s statement on “The Single Window Process to Manage Trade Facilitation” on 24 January 2007.

<sup>15</sup> Sub-decree on “Trade Facilitation through Risk Management” adopted on 1 March 2006.

<sup>16</sup> This progress is based on consultation with government official on 30 January 2007.

A speedier ratification of an SEZ law would lead to the opening up of greater investment opportunities, including in the potential sectors, since it will build investors' confidence. Other fiscal benefits in addition to those in the current investment law could also be considered, to make the environment more attractive for investors. In addition, the zones would be managed in a way that red tape can be minimized or eliminated.

#### 14.7. Standards and Certifications

Standards and certifications are a common barrier for exports from low-income countries. This is because their standard infrastructure is weak. They are unable to adhere to international standards, since their conformity assessment mechanisms, such as testing and laboratory systems are not internationally accredited. As a result, their product standards and certifications are not internationally recognized and are usually rejected by importing countries and/or buyers. Cambodia and the potential sectors in this report are no exception.

##### **Box 14.4: Experiences of Cambodia's Exports Facing Standards and Certifications Barriers**

**Fish and fish products:** Cambodia's fish products have not been exported to EU markets since 1997, while they can be exported to other countries such as the US, Hong Kong and Taiwan. The European Commission issued new requirements in 1997 for the purpose of consumer protection, under Decision 97/296/EC, for countries wishing to export fish products to the EU. Those requirements include production legislation equivalent to the EU's, laboratories accredited against standard ISO17025, health conditions during production and storage in line with the EU's requirements, and health certifications in line with international standards. Cambodia, which has weak standard infrastructure, cannot fulfill these requirements and thus is unable to access EU markets.

**Black pepper:** A local firm was prevented from exporting black pepper to Japanese markets due to its lack of a certificate of sterilization. Fortunately, French markets proved more accessible, since France requires only a certificate of analysis, which the firm was able to provide. In order to export their product to Japan, the firm would have to purchase expensive technology for sterilizing black pepper, which they are unwilling to invest in, since the Japanese market is the only one for which this process is required. The cost of sterilization is high, raising questions of return on investment. On the other hand, there is no private investment in sterilization certification services since the market for this service is undersized.

**Source:** Dourng Kakada and Sok Hach (2006), *"Non-Tariff Measures Facing Cambodia's Exporters"*.

There is a limited level of local standard legislation complying with international standard legislation. As of August 2006, only 47 mandatory standards in electronic products and four mandatory standards in food

products have been established by Industrial Standards of Cambodia (ISC), while more than 2500 standards have been established by Thailand Industrial Standard Institute (TISI). Presently, ISC is making slow progress due to under-funding, and only four standards have been issued in the past two years. Conformity assessment mechanisms, such as institutional laboratories, have difficulty earning international accreditation due to a lack of technical competence and equipment. Consultations with government officials reveal that in their current state, laboratories and other facilities are only partially able to perform certain checks as to whether local standard legislation complies with international norms. In addition, private investment in certification services is limited by the small market size of most sectors, with the exception of garments.

### **Policy Recommendations**

The country could unilaterally upgrade its standards and technical regulations to conform to international norms. Alternatively, Cambodia could upgrade its standards through the ASEAN framework. It means that country members harmonize standards and technical regulations through alignment with international practices. However, both approaches would be costly, and potential benefits are limited by the small size of the market.

In 1998, ASEAN decided to sign the framework agreement on Mutual Recognition Arrangement (MRA) which lays down basic principles for the development and conclusion of MRAs for specific sectors. Of the five sectors that have been identified for MRAs, namely electrical and electronic equipment, telecommunication equipment, cosmetics, pharmaceuticals and prepared food stuffs, three are currently at different stages of MRA implementation: electrical and electronic equipment, telecommunication equipment and cosmetics. A further MRA for the pharmaceutical sector is being developed. Efforts have also been taken towards the harmonization of technical requirements and regulations in various sectors.<sup>17</sup> In this context, Cambodia as a member of ASEAN could consider MRAs as another way to overcome standard related barriers. Ideally, MRAs should be reached with other members of ASEAN, focusing on potential export sectors.

Another effective option is to use the standards and conformity assessment systems already established in other ASEAN countries. For

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<sup>17</sup> The progress of ASEAN's MRAs is based on a speech from the Bureau of Economic Integration, ASEAN Secretariat, during the regional workshop on the "Importance of Rules of Origin and Standards in Regional Integration" held on 26-27 June 2006 in Hainan, China.

instance, instead of setting up a recognized laboratory system for conformity assessment within Cambodia, exporters could make use of internationally recognized laboratories in other ASEAN nations. This option would avoid the cost burden of setting up such a system within the country. However, Cambodian exporters, who operate mainly on a small to medium-sized scale, are as still unfamiliar with such practices, and their lack of experience may make them reluctant to risk investing in standard compliance services. Thus, initial standard certification services should be subsidized, allowing potential exporters to gain experience and confidence, until such time as they are willing to invest in this process.

Last but not least, Cambodia could consider investing in the creation of geographical indication for certain niche products in the medium and long term. Prior to investment, a detailed study would be made of the selection of niche products, along with a serious cost-benefit analysis.



## **Chapter 15**

### **Sector-Specific Approach: Constraints and Policy Recommendations by Sector**

This chapter discusses constraints and policies by selected sector. For each sector, one table summarizes the critical issues in each stage and their impacts. The critical issues are grouped into three main stages: production, processing, and marketing and export development. However, issues in tourism, a service industry, are grouped differently. Policy recommendations are not proposed to overcome all identified issues. Policy recommendations that are already discussed in the cross-sector approach will not be repeated, for instance regarding fuel prices.

#### **15.1. Organic Rice**

The organic rice sector in Cambodia is at a nascent stage. It was initiated by donor countries and launched in pilot projects in 2003. Organic rice is generally farmed by cooperatives in various provinces. The cooperatives serve as focal points for receiving external assistance and teaching technical organic requirements to their members. Cooperatives also play a crucial role of managing the internal control system (ICS) to ensure their members' compliance with organic standards. Organic rice presents real potential for both Cambodian markets and export markets. According to information from persons consulted during the research, buyers are actively seeking organic rice supplies from Cambodia.

##### **15.1.1. Constraints**

Even though organic rice farming is still new to Cambodia, the opportunities for development are quite open. However, the development of this sector requires enhanced production, promotion of compliance with standards, certification and new export markets. Additional efforts are needed to overcome challenges and seize the opportunities.

## ***Production***

Knowledge and understanding of organic production and standards are still low among farmers. They also lack experience of farming techniques. For instance, it is important to understand that parallel production is not allowed in organic farming, meaning that the same crop cannot be produced through both conventional and organic farming on the same farm. This is crucial because many farmers would prefer to start on a trial basis on only some of their land. This would lead to de-certification of the farmer's entire organic production.

During the conversion period, the yield is low and the rice is still marketed as conventional, which results in decreased economic return. Farmers whose sources of revenue are from conventional rice will find particular difficulty in accepting the decreased income during the conversion period.

In addition, farmers perceive that they decrease their income due to low yields because of not using chemical fertilizers when converting from conventional to organic rice. Therefore, they may still utilize a little chemical fertilizer in parallel production. Consequently, their rice cannot meet organic requirements, and this in turn discourages them from continuing organic farming.

Another significant barrier faced by farmers in both conventional and organic farming is insufficient water. Irrigation is underdeveloped in the country, and most farmers are dependent on rainfall. Farmers often suffer from droughts. Furthermore, the high cost of fuel is a burden on farmers if they use pumps to water their farms.

## ***Processing and Milling***

The availability of organic rice is still limited. This leads to under-utilization of processing machines. The high cost of diesel, energy, and electricity is a major impediment increasing the cost of milling and processing.

The low knowledge of the requirements for processing organic rice and of the availability of improved processing technology could be a constraint for processors and millers because organic rice is still new for them.

Additionally, poor access to finance due to high interest rates and lack of collateral could be a barrier by limiting processors' capacity to buy from farmers. The case of conventional rice shows that poor access to credit

for rice millers, coupled with weak border governance, lead to informal outflow of paddy to neighboring countries. This causes loss of value added and employment in the country. This would also happen for organic rice.

### ***Marketing and Export Development***

Awareness of organic rice is still low among local consumers. This makes them reluctant to pay premium prices for it.

Generally, buyers seek suppliers who can supply regularly in sizeable quantities, all year round. In this context, buyers may decide to source from other countries due to the small quantities produced in Cambodia.

Currently, there is no internationally recognized national body for certification of organic standards. Fortunately, organic requirements set by cooperatives generally follow international norms and are ensured by their ICSs and interested parties such as CEDAC. CEDAC ensures organic compliance at the stages of transport, milling and selling. External experts, from bodies such as ECOCERT, currently inspect farmer cooperatives, and are funded by donors or NGOs.

However, the lack of a common national standard induces mistrust in consumers, and exports are hindered by the costs of international certification.

Exporters also lack market information about organic rice and do not have networks to connect with buyers. This discourages export-oriented investment in organic rice.

**Table 15.1: Issues and Challenges in Organic Rice Industry Development**

Stage	Critical Issues	Impacts
<b>Production</b>	<ul style="list-style-type: none"> <li>▪ Low levels of knowledge and understanding of organic production and standards among farmers</li> <li>▪ Lack of marketing initiatives and supports during conversion period</li> <li>▪ Lack of irrigation systems</li> <li>▪ Insufficient support programs such as farmer education, marketing support</li> </ul>	<ul style="list-style-type: none"> <li>▪ Some farmers can not satisfy organic requirements within three years</li> <li>▪ Farmers are discouraged from transforming from conventional to organic rice</li> <li>▪ Low yield due to lack of water and inadequate manure. Farmers still depend on rainfall</li> <li>▪ Slow expansion of organic rice farming and conversion from conventional to organic</li> </ul>



<b>Milling and processing</b>	<ul style="list-style-type: none"> <li>▪ High cost of diesel, energy and electricity</li> <li>▪ Requirements for processing organic rice are still new to rice millers</li> <li>▪ Poor access to finance: high interest rates and limited loan options</li> </ul>	<ul style="list-style-type: none"> <li>▪ High cost of milling and processing</li> <li>▪ Rice millers find it difficult to fulfill the requirements in terms of milling</li> <li>▪ Limited capacity of rice millers to buy paddy from farmers at harvest time</li> </ul>
<b>Marketing and export development</b>	<ul style="list-style-type: none"> <li>▪ Low awareness among local consumers</li> <li>▪ Supply for exports is still small</li> <li>▪ Lack of internationally recognized organic standards certification</li> <li>▪ High export clearance charges and high cost of transport</li> <li>▪ Insufficient export market information</li> </ul>	<ul style="list-style-type: none"> <li>▪ Local consumers are reluctant to pay premium</li> <li>▪ Not attractive for buyers seeking large quantities</li> <li>▪ Certification becomes non-tariff barrier to market entry</li> <li>▪ Increased FOB price and reduced overall competitiveness of organic rice exports</li> <li>▪ Discouragement of export-oriented investments</li> </ul>

**Source:** EIC, compiled from various sources and interviews.

### 15.1.2. Policy Recommendations

Organic rice production can be substantially increased by converting from conventional to organic rice, while organic rice farming on newly cultivated land is minimally possible. Therefore, farmers should be encouraged to farm organic instead of conventional rice by explaining the social and economic benefits and the insignificant costs of conversion.

There should be an awareness campaign or advocacy program to inspire farmers and Cambodian consumers. The campaign should inform farmers about the sustainability of arable land for organic farming, available financial and technical assistance for conversion from conventional to organic rice, premium prices, the increasing demand for organic rice, organic rice markets—both local and export—and the health benefits for themselves. Cambodian consumers should be informed of the health benefits of consuming organic rice compared to conventional rice and the tastes and availability of organic rice so that they voluntarily pay premium prices. The campaign for consumers could be used as a tool to inspire farmers as well.

Farmers will bear the cost of conversion resulting from decreased returns and compliance with organic requirements. Providing free organic seeds and training in farming techniques is therefore crucial.

For the first two years of conversion (T1 and T2), the rice cannot be labeled as organic, but it is still possible to get a premium price from local markets. CEDAC's experience with farmer cooperatives is that farmers can be offered a premium of 10 percent during T1 and T2, because their rice sells at a premium in local markets. This is an effective tool, which could be implemented by other organizations involved with organic rice. Farmers would be informed about this benefit as well.

Common standards and certifications should be promoted in the country. These standards should follow international norms to assist future international accreditation. All organic products should be certified based on these national standards for domestic markets, so as to provide guarantees and build trust among consumers. Importantly, this organic certification must be constructed to facilitate trade rather than creating barriers through cost, complicated procedures and lengthy processes.

Some initiatives have already begun, such as the recent creation of the Cambodian Organic Agriculture Association (COraA). Its objectives are to define common organic standards and promote organic products in Cambodia. However, COraA is still in a nascent stage and much work remains to be done.

For organic rice exports, internationally accredited inspection is required, and the cost seems to be a major obstacle for small and medium farmers and processors. In the short run, therefore, the cost of certification should be subsidized. As an LDC country qualified for assistance from the donor community, Cambodia should seek inclusion of certification subsidies in donor assistance programs.

## **15.2. Cashew Nuts**

The current cashew nut industry in Cambodia is characterized by lack of investment in processing. Only five percent of raw cashew nuts (RCN) production is locally processed, mainly for exports to the US; the rest of RCN is almost all informally exported to Vietnam, one of the world's big processors and exporters of cashews. Cambodia is thus losing both value addition and employment.

### **15.2.1. Constraints**

Issues and challenges occur along the value chain in Cambodia's cashew nut industry, from the production stage to export.

## ***Production***

Due to a deficiency in farming techniques, lack of good seeds, and inadequate disease and pest control mechanisms, Cambodia's RCN yield is lower than that of neighboring countries. The quality of RCN is also affected by these deficiencies. Furthermore, there is no grading system that can serve as a pricing instrument for different grades of RCN. Therefore, there is no incentive for farmers to improve the quality of RCN. Buyers tend to offer prices appropriate to the lowest grades rather than risk overestimating quality.

It is difficult for Cambodian RCN producers to find buyers other than Vietnamese. India is also a major processor, but Indian buyers cannot compete with Vietnamese buyers since the transportation cost, including ocean freight, from Cambodia to India is much higher than from Cambodia to Vietnam. Thus, Cambodian RCNs have difficulty competing in the world markets, except in Vietnam, where Cambodia has an advantage over other RCN exporters in terms of transport costs.<sup>18</sup> This constraint coupled with small demand for local processing leads to a situation whereby RCN prices are likely determined only by competition among Vietnamese buyers and are susceptible to their collusion, which can force prices down.

Growers in remote areas suffer discounted prices depressed by intermediaries. This can be ascribed to high transport costs in remote areas, lack of alternative buyers and lack of alternative sources of information on prices.

## ***Processing and Packaging***

Processors face high costs of energy, a major production input. The expense of fuel and energy coupled with poor physical infrastructure creates high transport costs for the factory to collect RCN from farmers. In addition, there are some deficiencies in factory operation due to lack of modern management. These factors reduce competitiveness at the processing stage.

The financial resources to secure RCN inventories during harvest time are also critical. Currently, there is no special financial incentive or loan for the cashew nut industry, and processors are quite challenged by poor access to finance due to high interest and collateral requirements. The interest rate is generally higher than in other cashew processing countries such as India and only real estate is used as collateral, at a discount from its

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<sup>18</sup> Adapted from Andrew McNaughton & Associates (September 2005): The Cambodia Cashew Industry.

real value, whereas some processing countries use raw material inventories as collateral.<sup>19</sup> This high cost of access to funds limits the capacity of the processing factory to buy and stockpile RCN during harvest time.

Currently, there is only one processing factory operating in the country. It takes about five percent of RCN; the rest is almost all sold to Vietnam unprocessed. Vietnamese traders buy directly from farmers in Cambodia, then export informally to Vietnam. Cashew nuts of Cambodian origin are re-imported in processed form. Thus, the country is losing value added, employment, corporate and profit tax revenues, and profit margins for locally established processors. All cashew nuts grown in Cambodia are also recognized in the international market as Vietnamese cashew nuts.

Cambodia's single processing factory runs under capacity. In 2005, it collected only 900 tons of RCN while its full capacity is 1,500 tons.<sup>20</sup> The main reason is the unavailability of RCN. The factory needs to compete with Vietnamese traders to buy RCN. Vietnamese traders can afford to offer slightly better prices, because they have lower processing costs and a lower cost of finance.

Finally, packaging costs in Cambodia are expensive due to the lack of supporting industry. Most packaging materials, even plastic, are not available in the country, but are imported from countries such as Thailand. Nevertheless, investment in producing packaging materials is not foreseen, since the local demand is still not significant.

### ***Marketing and Export Development***

Local processed cashew nuts are not sufficient even for local consumption, and Cambodians still consume imported processed cashews. There is some family-scale processing using traditional techniques, which are well promoted to Cambodian consumers. This calls for attention to promoting small processing factories for local consumption, thus helping to absorb the RCN flowing out of the country and to add value.

Exports of RCN and processed cashews are constrained by a number of other factors. Cambodian farmers and processors are "price takers", because Cambodia's RCN supply is only 1.5 - 2.5 percent of world production. The processing factory supplies only about 190 tons of semi-final

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<sup>19</sup> Adapted from Andrew McNaughton & Associates (September 2005): The Cambodia Cashew Industry.

<sup>20</sup> Interview with director of Khmer Agriculture Product (KAP) Company in February 2006.

products per year and cannot produce year round. Because of this, buyers seeking big and regular supplies do not look to Cambodian markets.

Furthermore, there is no national standards body providing internationally recognized certificates. This makes it more difficult for the exporters to comply with the standard related non-tariff barrier in the international markets.

A final export constraint is associated with a lack of export facilitation. Exporters are hampered by bureaucratic and slow processing of exports and unofficial fees.

**Table 15.2: Issues and Challenges in Cashew Nut Industry Development**

Stage	Critical Issues	Impacts
<b>Production</b>	<ul style="list-style-type: none"> <li>▪ Deficiency in farming techniques, lack of good seeds, and inadequate disease/pest control</li> <li>▪ Almost all raw cashew nuts are informally exported to Vietnam</li> <li>▪ RCN are not formally graded to a standard</li> <li>▪ Lack of price information for growers in remote areas and price fluctuations determined by Vietnamese traders</li> </ul>	<ul style="list-style-type: none"> <li>▪ Low yield of RCN and low quality</li> <li>▪ Collusion among Vietnamese buyers can force a decreased price. Loss of market when Vietnamese RCN production is sufficient for its processing industry.</li> <li>▪ Limited incentive for farmers to produce high quality</li> <li>▪ Growers suffer prices depressed by middlemen</li> </ul>
<b>Processing and Packaging</b>	<ul style="list-style-type: none"> <li>▪ High cost of diesel and energy</li> <li>▪ Poor physical infrastructure</li> <li>▪ Poor finance: high interest rates</li> <li>▪ Unavailability of RCN in off-season due to poor access to finance for buying and stockpiling RCN during harvest time</li> <li>▪ Lack of techniques for shelling cashews</li> <li>▪ Lack of packaging materials</li> <li>▪ Insufficient support and incentives</li> </ul>	<ul style="list-style-type: none"> <li>▪ High cost of processing</li> <li>▪ High cost of transport</li> <li>▪ Traders and processors lack working capital to buy and stockpile RCN</li> <li>▪ Lack of RCN for processing in the off-season, which leads factories to operate under-capacity</li> <li>▪ Low quality of shelled cashew nuts</li> <li>▪ Relatively high cost of packaging</li> <li>▪ No incentives for investment in cashew nut industry and no encouragement of local processing</li> </ul>
<b>Marketing and export development</b>	<ul style="list-style-type: none"> <li>▪ Inadequate supply of processed cashew nuts in local markets</li> <li>▪ Cambodia's RCN supply is small relative to the global</li> </ul>	<ul style="list-style-type: none"> <li>▪ Cambodians consume imported processed cashew nuts</li> <li>▪ Cambodian traders are "price takers." Buyers seeking big supplies will not</li> </ul>

	cashew nut market <ul style="list-style-type: none"> <li>▪ Lack of international market information</li> <li>▪ Lack of national standard body providing internationally recognized certificate</li> <li>▪ Bureaucratic and slow process for export clearance</li> </ul>	look to Cambodia <ul style="list-style-type: none"> <li>▪ High dependency on few markets</li> <li>▪ Potential non-tariff barriers for exporters limit their market access</li> <li>▪ Lengthy processing of export clearance and costs for corruption</li> </ul>
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**Source:** EIC, compiled from various sources and interviews.

### 15.2.2. Policy recommendations

The central policy recommendations focus on the promotion of organic cashew nuts and the establishment of farmer cooperatives or associations. These two recommendations are equally important and mutually reinforcing.

The promotion of organic cashew nuts means more focus on niche markets where there is now less interest from competitors. Cambodia can also offset the disadvantage of relatively small supplies compared to other competitors. When growers are able to supply organic RCN, the industry will be attractive for investors who are seeking to invest particularly in organic products for niche markets.

Organic cashews would increase the income of growers through the premium price attached to organic brands. Additionally, avoidance of chemical fertilizers, which is an important requirement for organic products, should not be significantly problematic for farmers since they traditionally use less chemical fertilizer.

However, farmers and processors will face challenges of compliance with organic requirements such as seeds, farming and processing techniques, documentation and certification. Exporters may need support to seek buyers and niche markets. The establishment of cashew farmer cooperatives or associations could be the best way to solve this problem. Cooperatives or associations should operate in close coordination with processors and exporters.

A cooperative or association can serve as the center for all technical training in organic requirements. It can teach organic techniques to farmers. It can encourage farmers to grow organic cashews and formulate policies to involve stakeholders. It can also assist in diversifying markets for RCN and show investors that Cambodia's cashew industry is important.

### 15.3. Rubber

Rubber has been produced as an industrial crop in Cambodia since the 1920s. The industry currently has high potential for export earnings and rural income enhancement.

Cambodia is a planter, semi-processor and exporter of rubber. There are three categories of planters: state-owned and associated companies, private industrial plantations and smallholder plantations. There are seven state-owned enterprises and three private enterprises processing and exporting rubber.

Smallholders generally sell their natural rubber to private or state-owned companies, usually in blocks. Raw rubber exports have been banned by government regulation in an attempt to increase rubber processing within Cambodia. Only semi-processed rubber is allowed to be exported.

#### 15.3.1. Constraints

The constraints on rubber development exist in production, processing, and marketing and export development.

##### *Production*

Investment in rubber is of long-term nature, generally requiring from five to seven years before producing returns. On average, the expenses associated with labor, inputs and maintenance total US\$1,624 per hectare for the first five years before the trees produce latex. This is costly and a disincentive for smallholders, particularly those who lack capital. Farmers may decide to plant other crops with a quicker return, even though the net returns are lower.

A further constraint is that the current rubber yield is low compared to other countries in the region such as Thailand and Malaysia. Cambodia's yield is low because a substantial proportion of rubber trees are over 25 years old. Farmers' lack of planting skills and good seeds is also degrading the quantity and quality of latex production.

Another important issue is the lack of land titles. Most farmers have no title deeds; their possession is based on recognition and the evidence of neighbors in the villages. Expansion of rubber plantations is constrained by the

absence of land titles, because it prevents the commercial transaction of rubber lands and makes new investors reluctant to put money into rubber plantations.

### ***Processing***

Cambodia conducts semi-processing, converting latex into dry rubber before export. Final processing, however, is almost non-existent. Like other processing industries, the rubber industry is burdened by the high cost of diesel and of energy. Factories run at only 50-80 percent of capacity due to insufficient supplies of natural rubber.<sup>21</sup> This reduces the cost-effectiveness of factories.

The industry is also losing value addition from rubber trees. Local rubber tree processing is almost non-existent; most rubber tree wood is bought by Vietnamese traders for manufacturing furniture in their country.

Moreover, the latex and unprocessed rubber supplied by smallholders are not always of good quality due to improper collection. Rubber quality also deteriorates during prolonged storage prior to processing. Some rubber trees require nine years before producing latex, because of unsuitable planting and care.

Cambodia produces and exports mostly TSR5L and TSR5, which represent about 80 percent of total export volume. These two types enable the country to focus on niche markets. However, the world demand for these two types is only about five percent of total world demand.<sup>22</sup>

There has been a recommendation to produce TSR10 and TSR20 for tire manufacturing, since tire producers, who consume 70 percent of world production of natural rubber, have the most influence on demand; this is still being debated. Others argue that Cambodia should continue producing only TSR5L and TSR5 as niche products rather than shifting to TSR10 and TSR20, because the country's supply is small and buyers are looking for large supplies in other countries such as Vietnam and Thailand.

### ***Marketing and Export Development***

The Cambodian rubber supply is small, accounting for only about 0.3 percent of supply on the world market. This makes the country a "price taker."

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<sup>21</sup> According to SOFRECO, "Study on the Evolution of Cambodian Rubber Sector", March 2006.

<sup>22</sup> Idem



Farmers are supposed to sell their latex and unprocessed rubber to state-owned or private processing companies in Cambodia, because of the government ban on the export of latex and unprocessed rubber. Under these circumstances, the local processing companies inform farmers about prices. Prices sometimes fluctuate greatly from year to year, inducing mistrust among farmers and eventually discouraging them from producing rubber.

Actually, rubber price fluctuations are the effect of global demand and supply; Cambodia being a “price taker” with its small supply cannot influence international price. The problem is further compounded by the fact that farmers lack information on prices and market trends, which creates uncertainty for them.

Cambodian rubber exporters are penalized because of the lack of internationally recognized certification. Buying uncertified products involves risk, which results in producers being offered lower prices.

**Table 15.3: Issues and Challenges in Rubber Industry Development**

Stage	Critical issues	Impacts
<b>Production</b>	<ul style="list-style-type: none"> <li>▪ Long-term investment</li> <li>▪ Security of land tenure</li> <li>▪ Lack of planting materials, techniques and seeds</li> <li>▪ Over 45% of rubber trees are old (over 25 years)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Not attractive for farmers and investors who need quick returns</li> <li>▪ Prevents commercial transactions in rubber lands and makes new investors reluctant to invest in rubber plantation</li> <li>▪ Longer time for latex to be produced</li> <li>▪ Low yield of latex</li> </ul>
<b>Processing</b>	<ul style="list-style-type: none"> <li>▪ High cost of diesel, energy and electricity</li> <li>▪ Insufficient supplies of latex</li> <li>▪ Lack of local processing of rubber trees</li> <li>▪ Rubber delivered by farmers is not always good quality</li> <li>▪ Limited varieties of rubber produced and exported (80% is TSR5L and TSR5)</li> </ul>	<ul style="list-style-type: none"> <li>▪ High cost of processing</li> <li>▪ Under-utilization of processing capacity</li> <li>▪ Loss of value addition and employment</li> <li>▪ Low quality of processed rubber</li> <li>▪ Limited market access</li> </ul>

<b>Marketing and export development</b>	<ul style="list-style-type: none"> <li>▪ Relatively small supply</li> <li>▪ Lack of market information for growers</li> <li>▪ Lack of export certification</li> </ul>	<ul style="list-style-type: none"> <li>▪ Not attractive for buyers seeking big amount of supplies</li> <li>▪ Creates uncertainty for growers</li> <li>▪ Limited market access and dependence on few markets. Rubber exports suffer discounted prices</li> </ul>
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**Source:** EIC, compiled from various sources and interviews.

### 15.3.2. Policy Recommendations

Land titling is important in order to expand smallholder plantations, since it will ensure that there is no conflict when rubber trees produce returns. In addition, it facilitates commercializing of land with rubber trees.

It is recommended that village cooperatives be established for pre-processing, which would allow planters to deliver large quantities of rubber to factories, lower transport costs by reducing the liquid content in coagulum, and limit deterioration of rubber during prolonged storage. This can be done through support from donors, factories and the participation of farmers.

The local processing of rubber trees should also be promoted to retain value addition for the country by reducing the cost of processing and various incentives such as tax allowances.

The government, in cooperation with donors, should commit to complete the requirements so that Cambodia's certification is internationally recognized and rubber can be exported to broader markets without a price discount.

### 15.4. Silk

The hand-woven silk industry is part of traditional Cambodian heritage. Some hand-woven Khmer silk products are of high quality, produced from "golden thread." They have become popular in many countries, especially among people with higher incomes willing to pay a premium for traditional goods. Those countries are increasingly seeking silk imports.

The silk sector was selected for export diversification because it provides potential earnings and employment opportunities for woman in rural in areas, which is crucial for poverty reduction. The uniqueness and

high quality of these pure Khmer silk products allows producers to focus on niche markets and to charge premium prices. In addition, there is still room to get value added as well as employment generation if a number of critical constraints can be removed.

#### **15.4.1. Constraints**

The constraints on the sector are found in production, processing, and marketing and export development.

##### ***Production***

Factors including small mulberry farms, a shortage of skills and water for growing mulberries, and the slow reproduction of silkworms disadvantage the production of raw silk. Farms are often scattered in remote areas and mulberry trees produce fewer leaves in the dry season. In addition, the supply of silkworms is less than in neighboring countries.

The yarn is still spun manually, the introduction of modern machines being constrained by an insufficient supply of cocoons. The yarn is therefore not smooth. There are also inadequate skills available for performing such tasks as dyeing the yarn.

All these factors result in low returns per hectare per year, only about half the returns of neighboring countries.<sup>23</sup>

##### ***Processing or Weaving***

Weaving is traditionally done manually with old-fashioned equipment such as looms. This results in inefficiencies and high production costs and it affects the quality of products. Design, dyes and the number of different products are also insufficient, so Cambodian silk products do not fully satisfy market demands. Under-skilled workers do not offer product consistency, and they have neither design capabilities nor the capacity to translate new designs into production. Furthermore, quality standards and timelines are often not respected. Physical facilities are small, and the producers are unable to expand rapidly to fill large orders.

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<sup>23</sup> This conclusion is based on discussion with the manager of Khmer Silk Village.

At the moment, local raw silk production is not sufficient for the needs of weavers. Only two percent of silk thread used in the country is “golden thread” 98 percent is “white thread” imported from Vietnam and China.

In addition, weavers have difficulty accessing finance because of high interest rates and lack of collateral. For this reason, intermediaries play an important role, selling imported raw silk on credit to weavers and then buying back the products.

### ***Marketing and Export Development***

Khmer silk products do not fully meet the requirements of buyers in terms of regular supply, lead-time or quality due to constraints and capacity limitations in spinning, weaving, product development and marketing.

The supply of silk products is still small, which is not attractive for buyers seeking large quantities. In addition, the small supply means a high cost per unit for shipping to international markets.

A study conducted by ITC also revealed some specific constraints for small exporting NGOs, such as inappropriate legal procedures, the lack of intellectual property protection and weak trade support services (market information, trade insurance, etc.). This discourages new investors.

Due to lack of technology and under-skilled workers, some silk products are of inferior quality. Producers of inferior silk products threaten the reputation of the entire Cambodian silk industry.

**Table 15.4: Issues and Challenges in Silk Industry Development**

Stage	Critical issues	Impacts
<b>Raw silk production (yarn supply)</b>	<ul style="list-style-type: none"> <li>▪ Mulberry farms too small</li> <li>▪ Shortage of techniques and irrigation for growing mulberries</li> <li>▪ Manual spinning and traditional yarn processing</li> </ul>	<ul style="list-style-type: none"> <li>▪ Small production of raw silk and yarn</li> <li>▪ Mulberry trees provide fewer leaves</li> <li>▪ Yarn is not smooth</li> </ul>
<b>Silk processing (weaving)</b>	<ul style="list-style-type: none"> <li>▪ Traditional manual weaving and lack of modern techniques</li> <li>▪ Lack of design, colors and models</li> <li>▪ Small quantity of Khmer golden thread; most raw silk and accessories are imported</li> <li>▪ Poor access to finance</li> </ul>	<ul style="list-style-type: none"> <li>▪ Lower quality of product and inefficient operation</li> <li>▪ Products do not fully satisfy market demands due to lack of diversity</li> <li>▪ Small quantity of silk products produced from</li> </ul>

		Khmer golden thread <ul style="list-style-type: none"> <li>▪ Financing relies on middlemen</li> </ul>
<b>Marketing and export development</b>	<ul style="list-style-type: none"> <li>▪ Khmer silk products do not fully meet expectations and requirements of buyers in terms of regular supply, lead time and quality</li> <li>▪ Limited supply of silk handicraft products</li> </ul>	<ul style="list-style-type: none"> <li>▪ Limited buyers of silk products</li> <li>▪ Not attractive for buyers who are seeking large quantities</li> </ul>

**Source:** EIC, compiled from various sources and interviews.

### 15.4.2. Policy Recommendations

Policies should build on the comparative advantage of the high and unique quality of Cambodian gold silk thread. A “pure Khmer silk product” brand should be promoted as a top-quality silk product. This pure Khmer silk will obtain a premium price from customers. In addition, geographic indication should be created for this particular kind of product. To do so, Cambodia must first pass a national law on geographical indication in line with international practices, and a national evaluation committee must be established.

In the short and medium terms, the country will continue importing raw silk due to inadequate local supply. During this period, it is important to improve the design and quality of the products made from the imported raw silk in order to meet market demands. At the same time, Khmer raw silk production should be promoted among farmer cooperatives so that more products could be branded.

## 15.5. Tourism

Tourism is the country’s biggest exporter of services. It has been the main engine of economic growth during the last decade, and the increasing number of visitors is impressive. It indicates the strong potential of this sector to contribute to development and employment generation, leading to a reduction in poverty.

However, stronger efforts are required to overcome a number of constraints if the additional benefits from the sector are to be realized. There is an imperative for proper policies and strategies to be effectively implemented in this fast-growing sector.

### 15.5.1. Constraints

The main constraints are weak supply capacity, inadequate sector diversification and marketing support, and lack of legislative support.

#### *Supply Capacity*

Backward linkages in tourism are very weak. It was estimated that up to 95 percent of demand for food, to serve in the hotels and major restaurants in Siem Reap, is filled by imports from Thailand and Vietnam.<sup>24</sup> As a result, millions of tourist dollars are flowing out of the country just for foodstuffs. There is a shortage of local supply, and only a few Cambodian products are able to meet the needs and standards of the industry. Additionally, farmers and local business cannot guarantee regular supply, so hotels and restaurants decide to import.

The growth in tourism has attracted abundant young unskilled labor to Siem Reap and increased competition in low-skill jobs such as construction work, cleaning and food preparation. This competition keeps salaries low.

In contrast, there is a shortage of middle management skills and specialized workers in the sector. This results from inadequate education in the necessary skills. The shortage of skilled workers is a major disruption for hotels and restaurants, which then hire expatriates with much higher salaries and benefits.

#### *Tourism Diversification and Marketing Support*

Potentials in diversification and marketing are not being fully explored. Many tourists do not visit conceivable destinations because they do not know about them. Promotion and marketing support for cultural areas other than Angkor Wat is especially limited. Likewise, there is insufficient information for visitors on Cambodian culture and arts. This results in shorter stays and the loss of tourist revenue.

Poor infrastructure also hampers diversification, as some tourists are reluctant to visit places involving long and tiring journeys.

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<sup>24</sup> FIAS (April 2005): Corporate Social Responsibility in Apparel Sector and Potential Implications for Other Sectors.

The sector still lacks a clear and practical strategy for development. Without strategies, tourism growth does not contribute substantially to employment generation and poverty reduction.

### ***Legislative Support***

The draft tourism law has not yet been adopted. Adoption of the law will result in the establishment of a National and Regional Development Plan, which will identify policies and strategies for sector development while ensuring sustainability. Without this law, there are no legally enforceable regulations governing sector development and tourism.

A system of hotel classifications and the Cambodia Tourism Marketing and Promotion Board are also not yet in place, although they were initiated by a private sector working group on tourism. In the absence of these legal instruments, service quality is not assured. Marketing and promotion depend on individual actors, who focus on only a few destinations based on their own interests. Some destinations are not promoted effectively.

In addition, there is a lack of legislation to prevent environmental degradation as a result of tourism activities. A number of guesthouses and restaurants dump used water into rivers. The lack of sewage and waste systems causes pollution. Potential areas for eco-tourism are also degraded. This disturbs tourists who are aware of environmental issues.

**Table 15.5: Issues and Challenges in Tourism Industry Development**

Areas	Critical issues	Impacts
<b>Supply capacity</b>	<ul style="list-style-type: none"> <li>▪ Weak backward linkage due to poor supplies such as agricultural produce</li> <li>▪ Large low-skilled labor force</li> <li>▪ Inadequate middle management skills and specialized workers</li> </ul>	<ul style="list-style-type: none"> <li>▪ Most products are imported from neighboring countries to meet tourist demand</li> <li>▪ Competition keeps salaries low</li> <li>▪ Disruptions for hotels and restaurants. Cambodians lose opportunities</li> </ul>
<b>Diversification and marketing support</b>	<ul style="list-style-type: none"> <li>▪ Lack of infrastructure for visits to some potential tourist sites</li> <li>▪ Lack of initiatives to introduce visitors to Cambodian culture and arts</li> <li>▪ Insufficient and ineffective promotion to attract tourists to destinations besides Angkor Wat</li> <li>▪ Lack of clear and practical strategies for tourism development</li> </ul>	<ul style="list-style-type: none"> <li>▪ Reduced length of visitors' stay</li> <li>▪ Loss of potential tourists interested in culture and arts</li> <li>▪ Reduced length of visitors' stay and low level of visits in the areas beside Angkor Wat</li> <li>▪ Sector is not sustainably generating employment and alleviating poverty</li> </ul>
<b>Legislative support</b>	<ul style="list-style-type: none"> <li>▪ Lack of legislation to protect environment from tourism activities</li> <li>▪ Lack of tourism law</li> <li>▪ Lack of legislation and standards for classifying hotels and restaurants</li> </ul>	<ul style="list-style-type: none"> <li>▪ Environmental degradation and water pollution due to lack of sewage and waste water systems in some hotels and restaurants. There is also degradation of potential areas for eco-tourism</li> <li>▪ Lack of enforceable legislation to govern tourism development and business</li> <li>▪ Lack of service quality</li> </ul>

**Source:** EIC, compiled from various sources and interviews.

### 15.5.2. Policy Recommendations

It is important to benefit more local people by strengthening backward linkages from hotels and restaurants to suppliers of vegetables, fruits and other foodstuffs. For this, quality and regular supplies must be assured. Thus, the capacity of food producers should be improved in the surrounding provinces that have supply capacity. There should also be networks among hotels, restaurants, and food suppliers to agree on the quality and standards of food.



To increase middle management skills and specialized workers in the sector, there is a need for higher education and various short-term vocational training courses. Course curriculums should cover the skills needed in the sector. For this, a forum should be created in which educational strategies can be identified and developed. This could happen in the context of shared initiatives between the private sector and educational institutions.

The country should diversify tourism in terms of destinations, culture and arts. Local and foreign investment has to be encouraged in new destinations through incentives, including tax relief and investment guarantees. A concrete study should be undertaken on how to introduce Cambodian culture and arts to tourists. Then action plans and programs should be implemented to achieve the intended results. The promotion of the image of the entire country should be strengthened, in addition to the current promotion focusing on just a few destinations such as Angkor Wat.

Finally, legislative support has to ensure sustainable development in the sector. This legislation includes a tourism law, legislation to protect the environment from tourism activities, standards for ranking hotels and restaurants, and establishment of the Cambodia Tourism Marketing and Promotion Board.

## Conclusion

A lack of investment in processing leads to exports of raw products and re-importing of final products, as in the case of cashew nuts. This happens mainly due to the high cost of processing. The study found that high processing costs result from high fuel costs, high credit costs and inadequate infrastructure. Other significant factors preventing the development of selected sectors are anti-competitive practices, a lack of trade facilitation and governance, and a lack of standards and certification. In addition, each sector faces its own specific constraints.

Because of these constraints, various sectors continue losing value addition. The cashew industry loses value added because of a lack of investment in processing, so that most of the raw produce is exported. Rubber exports suffer discounted prices and the sector also lacks investment in processing rubber trees for furniture. In tourism, millions of dollars flow out for buying fruit, vegetables, and other foods due to the weak capacity of local suppliers. Organic rice and silk have tremendous potential for exports, but face critical challenges along their value chains.

To retain value addition for employment generation and poverty alleviation, as well as promoting human development, challenges have to be resolved effectively and sustainably. The policy recommendations from both approaches, i.e. cross-sector and sector-specific, have to be implemented effectively. They are equally important and reinforce one another.

Implementation requires the participation of various levels of stakeholders. High level decision-makers should formulate policies and legislation such as fuel price policy and competition policy. Coordination among relevant government agencies is crucial, for instance in the areas of trade facilitation and standards and certification. The role of the private sector is important in dialogue to provide feedback and express the needs of development. Donors can provide technical and financial assistance. Last but not least, local governments play an important role by raising awareness and increasing the participation of villagers and farmers.



## Policy Action Matrix

The table below outlines each policy recommendation along with responsible agencies, expected outcomes, and challenges in promoting export-oriented sectors. The matrix includes policy recommendations in both the cross-sector approach and the sector-specific approach.

Policy recommendations	Main Responsible bodies	Expected outcomes	Challenges	Timeframe*
<b>Reduced fuel prices and exploring alternative sources of energy</b>				
1. Reduce government taxes 2. Increase competition among distributors by establishing competition law/policy with effective implementation 3. Increase transparency and competition by establishing Energy Policy and Planning Office (EPPO) 4. Design policy program with effective implementation for development of alternative sources of energy such as bio-fuel and hydropower	1. MEF 2. MoC 3. MIME/CNPA 4. MIME/CNPA	1. Retail prices decline as a result of lowering taxes 2. Reduction of distributors' gross profits as a result of competition 3. Competition among distributors and transparency for investors and consumers 4. Alternative sources of energy are available for consumers with better prices	1. Reduced government revenue, at least in short term 2. An agency to implement the policy/law effectively and independently 3. Need both financial and technical resources to establish and sustain the system 4. Require government's efforts to design and implement the program effectively	1. Immediate 2. Mid term 3. Medium term 4. Mid term

Increased access to finance				
<ol style="list-style-type: none"> <li>1. Increase local savings and deposits in MFIs by building trust and confidence for depositors as well as promoting marketing toward them.</li> <li>2. Increase SMEs' access to credits of CBs through matching necessary requirements such as establishment of effective SME financial report and development of credit information system</li> <li>3. Encourage CB loans to MFIs through requirements and special guarantees set by NBC and/or donors</li> <li>4. Increase NBC loans to MFIs through less strict conditions</li> <li>5. Increase loan options by establishing a commodity-based collateral system</li> </ol>	<ol style="list-style-type: none"> <li>1. MFIs/NBC</li> <li>2. CBs/SMEs/NBC/MEF/Donors</li> <li>3. CBs/MFIs/NBC/Donors</li> <li>4. NBC/MFIs</li> <li>5. CBs/SMEs/Private Sector</li> </ol>	<ol style="list-style-type: none"> <li>1. Reduced dependency on the external funding associated with high interest</li> <li>2. Increased possibilities for SMEs to fund their operations</li> <li>3. Reduced dependency on external funding associated with high interest</li> <li>4. Reduced dependency on external funding associated with high interest</li> <li>5. Additional loan options for SMEs and farmers</li> </ol>	<ol style="list-style-type: none"> <li>1. Building confidence and trust between depositors and MFIs</li> <li>2. Building confidence and trust between SMEs and CBs</li> <li>3. Commitment from NBC and donors, and participation from CBs. Building confidence and trust between CBs and MFIs</li> <li>4. Commitment from NBC</li> <li>5. Strong interest of private sector</li> </ol>	<ol style="list-style-type: none"> <li>1. Mid term</li> <li>2. Mid term</li> <li>3. Mid term</li> <li>4. Mid term</li> <li>5. Mid term</li> </ol>

<b>Better infrastructure to reduce cost of doing business</b>				
1. Create competition among service providers by establishing competition policy/law with effective implementation 2. Building physical infrastructure in priority areas though public and donor investments 3. Rehabilitating priority roads which connect to major crossing points with neighboring countries through public and donor investments and participation from neighboring countries 4. Increase private sector's participation in infrastructure rehabilitation by providing an investment allowance scheme	1. MoC 2. MPTC/MRD/CC/ donors 3. MPTC/MRD/CC/ donors/ Neighboring countries 4. MEF/CDC	1. Reduced costs of doing business, as a result of competition, such as electricity, telephone, water supply 2. Priority sectors benefit particularly from good physical infrastructure 3. Trade with neighboring countries can benefit from better road conditions. Increased movement of goods within neighboring countries 4. Private sector participation in building infrastructure	1. An agency to implement the policy/law effectively 2. Financial resources 3. Financial resources 4. Need for new investment allowance scheme and greater administrative burden to implement it	1. Mid term 2. Medium term 3. Medium term 4. Long term
<b>Increase foreign and local investments by designing attractive investment incentive scheme</b>				
1. Introduce new investment incentive	1. MEF/CDC	1. Encourage new investments in all	1. Need for new investment allowance scheme and	1. Mid term

scheme by sector		sectors, but especially in potential sectors	greater administrative burden to implement it	
<b>Reduce cost of doing business by eliminating anti-competitive practices</b>				
1. Establish competition policy/law with effective implementation	1. MoC	1. Increased competition reduces prices of consumer goods and prices of inputs for various industries. The cost of doing business will decline.	1. An agency to implement the policy/law effectively and independently	1. Mid term
<b>Improve trade facilitation and governance to minimize costs and procedures in relation to import and export permits</b>				
1. Implementation of risk management approach through speeding up the designing service level agreement and MOU among border agencies 2. Publish guidelines on the process and steps in import and export procedures. The process should be associated with official fees 3. Minimize procedures in relation to import and export permits by establishing and approving SEZ law.	1. MEF(CED)/MoC/ MoH/ MAFF/MIME/ Donors 2. MoC/Donors 3. MEF(CDC)	1. Reduced overlaps and duplication of roles and responsibility among border agencies. Import and export inspections based on risk assessment 2. Transparent process and procedures for imports and exports 3. Increased investment in SEZs	1. Commitment of relevant border agencies to design service level agreement and MOU 2. Technical assistance and commitments from the government 3. Design SEZ law that is attractive for investors	1. Mid term 2. Immediate 3. Mid term

Some additional incentive could be considered to prevail in that law				
<b>Increase market access through upgrading standards and certifications</b>				
<ol style="list-style-type: none"> <li>1. Upgrading standards and conformity assessment to international level through public and donor investments</li> <li>2. Choose priority sectors/products to conclude MRA with other ASEAN countries</li> <li>3. Establish Business Development Services (BDS) for standards and certifications through initial subsidies from the Government and/or donors</li> <li>4. Promote and protect certain niche products by investing in creation of geographical indication</li> </ol>	<ol style="list-style-type: none"> <li>1. MoC/MIME/MoH/ MAFF/Donors</li> <li>2. MoC/MIME/MoH/ MAFF</li> <li>3. MEF/Donors/private sector</li> <li>4. MoC/private sector</li> </ol>	<ol style="list-style-type: none"> <li>1. Elimination of standard barriers to exports</li> <li>2. Elimination of standard barriers to exports</li> <li>3. Elimination of standard barriers to exports</li> <li>4. Promotion of Cambodian niche products</li> </ol>	<ol style="list-style-type: none"> <li>1. Huge investment to upgrade and sustain standards and conformity assessment</li> <li>2. Need for public-private forum to determine priority standards to be included in MRA</li> <li>3. Initial subsidies for export firms to cover costs of certifications</li> <li>4. Need serious cost-benefit analysis for selection of niche products. Also need new legislation and procedures</li> </ol>	<ol style="list-style-type: none"> <li>1. Long term</li> <li>2. Medium term</li> <li>3. Mid term</li> <li>4. Medium term</li> </ol>
<b>Promotion of organic rice industry</b>				



<ol style="list-style-type: none"> <li>1. Campaigns and advocacy programs to raise awareness for farmers about cost and benefits of farming organic rice, as well as for local consumers about health benefits.</li> <li>2. Provide farmers the assistance, such as seeds and training in farming techniques, through support from the Government and donors</li> <li>3. Establish national organic standards through the support from Government, donors and private sector.</li> <li>4. Subsidize standard certification for exported organic rice through inclusion of certification subsidies in donor-assisted programs</li> </ol>	<ol style="list-style-type: none"> <li>1. MAFF/MoC/Donors</li> <li>2. MAFF/Donors/NGOs</li> <li>3. MAFF/COrAA/Donors</li> <li>4. MoC/Donors</li> </ol>	<ol style="list-style-type: none"> <li>1. Increased production of organic rice and increased local demand</li> <li>2. High yield of organic rice and reduced cost of farming</li> <li>3. Built confidence and trust of local consumers. Local consumers will voluntarily pay premium prices</li> <li>4. Elimination of certificate barriers to exports of organic rice</li> </ol>	<ol style="list-style-type: none"> <li>1. Financial assistance</li> <li>2. Technical and financial assistance</li> <li>3. Financial assistance and participation from organic producers</li> <li>4. Requires interest from Government and donors</li> </ol>	<ol style="list-style-type: none"> <li>1. Mid term</li> <li>2. Immediate</li> <li>3. Mid term</li> <li>4. Mid term</li> </ol>
<b>Promotion of cashew nut industry</b>				
<ol style="list-style-type: none"> <li>1. Promote organic cashew nuts through various campaigns and advocacy</li> </ol>	<ol style="list-style-type: none"> <li>1. MAFF/MoC/Donors</li> <li>2. MAFF/Donors/NGOs</li> </ol>	<ol style="list-style-type: none"> <li>1. Increased organic cashew nut supply to niche markets</li> </ol>	<ol style="list-style-type: none"> <li>1. Farmers' lack of interest</li> <li>2. Require interest and support from donors and</li> </ol>	<ol style="list-style-type: none"> <li>1. Mid term</li> <li>2. Mid term</li> </ol>

programs 2. Establish farmer cooperatives through assistance of donor and Government. The cooperatives can also diversify markets for RCN		2. Technical assistance and training more easily delivered to farmers. It also can help to diversify RCN markets and show investors that Cambodia's cashew nut industry is important	Government	
<b>Promotion of rubber industry</b>				
1. Expansion of private plantation by promoting registration of land titles 2. Establish pre-processing village cooperatives through assistance from donors, rubber factories and farmers 3. Promote local processing of rubber trees through reducing cost of processing 4. Increase market access by promoting international recognition of certification	1. MLMUPC/donors 2. Donors/Rubber factories 3. Private sector 4. RRIC/MoC/Donors	1. Easier commercial transaction of rubber land and increased new investment in the sector 2. Large rubber deliveries to factories, reduced transportation costs and limited deterioration during storage 3. Increased value addition in relation to rubber trees 4. Elimination of standard certificate barriers	1. Complicated administrative procedures and need for financial resources 2. Participation from farmers, factories and donors 3. Require strong efforts from Government 4. Technical and financial assistance. Participation from all levels of rubber producers	1. Mid term 2. Mid term 3. Mid term 4. Mid term
<b>Promotion of silk handicraft industry</b>				
1. Promote "Pure Khmer Silk Product" brand to	1. MIME/MoC/Associations	1. Consumers' perception of Cambodian silk	1. Financial resources for promoting awareness	1. Mid term

<p>capture premium prices from customers</p> <p>2. Invest in creation of geographical indication for Khmer silk products through public investments</p> <p>3. Improved quality combined with arts, traditions and innovative design by providing training skills development and capacity building</p> <p>4. Promote Khmer raw silk production among farmer cooperatives</p>	<p>2. MIME/MoC/Associations/Donors</p> <p>3. MIME/Associations/Donors</p> <p>4. MIME/Associations</p>	<p>products as high quality. They are willing to pay premium prices</p> <p>2. Protect and promote Khmer silk products</p> <p>3. Silk products meet clients' demands</p> <p>4. Increased pure Khmer silk production</p>	<p>2. Require the creation of some legislation and procedures</p> <p>3. Need for technical skills</p> <p>4. Farmers' lack of interest</p>	<p>2. Medium term</p> <p>3. Immediate</p> <p>4. Mid term</p>
<b>Promotion of tourism industry</b>				
<p>1. Strengthen backward linkages by ensuring food quality and supply regularity, and by promoting network among hotels, restaurants and suppliers</p> <p>2. Improve skills and specialization by promoting curriculum covering skills needed by</p>	<p>1. MoT/Hotel associations/NGOs/Donors</p> <p>2. MoT/Education institutions/ Private sector</p> <p>3. MoT/Hotel associations/NGOs/Donors</p> <p>4. MoT/Donors</p>	<p>1. Increase value added along backward value chain</p> <p>2. Filling of demands for skilled and specialized workers</p> <p>3. Increased length of stay of visitors and attract new investors</p> <p>4. Legally enforceable regulations govern sector</p>	<p>1. Lack of interest of hotels and restaurants</p> <p>2. Need for strong network and dialogue between educational institutions and business</p> <p>3. Need for public and private investment</p> <p>4. Government commitments and donor</p>	<p>1. Mid term</p> <p>2. Mid term</p> <p>3. Medium term</p> <p>4. Mid term</p>

<p>the sector, and by establishing forum between private sector and educational institutions to identify needed skills</p> <p>3. Diversify in destinations, and in culture and arts, by providing incentives, promoting the country as a whole rather than focusing on few destinations, and enhancing concrete study on how to introduce Cambodian culture and arts to tourists</p> <p>4. Establish supportive legislation by speeding up the adoption of major tourism-related laws and legislations</p>		development in sustainable way	support	
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**\*Note:** *Immediate: Less than one year*  
*Mid term: one to two years*  
*Medium term: two to five years*  
*Long term: more than five years*



## **ACRONYMS OF ABOVE INSTITUTIONS ARE LISTED BELOW**

CB	Commercial Bank
CC	Commune Council
CNPA	Cambodian National Petroleum Authority
COrAA	Cambodian Organic Agriculture Association
CED	Custom and Excise Department
CDC	Council for Development of Cambodia
MAFF	Ministry of Agriculture, Forestry and Fisheries
MEF	Ministry of Economy and Finance
MFI	Micro-Finance Institution
MIME	Ministry of Industry, Mines and Energy
MoC	Ministry of Commerce
MoH	Ministry of Health
MoT	Ministry of Tourism
MPTC	Ministry of Public Transports and Telecommunication
MRD	Ministry of Rural Development
MLMUPC	Ministry of Land Management, Urban Planning and Construction
NBC	National Bank of Cambodia
NGO	Non-Government Organization
RRIC	Rubber Research Institute of Cambodia
SME	Small and Medium Enterprise



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## Appendix 9

### Doing Business in Cambodia 2006

Below are Cambodia's ranks for 10 business environment indicators among 175 countries in the report of doing business 2006. The detailed score and further explanation for each indicator is described consecutively. In this context, region refers to East Asia & Pacific region and OECD refers to countries in Organization for Economic Co-operation and Development.

<b>Ease of ...</b>	<b>2006 rank</b>	<b>2005 rank</b>	<b>Change in rank</b>
<i>Doing business (overall ranking)</i>	<i>143</i>	<i>142</i>	<i>-1</i>
Starting a Business	159	155	-4
Dealing with Licenses	159	163	+4
Employing Workers	124	124	0
Registering Property	100	94	-6
Getting Credit	174	174	0
Protecting Investors	60	58	-2
Paying Taxes	16	15	-1
Trading Across Borders	114	114	0
Enforcing contracts	118	115	-3
Closing a Business	151	151	0

#### Starting a Business

The challenges of launching a business are shown below. Included are: the number of steps entrepreneurs can expect to go through to launch, the time it takes on average, and the cost and minimum capital required as a percentage of gross national income (GNI) per capita.

Indicators	Cambodia	Region	OECD
Procedures (number)	10	8.2	6.2
Time (days)	86	46.3	16.6
Cost (% of income per capita)	236.4	42.8	5.3
Min. capita (% of income per capita)	66.2	60.3	36.1

## Dealing with Licenses

Shown below are the procedures, time, and costs to build a warehouse, including obtaining necessary licenses and permits, completing required notifications and inspection of utilities connections.

Indicators	Cambodia	Region	OECD
Procedures (number)	28	17.6	14.0
Time (days)	181	147.4	149.5
Cost (% of income per capita)	1,640.5	204.2	72.0

## Employing Workers

The difficulties that employers face in hiring and firing workers are shown below. Each index assigns values between 0 and 100, with higher values representing more rigid regulations. The Rigidity of Employment Index is an average of the three indices.

Indicators	Cambodia	Region	OECD
Difficulty of Hiring Index	56	23.7	27.0
Rigidity of Hiring Index	60	25.2	45.2
Difficulty Firing Index	30	19.6	27.4
Rigidity of Employment Index	49	23.0	33.3
Non-wage labor cost (% of salary)	0.0	9.4	21.4
Firing costs (weeks of wages)	39.0	41.7	31.3

## Registering Property

The ease with which businesses can secure rights to property is shown below. Included are the number of steps, time and cost involved in registering property.

Indicator	Cambodia	Region	OECD
Procedures (number)	7	4.2	4.7
Time (days)	56	85.8	31.8
Cost (% of property value)	4.6	4.0	4.3

## Getting Credit

Measures on credit information sharing and the legal rights of borrowers and lenders are shown below. The legal Rights Index ranges from 0 to 10, with higher scores indicating that those laws are better designed to expand access to credit. The Credit Information Index measures the scope, access and quality of credit information available through public registries or private bureaus.

Indicators	Cambodia	Region	OECD
Legal Rights Index	0	5.0	6.3
Credit Information Index	0	1.9	5.0
Public registry index (% adults)	0.0	3.2	8.4
Private bureau coverage (% adults)	0.0	10.1	60.8

## Protecting Investors

The indicators below describe four dimensions of investor protection: transparency of transactions (Extent of Disclosure Index), liability for self-dealing (Extent of Director Liability Index), shareholder's ability to use officers and directors for misconduct (ease of Shareholder Suits Index) and strength of Investor Protection Index. The indices vary between 0 and 10, with higher values indicating greater closure, greater liability of directors,

greater power of shareholders to challenge the transaction, and better investor protection.

Indicators	Cambodia	Region	OECD
Disclosure Index	5	5.2	6.3
Director Liability Index	9	4.4	5.0
Shareholder Suits Index	2	6.1	6.6
Investor Protection Index	5.3	5.2	6.0

## Paying Taxes

The data below shows the tax that a medium-size company must pay or withhold in a given year, as well as measures of the administrative burden in paying taxes. These measures include the number of payments an entrepreneur must make; the number of hours spent preparing, filing and paying, and the percentage of their profits they must pay in taxes.

Indicators	Cambodia	Region	OECD
Payments (number)	27	29.8	15.3
Time (hours)	121	290.4	202.9
Profit tax (%)	19.6	19.7	20.7
Labor tax and contributions (%)	0.0	10.9	23.7
Other taxes (%)	2.7	11.6	3.5
Total tax rate (% profit)	22.3	42.2	47.8

## Trading Across Borders

The costs and procedures involved in importing and exporting a standardized shipment of goods are detailed under this topic. Every official procedure involved is recorded, starting from the final contractual agreement between the two parties, and ending with the delivery of the goods.

Indicators	Cambodia	Region	OECD
Documents for exports (number)	8	6.9	4.8
Time for export (days)	36	23.9	10.5
Cost to export (US\$ per container)	736	885	811
Documents for import (number)	12	9.3	5.9
Time for import (days)	45	25.9	12.2
Cost to import (US\$ per container)	816	1,037	883

## Enforcing Contracts

The ease or difficulty of enforcing commercial contracts is measured below. This is determined by following the evolution of a payment dispute and tracking the time, cost, and number of procedures involved from the moment a plaintiff files the lawsuit until actual payment.

Indicators	Cambodia	Region	OECD
Procedures (number)	31	31.5	22.2
Time (days)	401	477.3	351.2
Cost (% of debt)	121.3	52.7	11.2

## Closing a Business

The time and cost required to resolve bankruptcies is shown below. The data identifies weaknesses in existing bankruptcy law and the main procedural and administrative bottlenecks in the bankruptcy process. The recovery rate, expressed in terms of how many cents on the dollar claimants recover from the insolvent firm, is also shown.

Indicators	Cambodia	Region	OECD
Time (years)	No practice	2.4	1.4
Cost (% of estate)	No practice	23.2	7.1
Recovery rate (cents on the dollar)	0.0	27.5	74.0





## Appendix 10

### The Twelve-Point Plan

In response to the study report “*Investment Climate Assessment*” by the World Bank, the Royal Government of Cambodia, through Prime Minister’s Decision No. 12/2004 and Decision No. 44/2004, established a Special Inter-Ministerial Task Force on Trade Facilitation and Investment Climate, chaired by the Minister of Economy and Finance and Vice-Chaired by the Minister of Commerce. This body defined an integrated program of reform to address the most urgent impediments raised in the report. At its June 7, 2004 meeting, the Task Force agreed on a number of actions to be taken as described below.<sup>1</sup>

**Action 1:** Establish a cross-Agency Trade Facilitation/Investment Climate Reform Team

**Action 2:** Establish Transparent Performance Measurement including Private Sector Monitoring.

**Action 3:** The trade facilitation process, including all licenses, procedures and documents, will be reviewed to remove overlaps and unnecessary approvals. Following the reengineering, a Single Administrative Document will be implemented and other documents progressively eliminated.

**Action 4:** Introduce an overall risk management strategy to consolidate and rationalize all examination requirements of the different control agencies.

**Action 5:** A strategic review of the role of CamControl will be launched to more productively deploy the organization’s unique knowledge of quality control process and make optimized use of inputs and resources from other agencies, such as the CED.

**Action 6:** A Single Window process to manage trade facilitation will be piloted in the Port of Sihanoukville by December 2005. The Trade Facilitation process, once streamlined, will be automated.

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<sup>1</sup> The World Bank: Cambodia, *Seizing Global Opportunity: Investment Climate Assessment & Reform Strategy*, August 2004.

**Action 7:** The Government will introduce a WTO compatible flat fee for service and the service will be defined by a service-level agreement. The fee structure will be public.

**Action 8:** Streamline the process and reduce the cost of incorporating with the Commercial Register, which is maintained at the Office of the clerk of the Commercial Court, and costs an average of \$630 and 30 days.

**Action 9:** Streamline the process notification of the Ministry of Labor to start hiring employees, which costs \$250 and 30 days to complete.

**Action 10:** Harmonize registration for VAT, income tax and company registration using the same form and resulting in the same unique identifier. This would facilitate information sharing across agencies.

**Action 11:** Implement a national award to promote good corporate citizenship in the private sector.

**Action 12:** Monitoring and Reporting will take place through the Private Sector Forum.

# **Part IV**

## **Promoting Human Development Trade Negotiations: *An Action Plan for Cambodia***



## Introduction

The garment industry is a major source of employment in Cambodia. EIC estimates that more than 500,000 citizens are employed directly or indirectly in the industry. Garment factory workers are usually low skilled women from the countryside and their salaries support not only themselves but also their families.

The expiration of the Agreement on Textiles and Clothing (ATC)<sup>1</sup> in 2005 created a substantial change in the global trade framework. It may affect both the future structure of the garment trade as well as employment levels in the sector.

Global trade in garments is progressively liberalizing. It can be expected that competition will increase as of January 2009, after which restrictions on imports of Chinese apparel to the EU and US markets will be phased out. Cambodia as a sourcing-location for garments will be challenged to find its position in this new environment.

Cambodia's economy has not yet been able to diversify sufficiently. It is therefore strongly dependent on revenues from the large garment industry. Any disruption in the sector's development would severely affect the human development prospects of many workers and put at risk the achievements of the Millennium Development Goals (MDGs) of the Royal Government of Cambodia (RGC).

This study is the fourth out of four to be conducted under the project "Addressing the Impact on the ATC's Expiry on Cambodia". It aims at exploring new employment opportunities for workers who may lose their jobs due to the restructuring processes in the garment sector.

The main objective of this study is to identify opportunities for the RGC to negotiate advantageous access to important export markets for rice, cashew nuts, silk and natural rubber. These sectors were identified in Part II of this publication under the title "*Export Diversification and Value Addition in Cambodia*". These sectors have a high potential to contribute to product and market diversification as well as to value-addition and retention. The tourism sector has also been identified on the grounds of its development potentials. Considering the weak options that exist for promoting the consumption of

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<sup>1</sup> The ATC is the successor of the Multi Fibre Agreement which expired on 1<sup>st</sup> January 1995.

tourism services abroad through trade negotiations, no specific analysis will be performed in this study.

A second objective of the study is to create a policy action plan detailing how the RGC can achieve the Trade Policy Objectives (TPOs) identified in the study.

The study is based on a combination of secondary information from existing reports of various organizations and qualitative interviews with trade practitioners and trade policy specialists. Inputs from relevant line ministries and the National Reference Group (NRG) have been integrated as well.

In respect to data describing market access conditions for selected markets, analysis has been based on data available through the sources of the International Trade Centre (ITC) and the ASEAN-Secretariat as of end 2006.

Cambodia's National Export Strategy 2007-2010<sup>2</sup> has been used as an important reference document to ensure that the trade policy objectives proposed in this study are in line with the government's vision.

First, this study identifies target markets for a choice of products. Market access constraints are then identified in countries where access could be secured through negotiations in fora such as the WTO, the ASEAN or bilaterally. Finally, a trade negotiation strategy is developed and TPOs are proposed.

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<sup>2</sup> The document has been formulated jointly by the MoC and the ITC.

## Chapter 16

### Linkages between Trade Negotiations and Human Development

Cambodia is a member of the World Trade Organization (WTO) and the Association of South East Asian Nations (ASEAN). The country currently negotiates and implements Free Trade Agreements (FTAs) with regional partners through the ASEAN framework. These partners are Australia, Japan, China, India and South Korea. The European Union is expected to become a non-regional partner in the near future. While it is widely assumed that the country's economy has benefited from economic integration through these frameworks, their human development impact has not yet been broad. This can be ascribed to the fact that Cambodia's accession represents only a recent event and that major potentials still remain to be seized.

At present Cambodia's economic base is thin and shows only low levels of diversification in terms of products and markets. Of the US\$2.9 billion worth of total exports in 2005, 79 percent were garment products, 16 percent primary or unprocessed agricultural products and 5 percent re-exports. The two main destinations for Cambodia's garment exports were the US, absorbing 70 percent, and the EU, absorbing 23 percent.<sup>3</sup> Agricultural exports concentrate around rubber, paddy, fish products and cashew nuts. Most of them are exported to neighboring countries. This takes place through informal channels to Thailand and Vietnam, and through formal ones to Malaysia and Hong Kong.

The current situation thus shows a strong vulnerability of the economy towards external shocks. A crisis in one sector or market cannot be easily compensated through strong performance in other sectors or markets. Overcoming this vulnerability is of high importance to securing past human development achievements and to the creation of a strong momentum for further promoting human development.

Becoming less vulnerable in the context of a high level of economic integration with the rest of the world mainly means diversifying exports and

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<sup>3</sup> MoC (2005): *Cambodia Balance of Payment Statistics*; EIC Database 2007, <http://data.eicambodia.org>; COMTRADE (2005): *Reporter: Cambodia*, United Nations Statistics Division



markets. The adoption of a tailored trade negotiation strategy targeting these two diversification aims would contribute substantially to the human development of workers in these sectors.

Human development objectives can be achieved through the support of the international trade framework as long as it contributes to opening up lucrative markets abroad for exported goods that generate high levels of income and employment in Cambodia.

These goods would ideally fit an effective and reliable demand in the destination markets and allow for a high portion of value addition to take place in Cambodia. Organic rice, cashew nuts, silk and natural rubber have been identified as such goods in a previous study by the EIC, along with tourism services.

The strongest momentum for increasing generalized market access for these goods lies within the trade negotiations of the WTO's Doha Round as well as within the regional framework of the ASEAN.

The following analysis will discuss what activities are needed in trade negotiations in order to increase market access for the goods mentioned above. Tourism services will not be discussed because market access is no longer linked to trade negotiations as these services can already be freely consumed by most tourists.

## Chapter 17

### Identification of Target Markets

In order to prioritize activities at the level of trade negotiations, target markets will be identified for each economic sector discussed in this paper.

For the purpose of simplifying the analysis, reference products are chosen as representative of each sector. These will be milled rice, silk shawls, technically specified natural rubber and cashew nuts without shell (see Table 17.1). Due to their elevated level of processing, they represent a higher level of value addition as compared to the basic product within each particular value chain. Thus the reference products can be expected to better contribute to human development benefits through international trade than basic products within the same value chain.

In the case of natural rubber, technically specified natural rubber is not on the top of the value chain, but is representative of the kind of product that Cambodia is likely to export in the short and medium term.

**Table 17.1: Reference Products By Sector**

Sector	HS code	Description
Rice	1006.30	semi-milled or wholly milled rice
Cashew nut	0801.32	cashew nuts, fresh or dried, without shell
Silk	6212.10	shawls, scarves of silk or silk waste
Rubber	4001.22	technically specified natural rubber (TSNR)

**Source:** ITC Trade Map 2007

At present, Cambodia still lacks large-scale experience in exporting processed products to final-destination markets. The marketing infrastructure currently available to most Cambodian producers apparently does not yet allow for such direct marketing. Furthermore, prevailing production structures do not allow for large-scale production of the qualities and products requested on destination markets.

Target markets will thus not be identified on the basis of past bilateral trade performance with Cambodia. They will be identified on the basis of two

simple indicators measuring current demand and market access levels. Five top markets for each product-category will be identified based on 2004 data, the most recent year for which data is available for all sectors discussed.

The first indicator is “market size”, measured by volume of consumption. It constitutes a simple indicator, which helps estimate the current demand of a country.

However, market size does not necessarily mean that a respective market is open to imports. In the cases of rice, cashew nuts and natural rubber, “import volume” will be used as a second indicator. It will be assumed that the import volume in a particular year is a simple but acceptable estimate of openness. It estimates at the same time the dependency of one country on imports and the level to which its mix of tariff and non-tariff import barriers constitute an impediment to imports.

Due to the availability of data for silk products, target markets for silk products will be assessed on the basis of import data only.

The two indicators will be used concurrently to prioritize markets. Each country which falls under the top-5 ranking of either of the two indicators will be designated as a target market for the purpose of this analysis. This will lead to a variable amount of 5-8 target markets for each product (see Table 17.2). Detailed calculations and tables regarding the selection can be found in Appendix 11.

**Table 17.2 : Target Export Markets for the Reference Products of the Analysis**

Target Markets								
<b>Conventional Rice</b>	Nigeria	Philippines	Indonesia	European Union	Saudi Arabia	China	India	Vietnam
<b>Organic rice</b>	European Union	USA	Switzerland	Canada	Japan	-	-	-
<b>Cashew nuts without shell</b>	USA	Netherlands	United Kingdom	Canada	Australia	India	Vietnam	Indonesia
<b>Silk shawls &amp; scarves</b>	USA	France	Japan	Italy	Germany	-	-	-
<b>Natural rubber</b>	European Union	USA	Canada	Japan	Republic of Korea	Thailand	India	-

**Source:** Selection of countries based on data in Appendix 11

## **Chapter 18**

### **Increasing Market Access through the WTO Negotiations**

Rice, cashew nuts, silk and natural rubber enjoy different degrees of market access on a country by country basis.

Intense activities aimed at increasing market access for these and other products are currently taking place in the WTO Doha Round Negotiations. These negotiations are trying to facilitate market access improvements for trade in both goods and services. Negotiations are therefore strongly interconnected.

At the time of writing, disagreement between members about what levels of market access improvements to use as targets for the negotiations persist. This has contributed to slow progress in negotiations.

This chapter will identify major trade barriers that constrain access to target markets. Options to overcome constraints through negotiations within the framework of the WTO will then be proposed.

#### **18.1. Organic Rice/Conventional Rice**

No distinction is made in trade treaties between conventional rice and organic rice. The denomination of “rice” in this chapter will therefore usually refer to rice in general, independently of its production methodology.

Being an important staple food with food security implications, market access for rice is highly regulated in many countries. This is the case in particular with Asian countries. Rice faces relatively open import regimes in countries like Singapore which are not significantly engaged in production. Serious market access restrictions are however to be faced in countries like Japan or South Korea which have a large but uncompetitive rice industry.

### 18.1.1. Tariff Barriers

#### Reducing Import Tariffs on Target Markets for Organic and Conventional Rice

The USA, Switzerland and Canada are target markets for organic rice. They can be accessed duty-free. The same is the case for the EU within the quantitative limitations of import quotas.

Japan is a different case. It has a rice import trade policy in place that severely limits rice imports, including organic rice. In calendar year 2004, for instance, the sum of all import measures amounted to a tariff equivalent of up to 626% depending on the origin and the market value of the product (see Table 18.1).

**Table 18.1 : Import Tariffs Applied to Milled Rice on Top 5 Organic Retail Markets**

Country	Applied Import Tariff
EU <sup>4</sup>	0 – 30
USA	0
Switzerland	0
Canada	0
Japan <sup>5</sup>	0 – 626

**Source:** ITC Trade Map 2006 and Komuro Norio (2006)

While most target markets for organic rice will apply no tariffs at all in the near future, the picture is slightly different on target markets for conventional rice. With the exception of the EU, Saudi Arabia and Vietnam, at present neither target market can be considered easy to access (see Table 18.2). This is not likely to change in the near future. Import tariffs have been raised in Nigeria just recently in order to support domestic production. India, the Philippines and Indonesia maintain high import tariffs. China regulates

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<sup>4</sup> Sum of retail sales in major EU markets: Germany, Italy, France, UK, Sweden, Netherlands, Denmark

<sup>5</sup> Duty-free imports are possible under state trade for a quota of 8% of consumption. The applied tariff for out-of-quota rice amounts to 49 JPY/kg. Difficulties exist in calculating the ad valorem import tariff equivalent of the Japanese import regime for rice, which operates with different import control measures. The methodology of ITC leads to an import tariff of 88% for out of quota rice. The author Komuro however calculates levels of up to 626%. See: Komuro, Norio (2006): "Japan's Generalized System of Preferences: An Oriental Pandora's Box", University Law School, Kobe, April 25th, 2006, p.13

imports through tariff rate quotas, with high import tariffs applied to out-of-quota imports.

**Table 18.2: Import Tariffs Applied to Milled Rice in Target Markets for Conventionally Produced Rice in 2006 (in %)**

Country	Applied import tariff <sup>6</sup>
Nigeria <sup>7</sup>	20 – 100
Philippines <sup>8</sup>	0 – 50
Indonesia <sup>9</sup>	16
EU <sup>10</sup>	0 – 30
Saudi Arabia	0
China <sup>11</sup>	1 – 65
India	70
Vietnam <sup>12</sup>	0 – 5

**Source:** *ITC Trade Map 2006 and ASEAN CEPT 2006*

<sup>6</sup> HS code 100630

<sup>7</sup> A special levy of 50% is to be added on top of the import tariff of 50%, thus adding up to an effective import tariff of 100%. However, by issuing business links with one of the two local import companies that currently hold licenses to import a rice quota of 100'000 tons a year, import tariffs could decrease to as low as 20%. In order to encourage local milling the import of paddy rice is subject to the lower tariff of 5%. *Reference found in: Uche Nzeke, GAIN Report-NI6003, USDA Foreign Agricultural Service, 20 March 2006; FAS Worldwide, Online Review, December 27, 2006, accessed at <http://www.fas.usda.gov>*

<sup>8</sup> The Philippines applies an import quota system. Tariffs on both in and out of quota imports amount to 50%. If the import is commissioned by the National Food Authority itself, the tariff is waived. *Source: USTR (2007): National Trade Estimate Report on Foreign Trade Barriers, p. 471f.*

<sup>9</sup> The ad-valorem tariff is calculated based on an import tariff of 47 USD/ton, a Thailand FOB price for rice of 299 USD/ton based on prices and exchange rates in December 2006.

<sup>10</sup> The effective tariff is dependent on rice variety and on availability of quota.

<sup>11</sup> China applies a tariff rate quota system. In 2007 about 2,7 million tons of rice can be imported at the tariff rate of 1% through private trade. Another 2,7 million tons can be imported through Chinese state trading at the same rate. All other rice imports are subject to the applied MFN tariff of 65%.

<sup>12</sup> 0% starting 2007 on the basis of recent bilateral agreement on trade promotion for agricultural products imported from Cambodia, source: <http://vietnamnews.vnagency.com.vn/showarticle.php?num=03ECO050806>, August, 5th 2006. See also Ministry of Trade of Vietnam “Bilateral Agreement on Agricultural Products Subject to Import Duty Rate of 0% in Vietnam”, [www.mot.gov.vn](http://www.mot.gov.vn). See also FAO (2006): “Food Outlook, Global Market Analysis”, No.2, December 2006

The current framework of the Doha Round has some potential to reduce import tariffs on rice through the duty free quota free (DFQF) initiative. The initiative will be presented in more detail later in this chapter.

### *General Tariff Cut Formula*

The general tariff cut formula will bring down tariffs on rice to different extents depending on the outcome of the ongoing negotiations. Developed countries may have to reduce their tariffs by 20 to 90 percent and developing ones between 15 to 40 percent. Cambodia as an LDC would not be obliged to undergo any tariff cuts.

However, at this stage it still remains difficult to assess to what extent tariff cuts would affect any particular product. Current negotiations under the Doha Round have introduced the possibility for developing countries to designate a certain number of products which would be totally or partly excluded from the obligation to increase market access through tariff cuts. This exclusion would be motivated through development objectives. Rice as an important staple crop in rice producing and consuming countries like Nigeria, Indonesia, China, India and the Philippines is likely to be designated as a “special product” in order to obtain favourable treatment.

Japan as a developed country would be requested to increase market access on all agricultural products. It would however be able to designate rice as a “sensitive product” under specific provisions of the Hong Kong Declaration. The concept of sensitive products would allow for partially excluding a choice of products from market access concessions. This would not allow for completely avoiding tariff cuts. But on such a product Japan would only be requested to commit to “smaller than average” tariff cuts.

### *Duty-Free Quota-Free Initiative*

The Duty-free Quota-free (DFDF) initiative has been launched in the context of the Doha Round negotiations with the aim of better integrating Least Developed Countries (LDCs) in international trade. The initiative will lead to developed countries granting duty-free and quota-free market access to products from LDCs, including Cambodia. As developed countries have

only committed to provide such favourable treatment to 97% of products<sup>13</sup>, it remains still uncertain to what extent market access for rice will be increased effectively to important markets<sup>14</sup>. In fact such partial coverage would allow many countries to still exempt products that they consider to be sensitive from undergoing significant market access commitments. This would for example most likely be the case with Japan in the case of rice.

Unlike developed countries, developing ones would retain the right to decide by themselves on whether to participate in the DFQF initiative. China, India and Indonesia, for instance, are not bound by it.

It can thus be concluded that the DFQF initiative as such is a weak instrument for obtaining reliable, across the board and quick market access to target markets for both conventional and organic rice. The initiative will have only a low impact on both tariff-barriers and quantitative import restrictions in developing countries. Some market access improvements may, however, materialize in non-target markets.

### **Addressing Tariff Escalation**

“Tariff escalation” is a methodology for setting tariffs at different levels according to the processing degree of a product. Various countries currently apply higher tariffs to imports of milled rice than to imports of unprocessed or semi-processed rice. Escalating tariffs constitute a hurdle for exporting countries because value-adding activities like rice milling become less attractive and profitable due to the increasing burden of import tariffs. While tariff escalation is generally of much less importance for rice than for other commodities, the phenomenon persists and affects Cambodia’s development interests.

Table 18.3 shows that in the case of the EU and Japan as target markets for either organic or conventional rice tariff escalation ranges between 4 and 51 percentage points depending on market and product. Tackling tariff escalation for milled rice would therefore increase market access for Cambodian rice to these countries and contribute to value-retention along the international value-chain.

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<sup>13</sup> Products are defined at the tariff line level.

<sup>14</sup> Hong Kong Ministerial Declaration 2005, Appendix F



**Table 18.3: Tariff Escalation for Rice Products in Selected Countries in 2006**

	Applied Import Tariff (In %)		Tariff Escalation (In %)
	Rice in The Husk	Milled Rice	
EU Long-Grain	26	30	4
EU Long-Grain Parboiled	8	29	21
Japan	37	88	51

**Source:** *TradeMap 2006 and ITC*

Starting in September 2009, the EU will abolish all import tariffs and quotas on rice originating from Cambodia based on its unilateral commitment it made in the Everything-But-Arms (EBA) Initiative. The initiative will provide such preferential treatment to all imports originating in LDCs, with the exception of arms. This will solve the problem of tariff barriers on an important target market, tariff escalation included.

Tariff escalation in Japan however will remain a difficult issue to address. The current negotiating framework is weak specifically on addressing tariff escalation. However, tariff escalation may be dampened through the effect of the general tariff cut formula to be applied in agriculture which cuts higher tariffs stronger than lower tariffs.<sup>15</sup>

### ***18.1.2. Non-Tariff Barriers***

#### **Tariff Rate Quotas and Quantitative Import Restrictions**

Tariff rate quotas define two types of tariffs. One tariff is applied against a specific import volume of rice. A second, often much higher tariff is then applied to all imports that surpass this quantitative ceiling. Such quotas constitute an effective import regulation tool in target markets such as Indonesia, China, the Philippines, the EU and Japan.

Indonesia imported high volumes of rice until 2005 but created a momentum of unpredictability by applying a temporary import ban in 2004.

<sup>15</sup> July Framework Agreement 2004, paragraph 29

Imports are however likely to resume in the near future due to concerns over food security and price stability.

In the case of the Philippines, a high tariff of 50% is applied against the rather small import quota of 350,000 tons. Out of quota imports are subject to political decision and to the same import tariff as in-quota rice. The government of the Philippines is likely to achieve a specific deal at the WTO that will allow it to retain import quotas until 2012. These quotas will be provided to main producers of rice.<sup>16</sup> The main option for Cambodia to access the market will therefore consist in bidding for import quotas in those years in which the government decides to buy quantities that exceed the predetermined quota ceiling. It may therefore be an interesting option for Cambodia to address the issue within the ASEAN framework.

The tariff quota rates applied by Japan are prohibitive and have effects similar to quantitative import restriction. The best way to address their constraints is therefore to increase the capacity of Cambodian exporters to use the tariff quota schemes and their administrative instruments currently in place.

A further barrier to imports can be seen in Japan's administration of import quotas under the auspices of the Food Agency of the Japanese MAFF. The applied auctioning system constitutes a price increasing factor for imported rice (see Box 18.1).

#### **Box 18.1: Japan's Simultaneous-Buy-Sell System for Rice Imports**

The Food Agency of the Japanese MAFF is the exclusive agency authorized to buy imported rice. Japan practices the Simultaneous-Buy-Sell (SBS) system, which is applied uniquely on rice imported within the quota. The system allows the Food Agency to add a markup of up to 292 JPY/kg on imported rice. This is the difference between the buying price to the Food Agency and the reselling price from the Food Agency to the domestic market. According to the system, the Food Agency will resell the rice to the importing firm. Competing importing firms will propose markups to the food agency, and the agency will select the bid that provides the highest markup. The system is known for its price increasing effect on imported rice. Through the auctioning process, the imported rice is indirectly submitted to a new form of tariff. Under the SBS system, not all imported rice is subjected to auctioning. The Japanese government will decide the quantity of imported rice that can be resold. In 2004 93,988 tons were managed by the SBS system.

**Source:** Fukuda, Hisao et al. (2003): "Rice Sector Policies in Japan", *Outlook Report No. RCS0303-01, ERS USDA*

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<sup>16</sup> See footnote 7

Pushing for simplification, harmonization and more transparency in quota administration systems in the Doha Round negotiations appears to be the best option for addressing the issue.

China's tariff rate quota allowing for imports at a duty of 1% is quite sizeable. A first instalment of 2.66 million tons can be imported through private trade and a second one of 2.66 million tons through Chinese state trading enterprises. Utilizing existing quotas therefore seems more promising for obtaining short term market access than joining forces with other producers in asking for a quota expansion or tariff reduction.

This could be obtained through capacity building measures in the field of compliance with Chinese phytosanitary regulations. Recipients could be both government institutions and producers and exporters. An appropriate training of potential exporters in matters of Chinese quota regulations could further increase quota utilization rates.

In conclusion it can be said that for small exporters, like those in Cambodia, the lack of harmonization related to quota administration rules constitutes a barrier to trade. However, harmonization is difficult to achieve within the WTO. More simplified market access approaches are therefore needed in the case of LDCs for markets applying tariff rate quotas. One promising approach to overcoming the impediments posed by tariff rate quotas in a comprehensive manner could be their effective elimination as proposed by the DFQF initiative of the Doha Round negotiations.

### **Licensing**

Import licensing is a requirement deriving mainly from quota administration. It constitutes an import barrier when transparency is not guaranteed and the administrative burden and insecurity for the exporters is increased. In the case of the EU, for instance, specific regulations on licensing come on top of the process that takes place at the level of the European Community (see Box 18.2).

### **Box 18.2: Import Licensing for Rice in the EU and the UK**

#### EU vs. Member State level

An importer must apply in advance for the import license. According to the Commission Regulation No 1401/2002 of 31 July 2002, an import license must be requested at the Member State level on five appointed dates within the marketing year. The application must mention the quantity of imported rice which is not allowed to exceed the available quota ceiling. The Member States then inform the European Commission within two days after the last day of the application submission. Upon reception of the notification from the Member States, the Commission will make a decision within 10 working days on which licenses to approve.

#### The case of the UK

In the UK, import licenses may be requested electronically. In addition, a special security fee may be required in order to guarantee that the products are imported during the validity period of the license. The security fee will be fully refunded if the importer imports at least 95% of the quantity foreseen by the license. If the requirements are not properly respected, the security fee may be wholly or partially retained. Many kinds of rice need the security lodge in the UK. The cost is fixed and based on the quantity of rice.<sup>17</sup>

**Source:** *EU and Royal Payments Agency UK 2006*

However, in this particular case the issue will lose its severity starting 2009 due to the DFQF treatment granted by the EBA Initiative of the EU.

### **Non-Ad Valorem and Peak Tariffs**

Indonesia, Japan and the EU calculate tariffs on imported rice based on the volume and not on the value of the good. This makes the border measure less sensitive to the price of an imported good and the level of competitiveness of an exporting country. Non ad-valorem (specific) tariffs to some extent have effects similar to quantitative import restrictions. This is the case in Japan with its very high non ad-valorem tariffs.

The Doha Round negotiations have achieved a consensus on the issue to convert all these specific tariffs to ad-valorem ones. The new calculation methodology would not lead to new tariff levels but simply make them more visible and comparable among each other. In the case of Japan these may thus be as high as 778 percent<sup>18</sup>.

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<sup>17</sup> ET14, March 2005, Version 3.00 ; Source : <http://www.rpa.gov.uk>; accessed on 20.02.2007

<sup>18</sup> Benette Richardson, Asia Time, July 28, 2005, [http://www.bilaterals.org/article.php?id\\_article=2378](http://www.bilaterals.org/article.php?id_article=2378)

Securing this achievement of the negotiations and pushing for the introduction of a maximal ceiling on peak tariffs may be important for securing an increase in market access.

### **Market-Distorting Subsidies**

Various forms of subsidies, export subsidies in particular, can have serious market distorting effects. Products can be exported below their cost of production, thus driving down prices on world markets. Competitors' margins decrease thus making exports for them less profitable and less likely. Export subsidies can therefore constitute a real barrier to trade that directly affects Cambodian rice producers and exporters. Due to lower world market prices resulting from subsidies, Cambodian rice exporters lose competitiveness on specific markets.

The US as a major exporter of rice is contributing significantly to this phenomenon, as it pays large sums of subsidies to its rice producers. This happens under forms such as direct payments, counter-cyclical payments, loan payments and crop insurance. Between 2000 and 2004 the sum of these payments to rice farmers averaged to \$US 1.2 billion per year<sup>19</sup>. It has been quantified that in 2003 rice originating the US was exported at an average price of 26% below the cost of production.<sup>20</sup> Estimates suggest that US rice production would significantly fall in the absence of subsidies and exports likely to disappear. One study concludes that such US rice subsidies contribute to drop of international rice prices of about 4 to 6 per cent<sup>21</sup>. If U.S subsidies were reduced or eliminated, margins for rice farmers and traders in Cambodia could be on the rise.

The EU as well subsidizes its own rice production with market distorting programs that amounted to \$US 395 million in 2006<sup>22</sup>. The bigger amount of subsidies goes to market price support. It therefore makes market access more difficult.

However, as far as export dumping is concerned, the phenomenon is unlikely to be severe with the EU. First, only a small amount of total

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<sup>19</sup> Stuart, Liz (2005): *"Truth or Consequences: Why the EU and the US must reform their subsidies, or pay the price"*, Oxfam Briefing Paper 81, p.17

<sup>20</sup> Murphy, Sophia et al. (2005): *"WTO Agreement on Agriculture a Decade of Dumping: United States Dumping on Agricultural Markets"*, Annex 1: xi, Institute for Agriculture and Trade Policy, Minneapolis

<sup>21</sup> Daniel A. Summer, "Boxed In: Conflicts between U.S farm Policies and the WTO obligations," Cato Institute Trade Policy Analysis, no. 32, December 5, 2005, p. 21

<sup>22</sup> WT/TPR/S/177, WTO, p. 88, 2007; see also Gain Report E23156, 2003

payments are export subsidies. In 2006 these were \$US 7 million<sup>23</sup>. Second, the EU is traditionally a net-importer of rice<sup>24</sup> and exports relatively small volumes. It is estimated that in 2006 the EU exported less than 1 percent of all world exports of milled rice whereas the US had a share of more than 13 percent in the same year.<sup>25</sup>

Japan too has policies in place that subsidize rice production. The money-value of its subsidy program for the rice, barley and the wheat sector is estimated to have reached \$US 1.5 billion in 2001 and 2002<sup>26</sup>. While this may give some competitive advantage to domestic producers on domestic markets, its real effect on overall market access is minor when compared to the effect caused from the extremely high levels of import tariffs. The impact on world market prices for rice of the Japanese subsidy program is likely to be low as Japan is not a big exporter of rice to the international market.

Considering the potential to increase the world price for rice, it therefore lays particularly in Cambodia's interest to make the elimination of export subsidies in the US to happen as soon as possible. This can best be achieved at the multilateral level. A consensus has been reached at the Ministerial Meeting in Hong Kong in 2005 to eliminate the most serious forms of export subsidies by 2013. However, this still remains dependent upon a successful and timely conclusion of the Doha Round negotiations.

## Standards

Various forms of standards are in place that regulate characteristics of rice-based products and therefore affect production processes. While the political objectives of standards are in most cases legitimate, e.g. consumer safety or environmental protection, they can act as an effective market access barrier for products coming from a country like Cambodia where inexperienced and resource-poor Small and Medium Enterprises (SMEs) prevail in the agro-processing sector. Due to the small scale of many operations, it is not economically viable to comply with the multitude of standards applied in different countries. Procuring the required certificates at the national and international level further adds burden to the export process.

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<sup>23</sup> Reichert, Tobias; Rice, Tim (2006): *"A depreciating asset, too high a price: The implications of the decision to end EU export subsidies by 2013 – and why dumping will continue"*, CAFOD p.7

<sup>24</sup> [http://trade.ec.europa.eu/doclib/docs/2006/june/tradoc\\_120338.pdf](http://trade.ec.europa.eu/doclib/docs/2006/june/tradoc_120338.pdf)

<sup>25</sup> ERS (2006): *"Rice Yearbook 2006"*, World Rice Trade, Table 25, USDA

<sup>26</sup> Trade Policy Review: Japan, 31 January and 2 February 2007, WTO

### *Phytosanitary Standards*

Cambodian rice faces strict phytosanitary requirements in almost every country, in particular in those that are rice-producers themselves. Such requirements are designed to avoid the spread of plant pests through imported goods. China, for example, has strict plant safety and protection requirements in place. Cambodia finds it hard to meet them and cannot sign a bilateral inspection and quarantine agreement which would allow for direct exportation of rice to China.

The failure in complying with phytosanitary standards is somehow symptomatic of the production environment in Cambodia. The major constraints arising from this failure should be addressed at the domestic level. Capacity-building is needed to support the country's Plant Protection and Phytosanitary Inspection Office, the plant pest diagnostic laboratory and the functionality of border check-points. Capacity building measures are also needed at the level of production management

While most of these points primarily should be addressed at the domestic level, they are connected to the Doha Round negotiations through the Aid for Trade initiative, which will be discussed in chapter 3.5 of this paper.

### *Food Safety Standards*

An important set of food safety standards concerning rice exists with the Codex Alimentarius Commission, of which Cambodia is a member. The Commission was set up by the Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO).

Of particular concern are maximum residue levels of pesticides that products are allowed to contain. These standards enjoy high legitimacy and priority on government agendas, and are therefore likely to become more severe over time. Utilization of pesticides by rice farmers in Cambodia, on the other hand, is increasing and could lead to critical residue levels in the future that endanger market access.

Market access constraints arising from food safety standards are therefore best addressed at the domestic level by increasing compliance. Major deficiencies at the domestic level can be identified with inadequate production management and training of farmers. Both are however difficult to influence in the short run.

On a transitional basis it is worth considering to target at markets in which lower standard requirements for rice are in place. This would allow for exporting rice while performing capacity building measures that aim at compliance with higher standards.

While such a strategy may work out in the short run, it is questionable whether it will lead to sustainable market access. Regulations on food safety in destination markets can change quickly. In addition, aiming at markets with low standards decreases incentives for agricultural reform and training to take place, thus postponing such work to the future when competition on access to new markets may be even more intense. A focus on organic rice could therefore be seen as one means to overcome the challenges arising to market access from food-safety standard-compliance. Organic agricultural practices ban the use of chemical inputs that could eventually be harmful to humans.



### *Organic Production Standards, Certification Procedures and Labeling Requirements*

In many countries, rice must be specifically certified and labeled before it can be marketed as “organic”. The procedures and standards laid out for obtaining such a certification and the use of labeling vary on a country by country basis. Complying with country specific organic regulations and certification procedures is therefore central for Cambodian organic rice to be able to be marketed as organic.

While production standards currently regulating major markets are similar, this is not the case with certification and inspection procedures. Only compliance with country-specific procedures will lead to the recognition of an organic certificate by the importing country. The need to serve different markets leads private certification institutions to hold accreditations for different markets at the same time, which increases their operating costs as well as those of their customers.

#### **Box 18.3: Insecurity through EU Certification Requirements for Organic Products from Third Countries**

As a principle set out in the 1991 Regulation, only the products originating from countries recognized by the Commission as having standards equivalent to those of the EU can be marketed as organic in the EU. Currently, there are only seven countries that are eligible to import their product to the EU. Cambodia is not one of them. As a result, Cambodian organic rice may not be imported to the EU. This is a very strict regulation as organic products must be subjected to specific controls covering production, handling and transportation. However, the latest regulation dated 26 December 2006 permits the EU member states to accord an importation permit to a product deemed to be organic if the importer may prove that those products are produced in accordance with the EU rule. In its countries of origin, the product must be inspected by a competent authority or body recognized by the EU Commission. Currently, there is no Cambodian authority which is recognized by the EU. So the certification may be trusted to private bodies that are accredited by the Commission. However, the certificate offered by private bodies does not ensure totally that the products may enter the EU market. At the border check point, inspection from the Member State’s authority is required by the 1991 Regulation. Under the newest Council Regulation EC 1997/2006 dated 19 December 2006, the Member States who grant import authorization to imports from third countries must inform other Member States about the production standards. The authorization issued by the Member State may finally be revoked by the Commission if the rule of production and inspection of the third country is not deemed equivalent with the 1991 regulation.

**Source:** *EurLex*, <http://eur-lex.europa.eu/en/index.htm>

Harmonization of organic standards and procedures are unlikely to be discussed as a specific issue during trade negotiations as they concern only specific markets and are usually not regarded as mandatory standards.

Initiatives would therefore be most effective if embedded in the context of the International Task Force on Harmonization (ITF) set up by FAO, United Nations Conference on Trade and Development (UNCTAD) and International Federation of Organic Agriculture Movements (IFOAM) in 2003.

A constraint may further arise from the insecurity created through unclear or shared competencies of different authorities. This is, for example, the case of the EU where the division of labor between the member countries and the union can increase insecurity and costs for the exporter (see Box 18.3 and Box 18.4).

**Box 18.4: Cost Increase of Field Inspection through EU Rules**

Individual field inspection

One of the outstanding problems in the 1991 EU Regulation is that the field inspection offered by an accredited agency, must be done for each producer individually and cannot be done for a group. This creates a relative constraint for producers in poor countries in term of inspection-costs. Economies of scale are not possible due to regulatory requirements.

Source: Kommerskollegium (2003): 12.

Market access concerns are further arising from inflexible production and certification requirements. Production rules often prescribe growing methods that are specific to a country's particular geographic and climatic conditions only. The same production rules may thus in some cases not be suited for organic farming in other countries with different climate regimes (see Box 18.5). Production rules should therefore be flexible enough to allow for specific geographical and climatic conditions to be taken into account.

**Box 18.5: Specific Requirements in Organic Farming:  
“Use of Animal Manure in Organic Farming in the US”**

Composted raw animal manure must be applied to the soil not less than 120 days prior to the harvest of a product whose edible portion has direct contact with the soil surface and less than 90 days if there is no direct contact between edible portion of product and soil. Composted plant and animal must be preserved at the temperature between 131 F (55C) and 170 F (76C) for three days using an in-vessel or static aerated pile system or 15 days using a window composting system, during which period, the material must be turned a minimum of five times.

**Source:** *US National Organic Programme* ; <http://www.ams.usda.gov>

### ***18.1.3. Trade Policy Objectives***

Import tariffs are a serious constraint to market access for rice. The current framework governing the Doha Round negotiation is not likely to lead to an increased access to target markets in the short run. Target markets are mainly developing countries in the Asian region which are likely to avoid applying strong tariff cuts to rice through specific provisions. General tariff levels on non-target markets are however likely to come down.

In order to significantly increase market access through the Doha Round negotiations, the general tariff cut formula would have to apply big cuts to high tariffs. It should provide developing countries like India and China with less room to avoid tariff cuts. In addition, developing countries would have to participate in the DFQF initiative as well. The initiative should be implemented as soon as possible and its coverage be extended to 100% of tariff lines. Any exemptions should be limited in time.

Tariff rate quotas and quantitative import restrictions on rice have only limited chances of being addressed seriously in the coming round of negotiations. Therefore the focus should be on securing DFQF treatment for LDCs on rice in order to circumvent difficulties with quota size and administration.

Some markets are strongly protected by non ad-valorem tariffs. This measure is best addressed by pushing for the conversion of tariffs into the ad-valorem calculation system generally applied by the GATT.

Peak tariffs are currently applied against rice imports to Japan. They could be challenged through the introduction of product-specific tariff caps into the tariff reduction methodology to be applied to agricultural products during the Doha Round. In upcoming negotiations the RGC should push for the introduction of caps that define maximal ceilings for product-specific tariffs. Such caps would additionally regulate peak tariffs after an eventual conclusion and implementation of the Doha Round and increase effective market access for rice to Japan.<sup>27</sup>

In order to realize a fair and undistorted market environment for rice, export subsidies need to be eliminated within the shortest possible time frame. The Doha Round negotiations need to secure an elimination of US-subsidies in particular, as these are distorting international rice markets and depressing prices.

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<sup>27</sup> See also WTO (2005): *"Doha Work Programme: Ministerial Declaration"*, WT/MIN(05)/DEC, Page A-5, Hong Kong, 13-18 December 2005

Compliance with product and production standards of importing countries currently causes the highest market access concerns. Unfortunately the issue remains difficult to deal with in trade negotiations. Standard compliance is probably best addressed through domestic measures. Capacity building is needed in order for Cambodian producers and exporters to better comply with various standards and could be financed through the Aid for Trade and the Integrated Framework mechanism being discussed in the negotiations.

As far as organic standards are concerned, achieving harmonization among individual countries' standards is of high importance to the sectors development. This concerns in particular the harmonization of product and production standards, as well as of certification procedures. During the negotiations at the WTO the RGC should therefore push for the issue being mandated to the International Task Force on Harmonization.

## 18.2. Cashew Nuts

### 3.2.1. Tariff Barriers to Trade

**Table 18.4 : Import Tariffs Applied to Cashew Nuts without Shell on Target Markets**

Country	Applied import tariff <sup>28</sup>
USA	0
Netherlands	0
UK	0
Canada	0
Australia	0
India	30
Vietnam	0 – 5 <sup>29</sup>
Indonesia	0

**Source:** ITC Trade Map 2006

With the exception of India, tariffs do not constitute a major market access barrier to target markets for cashew nuts (see Table 18.4). India levies a 30% tariff on cashews. It is unclear at present whether this number would decrease through a tariff cut as a result of the Doha Round. Finally it will

<sup>28</sup> HS code 080132

<sup>29</sup> See footnote 12

depend on whether India would choose cashews as a special product to be spared from substantial tariff cuts. It could therefore be worth dealing with the issue through the running ASEAN-India FTA negotiations in parallel with the Doha Round.

### ***18.2.2. Non Tariff Barriers to Trade***

#### **Food Safety Standards**

High levels of toxic components such as aflatoxin sometimes build up due to inappropriate storage of cashew nuts. Such contamination constitutes an impediment to accessing markets and calls for measures at the domestic level. Capacity-building needs to be performed with producers and processors in order to enable compliance. Egypt has been successful in addressing aflatoxin-contamination of peanuts through capacity-building measures (see Box 18.6). Related measures could focus around obtaining technical assistance from countries to which cashew nuts are to be exported.

#### **Box 18.6: The Case of Egypt Tackling Aflatoxin Contamination in Peanuts**

In 1999, the EU imposed a ban on imports of peanuts from Egypt as high levels of aflatoxin were found in peanuts. Instead of opposing the EU decision, the Egyptian government decided to put in place some measures to comply with the EU maximum residue levels. An EU Food and Veterinary Office officer was sent to assess the certification system and many recommendations on foodstuff control were brought to the attention of the Egyptian government. In 2003 the ban was lifted under the condition that 20% of imported peanuts must be tested by a competent authority of one of the Union's members.

While Egyptian peanuts are still subject to random inspections at the border, they have been gaining more trust from the European side. This could increase the good image of all Egyptian products on destination markets. Imports of Egyptian peanuts to the EU rose significantly after compliance assistance started. In the period of 2004-2006 imports averaged 311.000 tons.<sup>30</sup>

**Source:** *FAO-IBD Meeting-Jeddah (2003)*

Since problems of aflatoxin contamination of cashew nuts are widely known to border officials, specific inspections at border points can be expected with more frequency. Compliance with respective import regulations is therefore advised in order to avoid having to bear the costs for any supplementary inspection. EU Regulation 882/2004 may pose some problems in this respect as it foresees supplementary and costly border inspections upon suspicion without specifying the criteria. A risk exists that this ambiguity will discriminate against imports from an LDC because of the poor image of their country of origin (see Box 18.7).

<sup>30</sup> External Trade Export Help Desk 2007, Source: <http://export-help.cec.eu.int>

### **Box 18.7: EU Regulation on Compliance Verification**

The (EC) 882/2004 Regulation rules that not every country may import food products into the EU. According to article 17, Member States may require the importer to give notification prior to the product's arrival. Different types of control include systematic documentary checks and physical check according to the gravity of the situation (article 16). In case of suspicion of non-compliance, the competent authority may carry out an official control (article 18). The costs of supplementary inspections are paid by the importer. This article does not define the grounds that lead to suspicion or doubt. A simple suspicion may lead to an abuse by the border authority or discrimination against products exported from least-developed countries.

**Source:** *EurLex*, *EurLex*, <http://eur-lex.europa.eu/en/index.htm>

Pushing in the Doha Round for a simplification of import procedures in customs unions like the one of the EU is an option. Eventually the issue could be raised at the bilateral level as well. Through technical cooperation the risks of double inspections could be reduced.

### **Import Licenses**

While an import license is not required for cashew nuts in the USA in a strict sense, some specific licensing may be required for interstate domestic transportation of goods. The United States has exercised a total ban on import of raw cashew nuts from Cambodia<sup>31</sup>. As for processed cashew nuts, written permit issued by the Plant Protection and Quarantine Program is required<sup>32</sup>.

As an additional burden, an application for this permit must be made by a registered US resident. A Cambodian cashew nut exporter therefore would need to cooperate with a US-importer. This requirement limits the opportunities available to small scale Cambodian exporters to issue direct business relations with final buyers<sup>33</sup>.

The different regulations concerning licensing act as an export constraint. They are difficult to address through trade negotiations as they mainly reflect plant protection concerns of the US towards Cambodian products. It will therefore be better to take these regulations into account as part of the business model and to perform capacity-building measures in Cambodia in the areas of production and certification.

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<sup>31</sup> USDA (2007): *"Fresh food and Vegetable manual"*, 05/2007, p. 3-51; Web source: [www.aphis.usda.gov](http://www.aphis.usda.gov)

<sup>32</sup> Title 7, § 319.37-3 of the Code of Federal Regulation

<sup>33</sup> Notification G/LIC/N/3/USA/4 date 25 April 2006, WTO committee on licensing procedure

## **Labeling**

Labeling requirements can increase the costs of imported products to an extent that they become uncompetitive. This is likely to affect particularly Cambodia with its small volumes per import transaction. In the case of Canada, for instance, producers and importers are usually referred to private companies that specialize in labeling compliance certification. The costs of such services can be significant.<sup>34</sup> This is not an argument against labeling. However, more flexible solutions could be applied, as in the US where importers whose revenues from food sales are less than US\$50,000 are exempted from labeling requirements.<sup>35</sup>

During the Doha Round Negotiations, the issue of simplifying labeling requirements for developing countries could be raised and reference could be made to partial waivers or subsidized services.

### ***18.2.3. Trade Policy Objectives***

No severe import barriers to target markets are currently in place for cashew nuts with the exception of India. Securing high tariff cuts for agricultural products and minimizing the ability of developing countries to avoid tariff cuts will therefore increase the chances of an increased market access.

In terms of food safety standards, aflatoxin contamination is an issue that needs to be addressed through domestic capacity-building among producers and exporters. Such capacity building could be financed through the Aid for Trade initiative of the Doha Round negotiations.

## **18.3. Natural Rubber**

### ***18.3.1. Tariff Barriers to Trade***

Import tariffs for natural rubber do not pose a serious challenge to market access in most countries due to low tariff levels. This is however not the case in China and India (see Table 18.5). In 2006, China applied an import tariff of 20% and India one of 25%.

This does however not reflect the whole picture. Market access for rubber or rubber-based products may further be limited indirectly through

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<sup>34</sup> <http://www.foodlabels.com/services.htm#2>

<sup>35</sup> Nutrition Labeling and Education Act, USA

high tariffs imposed on car imports. These range between 5 and 100 percent in most target markets (see Table 18.6). Automobiles are typically sold and imported together with tires. As tires are one of the major applications of natural rubber, the more a market is closed to car imports, the more it will be closed to tire and natural rubber imports. This effect works independently from the import regime applied to natural rubber or tires.

Cambodia produces neither cars nor tires. However, it has an interest that countries which employ tires produced with Cambodian rubber face low levels of market access restrictions when exporting cars. This would be the case for instance for a French car with Michelin tires made with Cambodian rubber exported to India at an import tariff of 100 percent.

**Table 18.5: Import Tariffs Applied to Natural Rubber in Target Markets in 2006 (In %)**

Country	Applied Import Tariff <sup>36</sup>
EU	0
USA	0
China	20
Japan	0
South Korea	0
Thailand	0
India	25

**Source:** *International Rubber Study Group 2006*<sup>37</sup>

In order to export natural rubber, Cambodia therefore has both an interest in seeing a decrease on tariffs against both its natural rubber and automobiles generally. The RGC could support this goal by pushing during negotiations at the WTO for important tariff cuts to apply to non-agricultural products to developing countries as well. Such initiative is likely to be welcomed by industrialized nations which share similar market access interests, but not from developing ones. The latter intend to minimize their market access concessions on non-agricultural products.

<sup>36</sup> HS code 400122

<sup>37</sup> Calculations for EU and USA based on International Rubber Study Group, Rubber Statistical Bulletin, Nov-Dec, 2006



**Table 18.6: Import Duties Applied to Natural Rubber, Pneumatic tires and Automobiles in Target Markets for Natural Rubber**

	Natural rubber <sup>38</sup>	Pneumatic tire <sup>39</sup>	Automobile <sup>40</sup>
China	20	10	30
India	25	15	100
EU	0	0	10 - 100
USA	0	0	3
Japan	0	0	0
Republic of Korea	0	8	8
Thailand	0	0	10 - 80
Malaysia	0	5	5 - 50
Vietnam	3	5	5 - 100

Source: TradeMap 2006

### ***18.3.2. Non-Tariff Barriers to Trade***

The main non-tariff barrier existing with technically specified rubber (TSNR) has been the inability of Cambodian producers to certify the products' technical specification. The reference laboratory of the Rubber Research Institute of Cambodia lacks recognition by the International Rubber Association, causing its certificates not to be recognized. This missing certification puts pressure on prices and encourages indirect exportation through Vietnam.<sup>41</sup>

The RGC should continue to support the efforts already underway to establish the recognition of the reference laboratory by the International Rubber Association.

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<sup>38</sup> HS 400110

<sup>39</sup> HS 401110

<sup>40</sup> HS 870322; applied MFN rates

<sup>41</sup> Economic Review, EIC July 2005

### ***18.3.3. Trade Policy Objectives***

The main constraint to market access for natural rubber originating in Cambodia is the application of high import tariffs in China and India. Further constraints are the very high import tariffs on car imports in most target markets.

In the realm of the NAMA-negotiations of the Doha Round, the RGC has a good opportunity to increase market access on a broad basis by requesting developing countries to commit to important tariff cuts on non-agricultural products such as rubber, tire and cars.

## **18.4. Silk**

### ***18.4.1. Tariff Barriers to Trade***

Import tariffs do not constitute a major market access barrier for processed silk products as major target markets for silk scarves and blouses apply a 0% tariff (see Table 18.7).

**Table 18.7: Import Tariffs Applied to Silk Shawls & Scarves in Target Markets in 2006 (In %)**

Country	Applied Import Tariff <sup>42</sup>
USA	0
France	0
Japan	0
Italy	0
Germany	0

Source: UN ComTrade

### ***18.4.2. Non Tariff Barriers to Trade***

#### **Consumer Safety Standards**

Silk that has been dyed with azo-containing dyestuff is not allowed to enter the EU.<sup>43</sup> Since the majority of weavers in Cambodia still use azo-containing dyes, a home-made constraint to large scale export exists within

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<sup>42</sup> HS code 621410

<sup>43</sup> EU directive 2002/61/EC.

the silk sector. Tackling the regulation within the WTO does not make sense as consumer protection constitutes a legitimate goal and helps increasing consumer confidence. Switching production processes for exported goods towards non azo-containing dyes and building up the necessary capacity to certify the conformity to pertinent EU and other countries' regulations and standards may therefore be more effective and appropriate.

### **Voluntary Standards**

In Japan, an important set of voluntary standards covers market access for silk as well. This set of standards complements mandatory standards as set out by the Industrial Standardization Law. The Ministry of Economy, Trade and Industry (METI) of Japan administers the voluntary Japan Industrial Standards (JIS) which are designed to promote consumer confidence. Currently, the Japan Textile Products Quality and Technology Centre (QTEC) is the only accredited agency authorized to certify textile conformity to Japanese standards and labeling requirements. The fact that Japan accredits only one agency to inspect the conformity of textile product limits the manufacturer's choice, making the price relatively high (see Box 18.8). More flexibility would be an advantage for Cambodian exporters. Since disciplining market distorting effects of voluntary standards will remain difficult in the multilateral context, seeking bilateral facilitation in the context of a bilateral import promotion program may be the best alternative.

#### **Box 18.8: Costs and Procedures of Certification of Silk Exported to Japan**

Upon the application for a certificate of compliance through the competent Ministry or the accredited agency (QTEC), the factory screening (or inspection) is processed. Inspectors are sent to the factory or workplace to assess the conformity to the Japanese Industrial Standards (JIS). The screening fee is fixed at 345.000 Yen per item or category (almost 3000\$ US). Other fees relating to travel, transport, accommodation and per diem costs are charged to the manufacturer as well. The screening fee is fixed therefore impacting competitiveness of small producers.

**Source:** *METI & JIS*

### **Rules of Origin**

Silk products may be affected by rules of origin regulations in all target markets. Silk can be exported free of duty in all cases but this is subject to the preferential treatment granted by these countries through their respective GSP-schemes. In different production areas surveyed by the EIC, foreign content of the final products consisted of imported silk yarn and materials needed for the dyeing process. This foreign content could add up to 60% of

the final product's cost and therefore eventually prevent it from being accorded a certificate testifying a Cambodian origin (see Table 18.8).

Not qualifying for the rules of origin in the US would not pose a major constraint since the difference between MFN duty and preferential duty amounts to 1%-4% only. In both, EU member countries and Japan the difference is however higher. It amounts to 8%.

**Table 18.8 : Ratio of Foreign Inputs in the Silk Khben<sup>44</sup>**  
**Value Chain in Hol and Phamuong**

Location 1 (Hol)		Location 2 (Phamuong)	
Items	Value (US\$) Per khben	Items	Value (US\$) Per khben
Input (\$/1khben) <sup>45</sup>	26	Input (\$/1khben) <sup>46</sup>	4
Raw silk yarn	15	Raw silk yarn	4
De-gumming	10	De-gumming	0
Others	1	Others	0
Labor (\$/khben) <sup>47</sup>	14	Labor (\$/khben)	3
Total Cost	40	Total Cost	7
Foreign Input to Cost Ratio	64%	Foreign Input to Cost Ratio	59%

**Source:** EIC interviews of producers in Hol and Phamuong(2006)

The EU rules of origin are product-specific and in the case of shawls would require the item produced in Cambodia to start from unbleached single yarn or depending on the case contain 52.5% and 60% worth of local inputs. In the case of woven silk (HS: 5007) resulting from a mixture of inputs from various countries, the final product may be considered originating in Cambodia depending on the kind of processing steps that have taken place in the country (see Box 18.9).

In Japan a mix of rules of origin tests may disqualify silk products for preferential treatment in case local content is lower than 50% or in case the

<sup>44</sup> Traditional Cambodian clothing

<sup>45</sup> Hol input: raw silk yarn, de-gumming, kbong water and bamboo

<sup>46</sup> Pamuong input: raw silk yarn, de-gumming and spinning

<sup>47</sup> Hol work force: weaving, cost of bamboo reed

product lacks a transshipment certificate. This certificate is likely to be required for most orders as direct shipments to Japan are rare.

Japan and the EU allow for using the cumulation of content among ASEAN countries. This may in some cases constitute a solution to rules of origin problems as the majority of silk yarn used in Cambodia is imported from Vietnam, which is a member of the Association.<sup>48</sup>

**Box 18.9: EU Rules for Identifying the  
Origin of Manufacturing of Silk as a Product<sup>49</sup>**

The final product is considered as originating in Cambodia if:

- the woven fabric of silk or of silk waste incorporates rubber thread and is manufactured from a single yarn and the yarn is less than 10% of the total weight of silk.
- the woven fabric of silk or silk waste is manufactured from coir yarn, natural fibers, man-made staple fibers, not carded or combed or otherwise prepared for spinning, chemical materials or textile pulp, or paper and the mentioned inputs do not exceed 10% of the total weight of the basic textile material (silk).
- the woven of silk or silk waste is on printing accompanied by at least two preparatory or finishing operations (such as scouring, bleaching, mercerising, heat setting, raising, calendering, shrink resistance processing, permanent finishing, decatising, impregnating, mending and burling), provided that the value of the unprinted fabric used does not exceed 47.5% of the ex-works price of the product.

In more general terms, simplifying and harmonizing the different sets of rules governing the recognition of origin in different countries constitutes a promising option for increasing market access. This discussion could best be lead in the context the DFQF-initiative of the Doha Round negotiations, which allows for discussing the issue of rules of origin for LDCs. A source of inspiration could be the Canadian GSP system which, with the exception of few products, applies a simple and realistic local content rule for defining the origin of a product. In most cases a local content of 20 – 25 percent would satisfy the rules of origin criteria.<sup>50</sup> Both the silk as well as the whole garment industry of Cambodia could profit from such simplified rules.

<sup>48</sup> ITC (2006): "Sector –wide Strategy for the Cambodian Silk Sector", Geneva, p.8

<sup>49</sup> <http://export-help.cec.eu.int/thdapp/rulesoo/show.jsp? cmd=chap&regime= gsp&chapterNumber= 50071000>

<sup>50</sup> UNCTAD (2001): "Handbook on the scheme of Canada, UNCTAD Technical Cooperation on Market access and Trade Preferences", December 2001; Trade Facilitation Office Canada (2003): "Export to Canada – Duty Free: A Guide to Canada's Market Access Initiative for Least Developed Countries", www.tfoc.ca

## **Import quota and import license**

In Japan the importation of silk is regulated by a burdensome regime which includes tariff rate quotas for silkworm cocoons and raw silk.<sup>51</sup> An import license is required for importing silk fabrics.<sup>52</sup> Constraints arising from such regulations are difficult to deal with at the WTO where silk will not attract much attention. The RGC could therefore focus on obtaining facilitation with the quota application and import approval process in the context of a bilateral export promotion project.

### ***18.3.3. Trade Policy Objectives***

The tariff and non-tariff barriers in the silk trade are generally liberal in target markets. In order to benefit from LDC-specific preferential treatment in Japan and the EU, it is necessary to comply with the respective rules of origin regulations. Given the production structure prevailing in Cambodia, this may not be possible in some cases. Pushing towards a simplification and harmonization of rules of origin regulations within the framework of the DFQF initiative of the Doha Round negotiations therefore seems to be the most promising option.

Compliance with product-standards is best addressed domestically. Dealing with quota restrictions in Japan is best done at the bilateral level by asking for the extension of the coverage of the “Japanese Development Initiative for Trade” to all categories of silk products. This initiative, if passed into law, would accord DFQF treatment to “essentially all imported products from LDCs”.<sup>53</sup>

## **18.5. General Issues Related to Multilateral Negotiations**

### ***18.5.1. Aid for Trade and Integrated Framework***

The package of Aid for Trade (AfT) was developed in the context of the negotiations of the Doha Agenda. It supports developing countries in building up their supply-side capacity so as to enable or expand their participation in world trade. AfT promises new sources of money to finance a larger scope of activities like the building of trade-related infrastructure, the support of productive capacity, the provision of financial assistance for trade-

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<sup>51</sup> WTO (2007): “*Trade Policy Review Japan: Secretariat Report*”, WT/TPR/S/175, p. 65

<sup>52</sup> Office of Textiles and Apparel: “*Foreign Market Information: Japan*”,

<http://web.ita.doc.gov/tacgi/overseasnew.nsf/alldata/Japan#MarketInformation> (accessed on 25<sup>th</sup> May 2007)

<sup>53</sup> WTO (2007): “*Trade Policy Review Japan: Government Report*” WT/TPR/G/175, p.10

related adjustment costs and the build-up of trade negotiating capacity. All of these activities would provide targeted assistance in addressing supply-side constraints related to trading rice, cashew nuts, natural rubber and silk.

To date no binding commitments have been made during the negotiations. WTO-members recently commissioned a Task Force on Aid for Trade to come up with recommendations on how to operationalize the instrument.<sup>54</sup> A central recommendation is that financial resources for Aid for Trade should be additional to current official development assistance as well as adequate to finance Aid for Trade needs in developing countries.

Of the thematic areas which are recommended by the Task Force, the following are of particular interest to Cambodia: support towards the development of trade policy and regulations, trade development, trade-related infrastructure and building productive capacity.

An enforceable Aft package should finally not only be an integral part of an agreement within the Doha Round. WTO members should also commit to sufficient financing for needed activities to be performed. Major developed countries so far have pledged for US\$ 4 – 8.6 billion only. This stands in strong contrast with the real costs of the package that OECD-calculations for 2004 have estimated to stay at US\$ 22.8 billion.<sup>55</sup>

Trade-related assistance has until present also been provided to Cambodia through the channel of the Integrated Framework for Technical Assistance to Least Developed Countries (IF). The Hong Kong Ministerial Declaration makes reference to the IF. It proposes to enhancing scope and coverage of the framework in order to make it more effective. The Task Force on an Enhanced Integrated Framework proposed to focus more on building in-country capacity in identifying and implementing the IF objectives.<sup>56</sup> However, the Hong Kong Declaration does not include clear financial commitments. If sufficient funding will be provided, the Enhanced Integrated Framework could become a useful tool for Cambodia for building trade-related capacity. Even more important, however, may be the way in which the IF connects with the Aft Initiative. The IF can be used for financing a needs-assessment at the in-country level. This assessment could then serve as a basis for subsequent projects to be financed through the Aft framework.

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<sup>54</sup> WTO (2006): "Recommendations of the Task Force on Aid for Trade", WT/AFT/1, 20 July 2006

<sup>55</sup> See also: Smaller, Carin (2006): "Can Aid Fix Trade?: Assessing the WTO's Aid for Trade Agenda", Institute for Agriculture and Trade Policy, Minneapolis, p.8

<sup>56</sup> WTO (2006): "An Enhanced Integrated Framework: Report of the Chairman of the Task Force on an Enhanced Integrated Framework Including Recommendations", WT/IFSC/W/15, 29 June 2006

In order to significantly and speedily contribute to overcoming supply-side constraints, both Initiatives should be linked to sufficient financial commitments by WTO-members and adopt the recommendations made by the respective Task Forces.

### ***18.5.2. Safeguarding the Production and Supply Capacity of Rice***

Cambodia's rice sector is highly vulnerable in the current trade context. The ability of farmers to produce rice and supply it to export markets is dependent on a non-disruptive development of the sector. Such development could be endangered by sudden import surges of foreign rice on Cambodia's domestic market.

A further challenge exists in contaminations of the country's rice-crop with genetically modified varieties that would lead to import restrictions on some markets. Such contamination may eventually take place in the future if genetically modified rice varieties were to be planted in the country and mix with conventional rice varieties along the supply-chain.

Both issues are relevant to market access as the capacity to produce and supply rice are relevant for engaging in any export activity and to support human development through the rice sector.

#### **Sudden Import Surges Harming Domestic Production Capacity**

Rice imports to Cambodia can surge within a short period of time, putting pressure on domestic market prices and eventually driving domestic rice farmers out of business. This could be caused by fair competition but also by dumping of unfairly priced products on world markets.

Cambodia's domestic rice market and sector are vulnerable to such sudden import surges as the country's import regime for rice is relatively open. The tariff for rice is bound at 40 percent with the WTO. The currently applied tariff amounts to 7 percent plus an additional 10 percent of value added tax. In the event of a sudden import surge, raising import tariffs to the maximal allowed level of 40 percent may not be sufficient to avoid adverse effects on the domestic rice sector.

The relevance of this vulnerability to exports is founded in the fact that Cambodia currently produces rice for both the domestic and the international market. If farmers are driven out of business due to a crash in domestic price, they will not be able to engage in production in the following



years. A human development strategy based on the rice sector therefore may be put at risk.

The multilateral framework of the WTO allows governments to use specific safeguards in order to avoid the adverse effects of sudden import surges. To do so, Cambodia must pass a law on anti-dumping, safeguards and countervailing measures at the national level then notify its implementation to the WTO. To date, such law has not been passed nor notified to the WTO.

Reality further has proven that such safeguards do not reflect the needs of developing countries. The Special Safeguard Mechanism (SSM) has been introduced in the Doha Round negotiations as a more flexible mechanism for use in developing countries. It could provide temporary protection against sudden import surges for agricultural products like rice.

Both passing a law on anti-dumping at the national level and supporting the SSM-Mechanism in the Doha Round negotiations should be priority issues for the RGC.

### **Contamination with Genetically Modified Organisms as a Market Access Barrier**

At present the use of genetically modified seeds in the country's rice sector can neither be confirmed nor denied. No monitoring mechanism is in place. The use of such seeds could however pose serious problems in terms of market access, as the contamination of the country's rice production is difficult to avoid, as has been demonstrated by the case of a load of US-rice to be exported to the EU in 2006. Found to be contaminated with a non-approved genetically modified variety, the rice was prevented to be marketed in the EU. A temporary import ban on all rice originating the US was introduced in consequence.<sup>57</sup>

The organic rice sector would be affected to an even larger extent in case a contamination with genetically modified varieties were to take place along the supply chain. Due to strict product standards a contamination would disqualify the produce from being labeled organic in most target markets.

A national authority in charge of controlling the introduction of new seed varieties to Cambodia should therefore be created. Such an authority would assess the risks of contamination posed by the use of a genetically

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<sup>57</sup> See also related articles on: [www.euractiv.com](http://www.euractiv.com)

modified variety and decide on its use in the country's agricultural system on a case by case basis.

### ***18.5.3. Trade Policy Objectives***

The framework defined under the Aid for Trade initiative in the Doha Round negotiations helps to address important supply-side constraints to international market access. The RGC should insist that the initiative be implemented effectively, as it would facilitate financing the development of the country's supply-side capacity and trade-related infrastructure. These steps could greatly increase the country's ability to engage in international trade.

In order to preserve the existing production and supply capacity of the vulnerable rice sector the RGC should further pass a WTO-compliant anti-dumping law at the national level. It should actively support the SSM-Mechanism in the Doha Round negotiations.

In order to keep rice exportable to important target markets like the EU, the rice sector needs to be protected against contaminations of genetically modified organisms. A task force should be created and charged with developing a comprehensive strategy on the use of genetically modified organisms in the agricultural sector and dealing with decisions concerning the approval or ban of seed imports and planting. Ensuring WTO-compliance, which does not allow for a ban of genetically modified organisms unless restrictive conditions are established, will be a particular challenge.



## Chapter 19

### Increasing Market Access through Trade Preferences

Some products originating in Cambodia benefit from preferential tariffs when exported to target markets because of the country's LDC-status. Preferential tariffs are most commonly granted in the context of the Generalized System of Preferences (GSP). The GSP has been made possible by the Enabling Clause adopted by the GATT parties in 1979. This allowed GATT-members to support the integration of developing countries in the world economy by providing them with preferential treatment.

Many countries have since created GSP schemes, which have resulted in increased market access for developing countries in general and to a deeper extent for the LDCs. Table 19.1 lists those countries that currently grant market access advantage to Cambodia through GSP-schemes and similar programs.

**Table 19.1: Major Preferential Schemes  
including Cambodia as a Beneficiary**

Australia	Canada	China	EU
Iceland	Japan	Kazakhstan	Republic of Korea
Mauritius	Moldova	Norway	New Zealand
Russian Federation	Switzerland	Tajikistan	Turkey
USA	AISP (ASEAN-6*)		

**Source:** EIC, compiled from UNCTAD, Ministry of Commerce and WTO document WT/COMTD/LDC/W/38; \* ASEAN-6 includes Brunei, Indonesia, Malaysia, The Philippines, Singapore and Thailand.

In many cases, GSP schemes have not been designed to increase market access for products that LDCs are able to produce and export given their extent of development. Intended beneficial impacts of the initiative have therefore not sufficiently materialized. This is the case in Cambodia, which does not benefit from preferential schemes when exporting rice, its major agricultural product, to Japan, the Republic of Korea or China.

When assessing the tariff advantages that Cambodia enjoys through various GSP schemes and trade agreements, a rather modest result can be observed. Rice, silk products, cashew nuts and natural rubber originating in Cambodia currently hardly enjoy any tariff advantages when compared to the tariff levels enjoyed by the five main exporters for the respective products on international markets (see Table 19.2).

**Table 19.2: Average Tariff Advantage of selected Cambodian Products  
Compared to Top Five Competitors in 2004 (in %)**

	Silk	Cashew nut	Rubber	Rice
<b>Tariff advantage</b>	1.5	0.1	- 0.3	- 4.9

**Source:** *Export Potential Assessment in Cambodia 2006, ITC*

The value of such preferences is further diminished by the fact that they can erode over time by an extent to which the preference-granting country accords equivalent preferential tariffs to competitors of Cambodia within the framework of a bilateral FTA or the WTO.

The low preference margins as well as their tendency to erode help to explain why preference schemes often remain unused.

### **19.1. Milled Rice**

Rice markets are heavily regulated and protected for reasons of domestic policy in many rice producing countries. Not even LDCs are granted preferential tariffs on rice in most target markets. In fact, Cambodian rice has a negative preference margin. The country's rice is on average subject to 5% higher import tariffs as compared to its major five competitors in the market (see Table 19.2).

The fact that rice exports are affected by such tariff levels constitutes an important factor in the decision-making process of international buyers. Rice, as a standardized food staple, is more subject to competition on price than more complex goods.

<b>Table 19.3: Tariff Preference for Milled Rice Originating in Cambodia in Selected Countries in 2006 (in %)</b>					
	<b>MFN tariff</b>	<b>GSP tariff</b>	<b>LDC tariff</b>	<b>Bilateral tariff</b>	<b>Maximal Preference margin</b>
USA	0 - 1.2	0	0	n.a.	1.2
Vietnam	40	0	0	0 - 5 <sup>58</sup>	35
EU <sup>59</sup>	0 – 30	n.a.	0	n.a.	30

**Source:** *TradeMap 2006, ITC; Export Potential Assessment in Cambodia 2006 ITC; ASEAN CEPT 2006*

On specific markets, however, preferences may be significant. In the case of the EU, the EBA initiative will bring tariffs down to zero and eliminate quantitative restrictions on rice imports by September 2009, leading to a tariff advantage of up to 30%. In the case of Vietnam, Cambodian rice enters the country duty-free and therefore enjoys preference margins of up to 40% (see Table 19.3).

The EU's EBA Initiative should be considered an important push towards increasing market access for Cambodian rice to the EU. Specific regulations will apply in the interim period until the EBA is fully implemented in the rice sector (see Box 19.1).

Asking ASEAN-6 countries as well as Japan and the Republic of Korea to include rice in their preferential schemes within the shortest possible time appears to be the most promising way to increase the utilization of preferential schemes for rice.

<sup>58</sup> See footnote 12

<sup>59</sup> Preferential tariff for in-quota imports is 0%; for out-of-quota imports up to 30%; starting September 2009 import tariffs of 0% for all Cambodian rice imports.

### Box 19.1: Increased Market Access for Cambodian Rice to the EU through the EBA-Initiative's Preferential Treatment

The EU rice market is characterized by a strict quota system combined with a program giving domestic support to EU producers. Milled rice is currently subject to an average import tariff amounting to 23% of the product's value. Cambodia as an LDC has been granted preferential market access through the Everything But Arms (EBA) initiative launched by the EU in 2001. The EU rice market will open gradually to LDC imports of rice as a consequence thereof. Starting September 1<sup>st</sup> 2009 Cambodian rice will enjoy quota-free and duty-free market access to the EU. During the transition period of the import regime, LDCs will obtain special preferential market access in two ways. The common tariff of rice will decrease progressively on a yearly basis. In addition the tariff-quota currently enjoying duty-free treatment will increase in size by 15% every year, thus allowing for a larger amount of rice to benefit from duty-free treatment (see the table below). An interim report discussing "New Sources of Growth, Trade and Poverty" concludes that as a consequence hereof, 80% of EU rice consumption of 1.7 million MT will be met by LDC imports by 2009/2010.\*

#### Preferential Quota and Tariff Treatment of LDC Rice Imports to the EU

Starting date	Import tariff applied to out-of-quota rice (in %)	Import tariff applied within the preferential quota (in %)	Size of preferential quota (in MT of husked-rice equivalent)
1 September 2005	58	0	4402
1 September 2006	47	0	5060
1 September 2007	23	0	5821
1 September 2008	5	0	6694
1 September 2009	0	0	unlimited

**Source:** Council Regulation (EC) 980/2005, Helpdesk Tariff Data, TradeMap ITC 2006.

**Assumptions:** Rice exported to the EU will be priced at 299 USD/MT, which corresponds to the FOB price of wholly milled long grain rice in Thailand in November 2006 and is subject to an import tariff of 175 USD/MT in January 2006. NB: Tariffs vary slightly from those used in other tables due to the use of different prices and product categories.

\* Dao, Cambodochine (2005): "New Sources of Growth, Trade and Poverty: Provincial/Regional Diagnostic Trade and Integration Study: Private Sector Development in Rural Cambodia", Interim Report, p.29

## 19.2. Cashew Nuts

Cambodia currently enjoys duty-free access to all target markets for cashew nuts except India. Preferential treatment benefiting ASEAN-LDCs

could thus be asked for in the context of the ASEAN-India FTA negotiations.

In more general terms Cambodia does not enjoy any real trade preferences on world markets. The country's average tariff advantage towards its five main competitors on world markets amounted only to 0.1% in 2004 and risks being quickly eroded (see Table 19.2).

### **19.3. Natural Rubber**

With the exception of China and India all target markets for natural rubber apply 0% import tariffs for rubber originating Cambodia. The average tariff advantage that Cambodian rubber currently enjoys when compared with its five major competitors is virtually 0% (see Table 19.2).

China has already accorded preferential treatment to a choice of Cambodian products under the Framework Agreement on Comprehensive Economic Cooperation between ASEAN and China in the past. It could therefore be promising to ask for the extension of such treatment for natural rubber specifically.

In the case of India, preferential treatment could also be requested during ongoing FTA negotiations. This will however constitute a challenging issue, since India has explicitly shown its intent to protect its own rubber sector.

### **19.4. Silk**

Current levels of import tariffs do not constitute a market access barrier to any of the target markets for silk shawls and scarves originating in Cambodia, as they all apply a 0% import tariff. On a global scale the preference margin enjoyed by Cambodia for silk products amounts to 1.5% in average and is therefore rather low (see Table 19.2).

However, in selected countries a sizeable margin still exists, namely in Japan, the EU and New Zealand. The EU and Japan both constitute target markets and are therefore of particular interest (see Table 19.4).



**Table 19.4: Preference Margin Enjoyed by Cambodia on Shawls  
And Scarves Made of Silk in Selected Countries in 2006 (in %)**

	MFN applied tariff	GSP tariff	LDC tariff	ASEAN	Preference Margin
USA	1.2	0	0	n.a.	1.2
EU	8	n.a.	0	n.a.	8
Japan	8	n.a.	0	n.a.	8
New Zealand	19	n.a.	0	n.a.	19

**Source:** TradeMap ITC 2006

## 19.5. An Outlook for the Generalized System of Preferences

Up to present preferences like those offered through GSP schemes have only played a marginal role in facilitating market access for Cambodian products most of which have been traded under non-preferential terms.<sup>60</sup> Therefore the issue of preference erosion may not be as accentuated for Cambodia as it may be for other LDCs. This is reflected with the categories of goods discussed in this study, which success in exporting has been rather determined by high demand than by long standing preferences in the past.

If preferences are not central for increasing effective market access, they could at least ease reform pressure on some highly competitive sectors, like the one for rice. They may allow a longer timeframe for structural reforms to take place. This effect may gain greater importance with the possible conclusion of the Doha Round, as the competitive pressure is likely to increase.

In consequence Cambodia has an interest in making GSP-schemes work better for its own integration into the world economy, and should push for their reform. Open issues that could be addressed through a GSP reform are listed in Box 19.2.

<sup>60</sup> Sauv , Pierre (2004): "Special problems of financing for development in Asian and Pacific least developed countries", Background Paper presented at the "Expert Group Meeting on the Role of Trade and Investment Policies in the Implementation of the Monterrey Consensus", 26-27 October 2004, Bangkok

### **Box 19.2: Reform agenda for GSP rules to benefit LDC exports**

1. Simplify rules of origin by applying a simple value addition criterion
2. Harmonize rule of origin requirements among countries
3. Increase stability and duration of preferential commitments
4. Provision of full product coverage with limited exemptions
5. Strengthening technical cooperation to maximize utilization of preferences
6. Replace tariff rate quotas for LDC imports with safeguards

**Source:** UNCTAD (2003): *“Trade Preferences for LDCs: An Early Assessment of Benefits and Possible Improvements”*

An important impetus in terms of preferential treatment could finally come from the Doha Round’s DFQF Initiative foreseeing DFQF treatment for products originating in LDCs. Such treatment can be expected to have a beneficial impact on market access for rice. In addition, issues related to import licensing, import quotas, tariff escalation, transparency and reliability of market access could find a satisfactory answer in one strike as long as important developing countries would join the initiative.<sup>61</sup>

## **19.6. Trade Policy Objectives**

Due to exposure to preference erosion, preferential schemes are not suited to grant long-term market access benefits to selected countries in the near future. Rather, the framework will constitute a secondary priority to promote exports of the goods discussed in this study in a sustainable manner.

Notwithstanding this shortcoming, preferential schemes have an important short term potential. In contrast to multilateral negotiations at the WTO, they can achieve market access in the short run. Further, either in the form of the GSP or in the form of preferential schemes in the context of bilateral and regional FTAs, they could open doors to product-specific treatment.

Potential to put existing schemes to use exists with rice in particular. ASEAN-6 countries could be asked to grant preferences in the framework of the AISP, Japan and the Republic of Korea in the framework of the GSP and China and India within the framework of the respective FTAs concluded with ASEAN. India could in addition be asked to grant preferential treatment for cashew nuts within the same framework.

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<sup>61</sup> Hong Kong Declaration paragraph 36 b, Annex F, WOT-document: WT/MIN(05)/DEC, 22 December 2005

In the context of the WTO, the DFQF initiative should be supported, as it bears some potential for major reforms. It would increase overall market access to both target and non-target markets. Further it would allow for overcoming some shortcomings of current preferential systems.

In parallel, the difficult reform of the GSP system should further be promoted in the respective fora of the WTO in order for its rules to better benefit LDC exports.

## Chapter 20

### Increasing Market Access through the ASEAN Framework

Due to the slow progress of negotiations in the WTO, a regional approach toward trade integration through the ASEAN has gained in attractiveness.

The ASEAN framework constitutes a parallel approach to the multilateral approach of the WTO. It can contribute in two ways to increasing market access for Cambodian products. First, the integration process of the ASEAN through the establishment of an Asian Free Trade Area (AFTA) in itself is designed to effectively eliminate a wide range of market access barriers among ASEAN-member countries.<sup>62</sup> Second, the ASEAN serves Cambodia as a platform for negotiating FTAs with important markets like China, India or the EU. The latter framework of integration is often referred to as “ASEAN-plus”.

Market access in either case will mainly be increased through the reduction and elimination of tariffs on substantially all trade. Non-tariff barriers to trade and harmonization issues will be addressed as well.

#### 20.1. ASEAN Integration under the AFTA

To date, the AFTA integration process has provided free access for a wide range of Cambodian products to the markets of all members of the ASEAN. The continuation of this process is designed to result in a free-trade area in the medium to long term. The easing of visa requirements for tourists holding a passport from ASEAN member countries is a further step in this process and will open up new markets in the tourism sector.

While markets within the ASEAN have not been the final destination of Cambodia's exports of silk products, cashew nuts, rubber or rice during the past few years, they have been an important gateway to international markets. Almost the entirety of Cambodian rubber, cashew nuts and rice surplus production has been exported through mainly informal channels to

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<sup>62</sup> Members of ASEAN are: Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam

neighboring countries, where they are processed and re-exported to their final markets. Indirect trade certainly has benefited Cambodia's economy, as it secures jobs and incomes notwithstanding a rather underdeveloped market infrastructure. However, by trading mainly unprocessed products, value addition opportunities are lost.

In the years to come, the importance of markets in ASEAN member states is likely to increase for Cambodian producers. Not only will they serve as a gateway to international markets but they will increasingly become final markets for various products due to the dynamic development of the whole region.

That said, the process of market integration within the ASEAN is ongoing and barriers to trade will be eliminated in the foreseeable future.

### ***20.1.1. Tariff Barriers***

The original members of the ASEAN, Brunei, Indonesia, Malaysia, the Philippines, Thailand and Singapore, eliminated most of their import tariffs as of January 1<sup>st</sup> 2007 and will eliminate the remaining ones by 2010.<sup>63</sup> Cambodia, Laos, Myanmar and Vietnam will do so between 2012 and 2015 (see Table 20.1).

The goods discussed in this study will therefore face duty-free treatment in the near future, with the exception of rice, which has been designated as a sensitive product by Indonesia and the Philippines. Rice will therefore enjoy some flexibility until 2010.

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<sup>63</sup> ASEAN Framework (Amendment) Agreement for the Integration of Priority Sectors, signed in Cebu, Philippines, 8. December 2006; [www.thejakartapost.com](http://www.thejakartapost.com), "80% of ASEAN products exempted from tariffs", accessed on 12.01.2007

**Table 20.1: Import Tariffs on Selected Cambodian Products  
In ASEAN Member Countries under CEPT in 2006 (in %)**

	Milled rice	Cashew nuts without shell	Silk scarves	Natural rubber
<b>Brunei</b>	0	0	0	0
<b>Indonesia</b>	47 USD / ton <sup>64</sup>	0	0 - 5 <sup>65</sup>	5
<b>Laos</b>	5	3	0	0
<b>Malaysia</b>	40	0	0	0
<b>Myanmar</b>	5	15 <sup>66</sup>	15 <sup>67</sup>	1
<b>Philippines</b>	50 <sup>68</sup>	0	5	3
<b>Thailand</b>	5	0	0	0
<b>Singapore</b>	0	0	0	0
<b>Vietnam</b>	0 - 5 <sup>69</sup>	5	5	3

Source: ITC Trade Map 2006 & ASEAN 2006

### **20.1.2. Non-tariff Barriers**

All non-tariff import restrictions are to be eliminated by 2012 by the original members of ASEAN and by 2018 by all other members. Tackling these restrictions is therefore best achieved by keeping the issue on ASEAN's working agenda.

Most measures currently in place are of relevance to rice and are related to quantitative import restrictions. Major non-tariff barriers currently applied to rice in selected ASEAN-countries are compiled in Table 20.2.

<sup>64</sup> Corresponding to an ad-valorem import tariff of 16% If the calculation is based on Thailand FOB price for rice of 299 USD/ton, the ad-valorem import tariff equivalent would correspond to 16%. Prices and exchange rates are as of December 2006.

<sup>65</sup> Batik silk scarves 0%

<sup>66</sup> 10% starting 2007 and 5% starting 2008

<sup>67</sup> 10% starting 2007 and 5% starting 2008

<sup>68</sup> In- and out of quota tariff; see also footnote 7

<sup>69</sup> See footnote 12

In the cashew nut sector, the Philippines and Brunei Darussalam request an import permit for cashew nut seeds for planting. In the case of silk, Indonesia has an automatic import licensing system in place.

**Table 20.2: Non-tariff Barriers  
Applied to Rice in Selected ASEAN Countries**

Country	Barriers
<b>Brunei Darussalam</b>	Import licensing and quota control
<b>Indonesia</b>	Automatic import licensing and quota control
<b>Malaysia</b>	Import licensing and quota control
<b>Philippines</b>	Import licensing and quota control
<b>Singapore</b>	Import licensing
<b>Thailand</b>	Import licensing

*Source: ASEAN Secretariat*

### **Quantitative Import Restrictions**

Of particular relevance are the quantitative import restrictions applied by Indonesia and the Philippines. Imports are subject to licensing and are channeled through a single importing agency. AFTA commitments will however require them to eliminate all forms of quantitative restrictions by 1<sup>st</sup> January 2010, also those on sensitive products like rice.<sup>70</sup> If, this schedule is not modified Cambodia could enjoy high levels of market access on these markets by then. The same discussion on quantitative restrictions applies to Malaysia as well.

### **Import Licensing and Monopolistic Import Agencies**

The Philippines, Malaysia and Indonesia apply a system of import licensing combined with a sole importing agency. While licensing is mainly needed for quota administration, it adds burden to the export activity. There is a good chance to push for import licensing to be eliminated together with

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<sup>70</sup> Article IV, 1) of the "Protocol on the Special Arrangement for Sensitive and Highly Sensitive Products", Singapore, 30 September 1999

quotas under the rules of the AFTA by 2010. If licensing is not abolished, some kind of harmonization of procedures is worth considering as every country currently applies different rules.

## **20.2. Preferential Treatment under the Integration System of Preferences of the ASEAN**

An alternative option for increasing market access in the short term could be seen in the ASEAN Integration System of Preferences (AISP). This preferential scheme has been designed as a unilateral non-reciprocal instrument for facilitating the integration of ASEAN's less developed members. In the past the system has not granted preferences for products of relevance to Cambodia. This has also been the case with rice, which has not been covered by most country's AISP list. Cambodia could hence ask Indonesia, the Philippines and Malaysia to include rice in the AISP list before 2010. This would liberate Cambodia from quota restrictions before these will be lifted anyway.

## **20.3. "ASEAN-plus" and Negotiations with Third Countries**

Besides setting the framework for regional economic integration among its members, the ASEAN also serves the purpose of increasing market access between its members and major economies in the world. Various FTA-initiatives are currently under discussion, negotiation or implementation with the EU, India, Japan, Australia, New Zealand, China, the Republic of Korea and the US. The bilateral initiatives may result in increased access to these country's markets for the products discussed in this study. In particular, rice could profit from FTAs concluded with India, China, Japan and the Republic of Korea (see Table 20.3). All of these countries currently apply high import tariffs on Cambodian exports.



**Table 20.3: Import Tariffs Applied to Selected Products of Cambodian Origin by Negotiating Partners for Bilateral FTAs within the ASEAN-plus Framework in 2006 (in %)**

	Milled rice	Cashew nuts without shell	Natural rubber	Silk scarves
<b>China</b>	65	5	20	14
<b>USA</b>	0	0	0	0
<b>EU</b>	0 - 49	0	0	0
<b>India</b>	70	30	25	15
<b>Australia</b>	0	0	0	0
<b>New Zealand</b>	0	0	0	0
<b>Japan</b>	88 - 626 <sup>71</sup>	0	0	0
<b>Republic of Korea</b>	5 <sup>72</sup>	0	0	8

Source: Trade Map ITC

### ***20.3.1. ASEAN-China Comprehensive Economic Partnership Agreement***

The Comprehensive Economic Partnership Agreement concluded between the ASEAN and China is the first of its kind and will increase market access for many Cambodian products by 2010. The general assessment is however mixed for Cambodia, as to date the agreement has not resulted in reducing tariffs on some of the most important products. While cashew nuts will be able to enter duty-free starting in 2007 and silk products starting in 2010, tariffs on both natural rubber and rice will remain high for the foreseeable future. China has listed the latter two as very sensitive products. As a consequence, import tariffs on rice may remain as high as 50% and on rubber as high as 20% even after 2015.

In the FTA with China, mention is made of further negotiations to take place on the treatment of tariffs on products for which tariff rate quotas

<sup>71</sup> Difficulties exist in calculating the ad valorem import tariff equivalent of the Japanese import regime for rice, which operates with different import control measures. The methodology of ITC Trade Map 2006 leads to an import tariff of 88% for out of quota rice. The author Komuro calculates levels of up to 626%. See: Komuro, Norio (2006): *Japan's Generalized System of Preferences: An Oriental Pandora's Box*, University Law School, Kobe, April 25<sup>th</sup>, 2006, p.13

<sup>72</sup> The Republic of Korea applies the Minimum Market Access regime to rice. As a consequence, maximal import quantities are predefined for every year until 2014.

are currently in place. At the time, mutual agreement was foreseen to be achieved by 31 March 2005. To date the result of such negotiations is not publicly known. A shift towards quota-free treatment is however important in order to increase market access and to make it more predictable.

The ability to export rice is further constrained by non-tariff measures. Cambodia to date has had some difficulty in complying with phytosanitary requirements set out by China. Unsatisfactory production management as well as a weak capacity of the phytosanitary certification laboratory in Cambodia have hindered the conclusion of a bilateral inspection and quarantine agreement with China. Such an agreement is a precondition for the respective certificates by the Plant Protection and Phytosanitary Inspection Office of the Ministry of Agriculture Fisheries and Forestry to be recognized by China, and thus for any exporting of rice to take place. Measures required for overcoming this constraint are related to human, institutional and technical capacity-building and are therefore rather an issue of domestic policy than of trade negotiations. The Chinese could be asked to provide active support in capacity building.

A further constraint is seen in China's criteria used for the allocation of tariff rate quotas for rice, as Cambodia hardly fulfils any of them (see Box 20.1). This is a major constraint, considering the fact that the current overall import quota of over 5 million tons a year is large and Cambodia would have a potential to deliver the market.

Eventually the issue could be raised in the context of bilateral economic cooperation, aiming at achieving political intervention towards the allocation of specific quotas to Cambodia.

**Box 20.1: Tariff Rate Quota Allocation Procedure for Rice in China**

The State Development and Reform Commission (SDRC) jointly with the Ministry of Commerce are in charge of fixing the allocation of quotas. As for rice imports, an Agricultural Product Import TRQ Certificate is issued by SDRC. Applications can be submitted between 15 October and 30 October of each year. In addition, the law fixes some criteria for allocating the quota:

- First-come-first serve basis; or
- Past performance; or
- Production capacity; or
- Business criteria.

**Source:** *GAIN report no. CH4051, USDA 2004*

In conclusion, the programmatic objective with China can be described as obtaining duty-free and quota-free market access for rice and natural rubber. This could happen through negotiations with reference to either the general rules of the Partnership Agreement or to the preferential ones.

### ***20.3.2. ASEAN-EU FTA***

Negotiations on an FTA between the EU and the ASEAN are yet to start. At this stage it constitutes mainly a project for the nearer future which is enjoying a strong political backing by both sides.

An FTA with the EU would not additionally increase market access for the products discussed in this study as by 2009 they will all be able to enter the EU free of duty and quota anyway. However, such an agreement could have some medium term impact as far as industrial goods like garments are concerned. More flexible rules of origin than the ones currently granted by the EBA-initiative may be the result of negotiations and increase the ability of the sector to export to the EU duty-free or at low rates without quantitative restrictions.

Market access for Cambodian products to the EU could hence mainly be increased by obtaining mutual recognition or harmonization of production standards. The RGC should push for putting this issue on the negotiating agenda of the ASEAN.

### ***20.3.3. ASEAN – India: Comprehensive Economic Cooperation Agreement***

India is a target market for rice, rubber and cashew nuts. All three products face important tariff barriers that, even with possible tariff cuts as a result of the Doha Round, are likely to remain significantly high. Tariff cuts may eventually result through an FTA currently being negotiated under the ASEAN-plus framework. However, a significant increase in market access within a short time period is not to be expected. Rice should be expected to be chosen as a sensitive product by India and on the basis of the current discussion, natural rubber will remain protected as well. No tariff cuts on rubber would be committed before 2022.<sup>73</sup>

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<sup>73</sup> [www.indiaonline.com](http://www.indiaonline.com), “India-ASEAN FTA to be signed by July”, accessed on 15.01.2007

Besides high tariffs, rice imports face a market environment distorted by subsidies and other price support measures.<sup>74</sup>

Modest pressure to reform the Indian rice market may arise from domestic policy and the Doha Round negotiations. It will however not lead to significant changes in market access conditions in the short run. Therefore increasing market access for rice through tariff cuts through an FTA with the ASEAN will remain the most promising option. Doing so will require the ASEAN to request with more resoluteness market access for rice. Cambodia could join hands with the big rice producers, Vietnam and Thailand, in their bilateral requests for increased market access. The tactic may also be valid for rubber.

#### ***20.3.4. ASEAN-Australia/NZ FTA***

An FTA with Australia and New Zealand is likely to be concluded by 2009. It would not increase the prospects of market access for the products discussed in this study significantly as they already benefit from duty-free treatment. However some positive impact on market access may result in streamlining regulations and increasing trade promotion activities.

#### ***20.3.5. ASEAN – Japan: Comprehensive Economic Partnership Agreement***

In the context of the Comprehensive Economic Partnership Agreement with Japan, an FTA may be concluded soon. The negotiations may constitute an opportunity for increasing market access for rice in particular. An import quota for Cambodia as an ASEAN LDC could be requested during the negotiations. Such a request could be accompanied by granting Japan the right to apply safeguards in order to account for Japanese concerns of disruptive increase in imports. Some service sectors may also see some boost, though rather in the long run.

In the short run the most beneficial effect for Cambodia from an agreement with Japan may be seen in increased FDI opportunities and spill-offs from the stronger development perspectives of its neighbouring countries. Most directly Cambodia could benefit from a trade facilitation and co-operation package coming together with the agreement. Provision for such a package should be an integral part of such an FTA.

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<sup>74</sup> Shikha Jha; P.V. Srinivasan; Landes, Maurice (2007): *“Indian Wheat and Rice Sector Policies and the Implications of Reform”*, ERS Economic Research Report Number 41

### **20.3.6. ASEAN - Republic of Korea: Agreement on Trade in Goods**

An Agreement on Trade in Goods entered into force between Korea and the ASEAN in 2006. The agreement with Korea is of interest as it could lead to an increased market access for a wide range of products already by 2009. This is however less likely to be the case of agricultural products, rice in particular. In fact, it was the wish of Korea to exclude rice from any significant commitment under the agreement, resulting in Thailand's refusal to sign<sup>75</sup>.

Market access for rice will remain low as it can only enter the country under a restrictive quota regime that will be in force until 2014. Any rice imports above the quantitative limits defined by the yearly quota can be banned. The tariff currently applied to rice within the quota is 5%. The size of the quota will increase from present until 2014 only slightly and Cambodian rice would therefore compete with other countries for both customers and quotas (see Table 20.4). Nevertheless, the export of rice to Korea is likely to remain unrealistic for the years to come due to the weakness of Cambodia's marketing infrastructure and the lack of any preferential treatment.

**Table 20.4: Import Quotas for Rice Exports to Korea Available Upon Application to Cambodia and Other Countries (in MT)**

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Quota size	20,347	40,694	61,041	81,389	101,736	122,083	142,430	162,778	183,125	203,472

Source: ERS/USDA 2006

One option for overcoming the market access barriers for rice is to request a country-specific rice import quota in the context of future FTA negotiations or as part of an LDC-specific concession in the context of Korea's GSP scheme.

Cashew nuts and natural rubber can already be exported free of duty at present. Processed silk products are subject to an import tariff of 8%, though this is likely to be eliminated by 2009 as a consequence of the FTA. Another option for overcoming the tariff barriers for silk consists in including the product category in the GSP system of Korea.

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<sup>75</sup> The Associated Press, Monday, April 9, 2007

### **20.3.7. ASEAN-US Trade Relations**

In the framework of the “Enterprise for ASEAN Initiative” (EAI) the US is already in the process of negotiating FTAs or will do so in the near future with Malaysia, Thailand, Indonesia, and the Philippines. An agreement already exists with Singapore. The US is currently not in a hurry to negotiate an FTA with other ASEAN countries. It has already secured its current market access interests with countries like Cambodia and Vietnam just recently during these countries’ accession negotiations to the WTO. Therefore the interest of the US with these countries may rather lay with ensuring the implementation of their WTO commitments.

Nevertheless a Trade and Investment Framework Agreement (TIFA) recently has been signed with the ASEAN as a prelude to a possible future FTA. However, no timeframe has been set and the start of effective FTA-negotiations at this stage would be purely speculative.

From Cambodia’s point of view this approach towards ASEAN is problematic. FTAs concluded bilaterally between the US and member countries of ASEAN will set a precedent for future agreements and may weaken the negotiating position of Cambodia. Whatever a future US-Cambodia FTA may look like, negotiations are likely to include issues like labor-standards, environmental protection concerns and the so called “WTO-plus” issues. WTO-plus may lead to a deeper liberalization of service sectors as well as to a strong regime on patent rights for drugs and plant varieties.<sup>76</sup>

Finally, an FTA with the US does not necessarily need to be concluded to increase market access for the products of this study, as they already enter the US duty-free.

## **20.4. Trade Policy Objectives**

The ongoing AFTA integration is characterized by clear deadlines and targets. It is in a crucial implementation phase at the moment and therefore cannot be influenced significantly as far as tariff barriers are concerned. Non-tariff barriers in contrast deserve some closer attention as the programmatic objective for their elimination by 2012 has not yet been elaborated in detail.

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<sup>76</sup> See also UNDP (2005b): *“The Great Maze: Regional and Bilateral Free Trade Agreements in Asia”*. Policy Paper. Colombo: UNDP Regional Centre in Colombo. [[http://www.undprc.lk/web\\_trade/publications/Policy%20Paper%20Book%203.pdf](http://www.undprc.lk/web_trade/publications/Policy%20Paper%20Book%203.pdf)]

In order to ensure a timely elimination of non-tariff barriers that are currently in force among members of the ASEAN, the RGC should push the Association for setting up clear criteria for the definition and identification of such barriers. Further the RGC should push for quantitative import restrictions to be eliminated within the shortest possible time-frame in order to promote rice exports.

Another opportunity to promote exports of rice consists in asking Indonesia, the Philippines and Malaysia to grant preferential tariffs and quotas to Cambodian exports within the shortest possible time. This could be possible under the provisions of the AISP.

In the realm of FTA-negotiations between the ASEAN and third countries, Cambodia as a member of the ASEAN has a unique opportunity to achieve specific market access to target markets. The RGC should secure that the Association pushes for market access concessions for rice when negotiating with Japan and the Republic of Korea. When negotiating with India, market access for rice, cashew nuts, natural rubber and silk should be asked for. In the case of China, negotiations should be initiated with the aim of granting free market access to natural rubber and rice.

## **Chapter 21**

### **Increasing Market Access through Bilateral Relations**

Improved market access can also be achieved through a targeted bilateral approach, therefore complementing the multilateral framework of the WTO and the regional one of the ASEAN. However, an increasing number of countries has acceded the WTO. Thus obtaining market access for individual products becomes less and less an option. This is virtually only possible within the framework of a comprehensive bilateral FTA that substantially covers all trade between two countries and not just single products.

While the option to negotiate FTAs bilaterally persists, it is unlikely that Cambodia by acting on its own may be able to conclude FTAs with larger partners any time soon. The country has already liberalized its markets to a large extent and is therefore not in a good bargaining position in independent negotiations. It will find it more effective to use the ASEAN framework to negotiate collectively for bilateral market access with non-ASEAN partners (see Chapter 20.3).

#### **21.1. Supporting regional and bilateral trade through informal bilateral talks**

Cambodia should initiate informal bilateral platforms for discussing issues related to market access. One representative platform is the Trade and Investment Framework Agreement (TIFA), signed recently with the US. Discussions could take place on technical issues pertaining to bilateral trade and on coordination in trade negotiations.

Such fora, maybe in a less formal form than a TIFA, could be created with all countries with which major market access issues remain unresolved and with those which are currently considering the conclusion of an FTA with the ASEAN (see Table 21.1).

An opportunity to hold bilateral informal talks with most of the proposed countries already exists at the sidelines of regular ASEAN meetings. In the case of Nigeria, however, a specific forum would need to be created.



**Table 21.1: Potential Partners for Bilateral Talks**

Country	Market access constraints in place			Of which potential FTA partners
	Rice	Cashew nuts	Natural rubber	
Nigeria	X			
Japan	X			X
Indonesia	X			
Philippines	X			
China	X		X	X
India	X	X	X	X
Republic of Korea	X			X
EU	X			X

*Source: Compiled by the authors on the grounds of target markets with major open issues*

## **21.2. Trade Capacity-Building through Bilateral Economic Development Assistance**

Target markets could be encouraged to become cooperation partners with Cambodia. As partners they could provide support towards capacity building measures in the fields of market infrastructure and export promotion. Financial resources from the Aid for Trade initiative of the Doha Round could be used for such purposes. Eventually, existing budget lines could be reclassified in order to make the framework more appealing to prospective partners.

## **21.3. Market Linkages through Neighboring Countries**

Cambodian rice and cashew nut producers can be connected to international value-chains through neighbouring countries. To present these have failed to export processed products to final destination markets directly in large quantities.

Marketing channels going mainly through neighboring Thailand and Vietnam have undoubtedly supported the human development of Cambodian farmers, since only few marketing alternatives are available to them. However, with the exported goods being mostly unprocessed, Cambodia's economy loses significant value-addition potential.

At least 30% of Cambodia's total paddy rice production is milled and consumed abroad.<sup>77</sup> EIC estimates that around 95% of Cambodia's harvest of cashew nuts is exported<sup>78</sup>. With the existing domestic processing capacity able to process only 2% of the country's domestic production of raw cashew nuts, it can be assumed that almost all value-addition potential through processing is lost.

The potential for increasing value-addition in the rice and cashew nut value-chain could be captured by strengthening the linkage between farmers on the one side and domestic processors and markets on the other. Since results can only be expected in the medium to long run, it is advisable to look at existing trade links with neighboring countries in a positive way. These could be strengthened and diversified, thus allowing the benefit to Cambodian producers through trade to increase further.

#### **21.4. Trade Policy Objectives**

Bilateral negotiations are not expected to lead to enhanced market access directly as far as target markets are concerned. They could however be supportive to ongoing trade negotiations at the regional and multilateral level.

The quickest results could be gained through engaging in talks with selected ASEAN-FTA partners on bilateral economic development assistance. Further talks could take place within the context of a TIFA and aim at promoting trade capacity building and Foreign Direct Investment in the short term, with the conclusion of an FTA as a long term goal. The bilateral approach is further well suited for strengthening technical cooperation on issues pertaining to cross-border trade with neighbouring countries. Market linkages with Vietnam and Thailand should be promoted in this context with the aim of fostering the development of an agro-processing industry in Cambodia.

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<sup>77</sup> The estimated effective export volume of paddy is compiled by subtracting the local consumption from the total production in milled rice equivalent. The production volume of paddy is calculated by averaging data of the years 2004 and 2005 to compensate for the fluctuations in production and amounts to 5'078'000 tons. Seed reserves for sowing and post harvest losses account for 13% of total paddy and are thus subtracted. With a pro capita consumption of about 0.145 ton/year of milled rice and a population of 14 Million, the total consumption of Cambodia's population amounts to 2'030'000 tons which correspond to 2'760'800 tons of paddy equivalent. Paddy equivalent of the rice consumed abroad thus amounts to 1'657'060 tons or 33% of paddy production. The paddy to rice conversion rate of 0.64 is used for the calculation of volume equivalents of paddy.

<sup>78</sup> Data based on interviews with the only factory which is currently processing cashew nuts domestically. Only 2% of total cashew nut harvests are processed there. After subtracting the small domestic consumption it is thus estimated that around 95% of the total cashew nut production are exported to Vietnam.



## Chapter 22

### Inter-linkages and Trade-offs Between Different Negotiating Fora and Issues

#### 22.1. Preferential Market Access for LDCs versus Multilateral Liberalization

Preferences are an attractive form of obtaining market access due to their immediate impact and lack of reciprocity. However, the advantages in competitiveness they provide are often limited in duration. First, market access only constitutes one factor among many in determining the success of export operations. Second, advantages obtained today can erode in a few years. The same preferences granted by the EU to Cambodia through the framework of the EBA today may, for instance, be offered to India tomorrow in the context of an FTA. Finally, preferences may create adverse effects by dampening the pressure on national policy to support longer-term substantive reforms.

Multilateral liberalization may not provide results as quickly as preferential schemes. But it is more likely to increase market access on a larger number of markets, though at lower average levels.

Cambodia would benefit most in terms of market access if a Doha Round agreement, once concluded, were to provide high levels of preferential DFQF treatment at the beginning of its implementation phase and high levels of multilateral liberalization of markets for rice, silk, cashew nuts and rubber in a second phase.

Preferences would provide an initial and immediate source for increased market access to target markets in the short and medium term. Multilateral liberalization could then serve as a second medium to long-term oriented source of market access once preferences start to erode due to the implementation of multilateral commitments and bilateral FTAs that are concluded on a continuous basis at all levels.

A short-term focus for Cambodia on trade preferences is well advised. The country will not benefit much from multilateral liberalization at the outset due to central constraints on the supply side of its value-chains. It is on the supply side that structural features of production like transportation

and energy costs are currently exercising strong effects on the country's competitiveness. This structural feature of production is not going to change significantly in the short run. Electricity costs are, for example, not going to change significantly before the year 2010 when the hydropower station at Kamchay is expected to start delivering electricity into the national grid.

## **22.2. WTO versus Bilateral/Regional Approach**

Negotiations at the WTO have been stagnating for a while now, which has already resulted in an increased tendency to pursue selective liberalization through bilateral initiatives.

Bilateral negotiations may however pose some problems to Cambodia, as the country may find it difficult to conclude FTAs with large economies in the short or medium run. The Cambodian market is too small to expect a country like the US to prioritize the negotiation and conclusion of a bilateral FTA. Moreover, Cambodia lacks major negotiating assets that could give it some kind of leverage during trade negotiations with a strong partner. This could decrease the benefits that may result from such a deal.

With the focus of international trade negotiations increasingly shifting from multilateral to bilateral negotiations, Cambodia risks isolation in trade negotiations.

This risk could be minimized by concentrating on bilateral negotiations with target markets through the ASEAN framework. Joining with a group will increase Cambodia's bargaining power compared to negotiating independently. However, past experiences like the ones of the ASEAN-China FTA (ACFTA) demonstrate how limited the ASEAN framework is when it comes to obtaining material benefits for the less developed members of the association. As noted above, the ACFTA has not been able to provide for a significant increase in market access for such important crops as rice, rubber or palm oil. In 2006, China applied a 65% import tariff on rice. Even after 2015 China will still be able to protect rice with tariffs as high as 50%. The same is the case with palm oil and rubber, both of which have been declared "very sensitive products" by China and will therefore not be subjected to tariff cuts as a consequence of ACFTA. The tariff levels for these products will be allowed to stay at 20%.

Since neither the bilateral negotiating option through the ASEAN-framework nor the independent one seems to be able to increase market

access for the products discussed in this study, the multilateral option appears to be the most promising.

The proposals currently on the table in the Doha Round negotiations could therefore be regarded as an acceptable deal for an LDC like Cambodia. The country would not be requested to perform any tariff cuts or make any market access commitments. Pre-existing preferences that it may lose are not relevant to the products analyzed in this study. Cambodia could also obtain some new preferences through the DFQF initiative in the short run and obtain new financial resources for trade capacity building through the Aid for Trade Initiative and the Enhanced Integrated Framework.



## Chapter 23

### Negotiating Strategy for Cambodia

No guarantee exists at the time of the writing of this report that the Doha Round will be concluded any time soon, as the negotiations have been temporarily “stalled.” While major players seem to be willing to conclude the negotiations by December 2007, an undetermined delay or even a formal suspension of the negotiations is possible as well.<sup>79</sup>

In case the Doha Round is not concluded by the end of 2007, short term prospects of gaining market access through tariff reductions and addressing non-tariff issues will be reduced significantly for Cambodia. There will be less pressure on Cambodia’s trading partners to loosen their protectionist import regimes on, for instance, rice. Stronger emphasis would therefore have to be placed on bilateral or regional options for negotiating market access. In these negotiating fora however Cambodia may not be able to address the core market access barriers that affect the products discussed in this study.

#### 23.1. The virtues of a “Quick Gain Scenario”?

The Quick Gain Scenario is presented as a reference scenario which would allow Cambodia to benefit the most. It describes a situation in which the current negotiations of the Doha Round will lead to the conclusion of a modest agreement by the end of 2007. An agreement would reflect central interests of large developing countries, although to a more moderate extent than currently requested. It would further include general beneficial provisions for LDCs as well as the most important Trade Policy Objectives that have been presented in this study.

Selected countries will continue bilateral FTA-negotiations in order to achieve deeper integration. The bilateral negotiations that ASEAN has commenced with selected trade partners in the Asian sub-region are expected

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<sup>79</sup> ICTSD: “G-6 Ministers Agree to Work to Conclude Doha Round by End of 2007”, Bridges Weekly, 18<sup>th</sup> April 2007; Vol.11, Number 13



to be concluded by the end of 2007,<sup>80</sup> though the ones with the EU will take many more years.<sup>81</sup>

Considerable amounts of funding will be made available through the Aid for Trade initiative to increase financing for capacity building and trade facilitation projects in Cambodia.

The conclusion of the Doha Round would therefore secure the benefits on which agreement has already been achieved without compromising Cambodia's alternative option to negotiate FTAs through the ASEAN-plus framework.

Due to the high vulnerability of the country's economy, progress in negotiations is critical. Cambodia is vulnerable to the risk that the longer it takes to conclude the Doha Round, the more trade patterns will shift towards large economies trading only amongst themselves while marginalising small LDCs.

The Quick Gain Scenario offers the most opportunities for Cambodia to deploy the full range of negotiating resources at its disposal. It allows Cambodia to participate in shaping the future trade framework by acting as an LDC within a group of LDCs to defend LDC-specific interests. It can act as a promoter of increased market access on markets of developed and developing countries in changing coalitions. And it can still act in parallel in the regional context of ASEAN to target markets like China, India and the EU for more specific market access and trade facilitation.

### **23.2. The Challenges of a "Quick Gain Scenario"?**

A Quick Gain Scenario may however also entail some major challenges. The DFQF initiative for LDCs and the tariff cuts foreseen by the general tariff cut formula in the Doha Round may not lead to increased access on some target markets for rice, cashew nuts and natural rubber. Some countries will be able to avoid significant market access concessions.

Market distortions caused by different forms of subsidies will diminish only slightly when compared to present levels. Therefore no guarantee could be given that prices for rice are going to rise.

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<sup>80</sup> <http://www.bilaterals.org>

<sup>81</sup> Bridges Weekly Trade News Digest: *"EU to Start FTA Negotiations with India, Korea, ASEAN"*, 25<sup>th</sup> April 2007, Vol.11, No. 14

### 23.3. How to negotiate the Quick Gain Scenario?

The ability to realize the Quick Gain Scenario depends highly on the commitment of relevant actors to achieve a result by the end of the year 2007. This means that any deal concluded within the WTO would at least need to satisfy the basic needs of the US, the EU, India and Brazil and that none of these countries would be left as a net-loser. Cambodia could ease this process by supporting a consensus among these countries.

The negotiating issues on which consensus has been achieved already reflect Cambodia's central short term market access interests.

As an insurance in case the Doha Round fails to be concluded by the end of 2007, it is worth continuing negotiations within the ASEAN-Third Country FTA framework. However, it is worth considering slowing down the pace and the level of commitments that ASEAN is willing to offer to its potential FTA-partners until January 2008. This would add an incentive for concluding a deal through the WTO framework. It would further increase the levels of concessions which ASEAN may be able to obtain from its FTA partners if the Doha Round fails to be concluded. ASEAN does not need to sell its assets at a low price so long as markets like the EU are keen on the conclusion of an FTA with the ASEAN in order to support its own economic growth.

In conclusion the strategic objectives of Cambodia in trade negotiations could be formulated as follows. The first priority would be to make sure that the Doha Round is concluded by the end of 2007 and that Cambodia's trade policy objectives are fed into the final agreement. The second priority is to continue negotiations within the ASEAN-Third Country FTA framework in parallel, but with a delaying ambition until January 2008.



## Chapter 24

### Trade Policy Objectives

Trade Policy Objectives (TPOs) have been discussed throughout the analysis. In this chapter the most important TPOs will be compiled and serve as a basis to generate a policy action plan. The policy action plan aims at becoming a monitoring instrument supporting the RGC in its efforts to achieve the intended TPOs.

The policy action plan will provide indications on which activities to perform. It will also give indications on which government agencies are the most suited for implementing the activities, the timeframe needed for implementation, the outcomes that can be expected and the challenges that need to be addressed. The detailed Policy Action Matrix is provided in Appendix 12.

The major Trade Policy Objectives are the following:

- TPO 1:** Obtain high market access concessions in the agricultural and non-agricultural market access negotiations at the WTO.
- TPO 2:** Ensure that developed and developing countries do not circumvent market access concessions in the negotiations at the WTO.
- TPO 3:** Achieve the elimination of export subsidies within the shortest possible time.
- TPO 4:** Secure the effectiveness of the Aid for Trade Initiative as well as Enhanced Integrated Framework within the Doha Round
- TPO 5:** Achieve the harmonization of production standards and certification procedures for organic products.
- TPO 6:** Achieve a simplification and harmonization of rules of origin regulations.
- TPO 7:** Protect the rice sector from disruptive effects of export dumping.
- TPO 8:** Secure preferential market access through available trade frameworks.

**TPO 9:** Increase utilization rates of preference schemes by reforming them.

**TPO 10:** Increase market access for rice within the ASEAN.

**TPO 11:** Secure maximum benefits for ASEAN-LDCs from FTAs between the ASEAN and Third Countries

**TPO 12:** Promote trade integration with target markets through TIFAs.

**TPO 13:** Promote the participation of stakeholders in the process of trade integration.

These TPOs necessitate the RGC taking an active role in the context of different trade negotiations by the end of 2007, date at which an agreement at the WTO can be expected to be concluded. Any activities implemented at a later date may in some cases not contribute to the desired effects.

## Conclusion

The analysis has demonstrated that market access can be increased through trade negotiations by January 2009. In order to maximise the benefits of increased market access, the RGC should adopt a strategy that aims at an early conclusion of the Doha Round negotiations by the end of the year 2007. Achievements at the multilateral level could then be complemented by deeper trade integration with selected target markets through the frameworks of ASEAN and ASEAN-plus.

Access to many target markets for rice, cashew nuts, silk and natural rubber is already a reality. Major improvements can be expected as a result of the Doha Round negotiations if the RGC successfully negotiates tariff cuts, the elimination of quantitative import barriers and an effective Aid for Trade initiative as well as Enhanced Integrated Framework. The latter two would allow for supporting the building up of trade infrastructure and capacity as well as trade negotiating capacity to the benefit of Cambodian producers and exporters.

Trade negotiations are however not expected to improve market access in the short run to those target markets which at present have a rather protective import regime. In these markets, access will increase only sequentially and in the long run. This will be the case with India as a target market for rice, cashew nuts and natural rubber. It will also be the case with China as a target market for rice and natural rubber. And finally it will most likely be the case with Nigeria, Indonesia, the Philippines and Japan as target markets for rice.

It can thus be concluded that in the case of the products analyzed in this study, the difficulties to access markets are rather to be found in developing countries than in developed ones. The RGC is hence well advised to push for improvements for market access to developing country markets in particular.

Effective market access will finally not only depend on successful trade negotiations, but also on supportive measures at the domestic level. These include in particular activities that aim at the reform of the trade and industrial policy environment and at trade capacity building. Major supportive measures have been elaborated in Part III of this book under the title *“Trade and Industrial Policy Environment in Cambodia”*.

In response to the underlying question of this paper on how to address the challenges posed by the phasing out of the ATC, the development of the proposed sectors as alternatives to garments should serve as a short to medium term option. However, responses may also be found in seizing value addition and diversification opportunities of the garment sector itself.

Finally, it should be noted that an export-oriented approach towards diversification and value retention alone will not guarantee the achievement of human development objectives. Long timeframes are required to implement policies within the international trade framework. Even the “quick-gain” strategy proposed in this paper would not lead to an immediate improvement in market access. Any agreement concluded by the end of 2007 may take up to five years to implement, with some measures having even longer implementation periods.

The second reason is to be found in the redistributive effects of Cambodian domestic policy. Trade policy is only one element of a larger set of national policies that can influence human development. While trade policy measures can open up new opportunities to generate returns on export markets, the impact of returns on human development will strongly depend on how gains will be redistributed to all members of Cambodia’s society.

An institutionalised dialogue within Cambodian society on how to best redistribute new sources of income and employment for the sake of human development is therefore urgently needed and would require the inclusion of all stakeholders.

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# Appendix 11

## Tables and Calculations for Target Market Selection

**Table A11.1: Top 5 Organic Retail Markets by Value of Sales in 2004 (billion USD)**

Country	Value
EU <sup>82</sup>	13.0
USA	12.7
Switzerland	1.0
Canada	0.9
Japan	0.9

**Source:** FiBL, SOEL, & IFOAM. 2006, *The World of Organic Agriculture, Statistics & emerging trends 2006*

**Table A11.2: Top 5 Importing Countries of Milled Rice by 3-Year Average, 2003-2005 ('000 MT)<sup>83</sup>**

Country	Volume
Nigeria	1'472
Philippines	1'433
Indonesia	1'433
EU	1'026
Saudi Arabia	1'300

**Source:** "2005 World Rice Yearbook" USDA ERS 2005<sup>84</sup>

<sup>82</sup> Sum of retail sales in major EU markets: Germany, Italy, France, UK, Sweden, Netherlands, Denmark

<sup>83</sup> Import data represents a 3-year-average in order to compensate for strong fluctuations in import volumes for rice on a year by year basis.

<sup>84</sup> <http://usda.mannlib.cornell.edu/MannUsda/viewStaticPage.do?url=http://usda.mannlib.cornell.edu/usda/ers/.89001/2005/index.html>

**Table A11.3: Top 5 Consumers of Milled Rice  
in Marketing Year 2004/05 ('000'000 MT)**

Country	Volume
China	130
India	81
Indonesia	36
Vietnam	18
Philippines	10

**Source:** “World Supply and Demand Estimates” USDA 2006

**Table A11.4: Top 6 Consumers of  
Cashew Nuts Without Shell in 2004  
('000 MT)**

Country	Volume
USA	129
India	77
Vietnam	60
Canada	12
Australia	12
Indonesia	10

**Source:** FAOSTAT data 2004

**Table A11.5: Top 5 Importing Countries of Cashew Nuts Without Shell in 2004 ('000 MT)**

Country	Volume
USA	131
Netherlands	24
UK	15
Canada	12
Australia	12

**Source:** FAOSTAT data 2004

**Table A11.6: Top 5 Importing Countries for Silk Shawls & Scarves by Value in 2004 (million USD)**

Country	Value
USA	51
France	44
Japan	31
Italy	29
Germany	19
<b>Source:</b> UN ComTrade <sup>85</sup>	

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<sup>85</sup> Target markets for silk are identified on the basis of USD value instead of quantity because of the availability of data and the luxury character of silk as a product.

**Table A11.7: Top 5 Consumers of Natural Rubber in 2004 ('000 MT)**

Country	Volume
Thailand	2'152
China	1'695
EU	1'294
USA	1'046
India	817

**Source:** FAOSTAT 2004

**Table A11.8: Top 5 Importing Countries of Natural Rubber in 2004 ('000 MT)**

Country	Volume
EU	1'294
USA	1'046
China	1'095
Japan	796
Republic of Korea	328

**Source:** FAOSTAT 2004

## Appendix 12

### Policy Action Matrix

Trade policy objective	Activity	Responsible body	Expected outcomes	Challenges	Timeframe
TPO 1: Obtain high market access concessions in the agricultural and non-agricultural market access negotiations at the WTO.	1) Push for high tariff cuts in the agricultural and NAMA negotiations of the Doha Round. 2) Secure the realization of the DFQF initiative within the Doha Round negotiations.	Ministry of Commerce (MoC), Ministry of Agriculture, Forestry and Fisheries (MAFF), Ministry of Industry, Mines and Energy (MIME)	1) Increased market access for rice, rubber, silk and cashew nuts. 2) Market access to all developing country target markets, with the exception of rice in Japan.	1) Market access for rice and rubber may not increase in target markets in developing countries. 2) Important developing country markets are not likely to participate in the initiative.	end 2007
TPO 2: Ensure that developed and developing countries do not circumvent market access concessions in the negotiations at the WTO.	1) Support the position to minimize the number of sensitive and special products that can be designated by WTO members. 2) Secure the participation of developing countries in the DFQF	MoC, MAFF	1) Fewer countries will designate rice and rubber as sensitive or special products. 2) Some developing countries will participate in the initiative in the medium term. 3) 100% of tariff	1) Important target markets are likely to designate rice as a special product and avoid tariff cuts. 2) The majority of developing countries do not show interest in participating in the initiative. 3) At present exceptions	end 2007



	<p>initiative of the Doha Round.</p> <p>3) Secure 100% tariff line coverage of the DFQF initiative.</p> <p>4) Secure adoption of tariff caps for very high tariffs.</p>		<p>lines will enjoy DFQF treatment in the medium term.</p> <p>4) Tariffs on rice will not be allowed to be higher than a certain benchmark.</p>	<p>are allowed in the initiative.</p> <p>4) Countries like Japan or Switzerland are unlikely to accept the concept of tariff caps.</p>	
TPO 3: Achieve the elimination of export subsidies within the shortest possible time.	Support the position within the Doha Round negotiations that export subsidies in general and on rice in particular should be eliminated as soon as possible.	MoC, MAFF	Market access for rice and world market prices for rice will increase.	<p>Long timeframes are foreseen for the elimination of export subsidies in the Doha Round.</p> <p>Not all forms of export subsidies can be addressed.</p>	end 2007
TPO 4: Secure the effectiveness of the Aid for Trade Initiative of the Doha Round	1) Support the position that the Aid for Trade initiative should be designed in view of financing supply-side capacity–building, trade-related infrastructure and trade negotiating capacity building	MoC, Ministry of Economy and Finance, Council for the Development of Cambodia (CDC)	<p>1) Major supply side constraints related to rice, cashew nuts, natural rubber and silk can be addressed due to financing through the initiative.</p> <p>2) The initiative will</p>	<p>1) Disagreement persists as to the categories of capacity building that should be able to be financed under the initiative.</p> <p>2) Some countries will divert existing official development</p>	end 2007

	<ul style="list-style-type: none"> <li>2) Support the position that Aid for Trade should constitute a self-standing and additional source of funding.</li> <li>3) Support the position that financing under Aid for Trade should be reliable, unconditional and enforceable.</li> <li>4) Support the position that Aid for Trade should provide for sufficient funding for trade capacity to be enhanced.</li> <li>5) Secure the adoption of an effective Enhanced Integrated Framework</li> </ul>		<ul style="list-style-type: none"> <li>provide new sources of funding.</li> <li>3) Long term and unconditional support materializes.</li> <li>4) Funding will be sufficient for addressing major areas of concern along value chains.</li> <li>5) An Enhanced Integrated Framework with sufficient funding and adequate governance structures is in place</li> </ul>	<ul style="list-style-type: none"> <li>assistance in order to run it under the initiative. Thus no additional funding will be provided.</li> <li>3) A conditional approach towards funding prevails among donors. Enforceability of rules is generally weak in the WTO system.</li> <li>4) Funding is not likely to be sufficient to finance the whole Aid for Trade working program.</li> <li>5) WTO-members do not commit to sufficient funding</li> </ul>	
TPO 5: Achieve the harmonization of production standards and certification procedures for organic products.	Push in the Doha Round negotiations for mandating the harmonization of production standards and certification procedures to the International Task	MoC (Camcontrol), MAFF, National Codex Committee, Cambodia Standards Institute	The WTO mandates the ITF to come up with proposals on harmonization.	Harmonization of rules governing organic markets is not a priority issue for many countries and results may materialize in the long run only.	end 2007

	Force on Harmonization (ITF).				
TPO 6: Achieve a simplification and harmonization of rules of origin regulations.	Promote a working program to be decided on in the context of the DFQF initiative of the Doha Round.	MoC (Camcontrol), MAFF	A program on simplification and harmonization of rules of origin is decided on.	Some importing countries have an interest in keeping strict rules of origin as an instrument for regulating market access.	end 2007
TPO 7: Protect the rice sector from disruptive effects of export dumping	<ol style="list-style-type: none"> <li>1) Support the position in the negotiations that an effective Special Safeguard Mechanism (SSM) for developing countries must be created.</li> <li>2) Support the elimination of all forms of export subsidies.</li> </ol>	MoC, MAFF, Ministry of Economy and Finance	<ol style="list-style-type: none"> <li>1) An SSM is in place and provides effective protection against disruptive price and volume effects.</li> <li>2) Major forms of export subsidies are eliminated</li> </ol>	<ol style="list-style-type: none"> <li>1) The mechanism may only provide temporary relief and not address long term trends of declining prices of agricultural commodities.</li> <li>2) Not all forms of export dumping are caused by export subsidies.</li> </ol>	end 2007

TPO 8: Secure preferential market access through available trade frameworks	<ol style="list-style-type: none"> <li>1) Push ASEAN-6 countries to grant preferential access to rice under the AISP.</li> <li>2) Push Japan and the Republic of Korea to grant preferential access to rice under their respective FTAs with Cambodia.</li> <li>3) Push China and India to grant preferential access within their respective FTAs with Cambodia.</li> </ol>	MoC, MAFF	<ol style="list-style-type: none"> <li>1) DFQF market access is granted to all products by 2010.</li> <li>2) Market access will be granted under restrictive conditions and in combination with safeguard measures.</li> <li>3) Modest preferences are granted in the medium term.</li> </ol>	<ol style="list-style-type: none"> <li>1) Indonesia, the Philippines and Malaysia have interest in protecting their rice markets.</li> <li>2) Domestic policy puts pressure on the respective governments to protect rice.</li> <li>3) The FTAs have already been negotiated and motivation to grant preferential treatment is low.</li> </ol>	<p>end 2007</p> <p>2007, 2008</p>
TPO 9: Increase utilization rates of preference schemes	Push for the rules governing the GSP and other preferential schemes to be reformed in the context of the DFQF initiative of the Doha Round.	MoC, Ministry of Economy and Finance, MAFF, CDC	<ol style="list-style-type: none"> <li>1) Rules of origin are streamlined and replaced by a simple local content criterion.</li> <li>2) All countries apply the same rule of origin requirement.</li> <li>3) Preferential commitments are stable, durable and</li> </ol>	<ol style="list-style-type: none"> <li>1) The threshold used for measuring the local content may be set too high.</li> <li>2) Consensus is difficult to achieve due to the variety of existing mechanisms.</li> <li>3) To date some countries have applied preferences</li> </ol>	<p>end 2007</p>

			granted to all products.	unilaterally, in an unreliable way and only to products of low significance to the preference receiving country.	
TPO 10: Increase market access for rice within the ASEAN	<ol style="list-style-type: none"> <li>1) Promote the discussion on setting up clear guidelines for the elimination of quantitative import restrictions.</li> <li>2) Promote the discussion on granting ASEAN LDCs preferential tariffs for rice.</li> </ol>	MoC, Ministry of Foreign Affairs and International Cooperation	<ol style="list-style-type: none"> <li>1) Quantitative import restrictions, import licensing and testing requirements are abolished by 2008 or do not cause trade distortions.</li> <li>2) ASEAN LDCs enjoy preferential tariffs on rice starting 2008.</li> </ol>	Target markets for rice may not grant preferential tariffs nor eliminate quantitative import restrictions due to the sensitivity of the issue.	end 2007
TPO 11 : Secure a maximum of benefits	<ol style="list-style-type: none"> <li>1) Integrate into the negotiating</li> </ol>	MoC	<ol style="list-style-type: none"> <li>1) LDC-specific interests are</li> </ol>	<ol style="list-style-type: none"> <li>1) Commitment for LDC-interests may</li> </ol>	2007 -2015

resulting to ASEAN-LDCs from FTAs between the ASEAN and Third Countries	<p>strategy of the ASEAN towards Japan, India, China and the Republic of Korea the commitment that FTA partners accord effective market access in areas of interest to ASEAN LDCs.</p> <p>2) Coordination of bilateral trade-integration strategies among ASEAN Members.</p> <p>3) Secure trade capacity building through bilateral economic development assistance from ASEAN-plus partners.</p>		<p>reflected in the strategy of the ASEAN</p> <p>2) Guidelines for bilateral trade-integration strategies are in place in the ASEAN.</p> <p>3) ASEAN-plus partners increase economic development assistance</p>	<p>remain rhetorical and not lead to tangible results.</p> <p>2) Some ASEAN partners may not profit and block such coordination.</p> <p>3) ASEAN-plus partners may not be interested in providing the technical assistance needed to improve market access.</p>	
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TPO 12: Promote trade integration with target markets through TIFAS.	Negotiation of bilateral TIFAs-like agreements with target markets.	MoC, Ministry of Foreign Affairs and International Cooperation	TIFAs are signed with target markets.	<p>TIFAs may not lead to benefits in increased market access and are no guarantee for the conclusion of an FTA.</p> <p>TIFAs may be used against Cambodia as a framework to pressure for the implementation of policy reforms.</p>	2007 -2009
TPO 13: Promote the participation of stakeholders in the process of trade integration.	Identify and consult with stakeholders.	MoC, MAFF, National Assembly	Stakeholders are consulted regularly and their opinions are reflected in the actions of the RGC.	<p>Stakeholders may lack technical knowledge to effectively contribute to the process.</p> <p>Lack of experience of some public offices with conducting stakeholder consultations.</p>	2007 – 2009



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