



Cambodia
Development Resource
Institute (CDRI)

Annual Development Review 2006-07





Annual Development Review 2006-07

- Chapter (1) - Major Development Trends*
- Chapter (2) - Macroeconomic Performance*
- Chapter (3) - Foreign Direct Investment and Poverty Reduction in Cambodia*
- Chapter (4) - Windfall Revenue from Oil and Gas in Cambodia:
A Development Blessing or a Curse?*
- Chapter (5) - Livestock Production and Veterinary Services in Cambodia*
- Chapter (6) - Rural Poverty and the Use of Natural Resources*
- Chapter (7) - Labour Migration in Rural Livelihoods:
Challenges and Opportunities*
- Chapter (8) - Conceptualising Accountability: The Cambodian Case*

Phnom Penh, February 2007

Edited by: Brett M. Ballard

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List of Acronyms and Abbreviations

ADB	Asian Development Bank
ADHOC	Cambodia Human Rights and Development Association
ADR	Annual Development Review
AFTA	ASEAN Free Trade Area
APSARA	Autorité pour la Protection du Site et L'Aménagement de la Région d'Angkor (Authority for the Protection and Management of Angkor and the Region of Siem Reap)
ASEAN	Association of South East Asian Countries
ATC	Agreement on Textiles and Clothing
C/S	Commune/Sangkat
CARERE	Cambodia Area Rehabilitation and Regeneration
CAS	World Bank Country Assistance Strategy
CBAH	Community-Based Animal Health
CBM	Cross-Border Migration
CDC	Council for the Development of Cambodia
CDR	Cambodia Development Review
CDRI	Cambodia Development Resource Institute
CPI	Consumer Price Index
CPR	Common Property Resources
CSES	Cambodia Socio-Economic Survey
CSF	Commune/Sangkat Fund
CSO	Civil Society Organisations
CWS	Church World Service
D&D	Decentralization and Deconcentration
DAHP	Department of Animal Health and Production
DFID	Department for International Development
EHP	Early Harvest Programme
EITI	Extractive Industry Transparency Initiative
FAO	Food and Agriculture Organization
FDI	Foreign Direct Investment
FGD	Focus Group Discussions
FIE	Foreign Invested Enterprise
GAP	Governance Action Plan
GDE	Gross Domestic Expenditure
GDP	Gross Domestic Product
GMAC	Garment Manufacturers Association of Cambodia
GTZ	German Technical Cooperation
GVA	Gross Value Added
HFCE	Household Final Consumption Expenditure
HSSP	Health Sector Support Project
IES	Industrial Establishment Survey
IMF	International Monetary Fund
LMAP	Land Management and Administration Project
MAFF	Ministry of Agriculture, Forestry and Fishery

MDGs	Millennium Development Goals
MEF	Ministry of Economy and Finance
MFA	Multi-Fibre Agreement
MoI	Ministry of Interior
MOPS	Moving Out of Poverty Study
MoU	Memorandum of Understanding
NBC	National Bank of Cambodia
NDA	Net Domestic Assets
NFA	Net Foreign Assets
NGO	Non Government Organization
NIE	New Institutional Economics
NIS	National Institute of Statistics
NPM	New Public Management
NRDP	Northwestern Rural Development Project
NRE	Natural Resources and Environment
NSDP	National Strategic Development Plan
NTFP	Non-timber Forest Products
OCA	Overlapping Concession Area
ODA	Overseas Development Assistance
OECD	Organisation for Economic Co-operation and Development
PA	Poverty Assessment
PAP	Priority Action Programme
PBC	Planning and Budget Committee
PFM	Public Finance Management
PPA	Participatory Poverty Assessment
PRPK	People's Revolutionary Party of Kampuchea
RETA	Reviewing Poverty Impact of Regional Economic Integration in the Greater Mekong Sub-Region
RGC	Royal Government of Cambodia
RPRP	Rural Poverty Reduction Project
SEZ	Special Economic Zone
SMEs	Small and Medium Enterprises
SWAps	Sector Wide Approaches
TPA	Traditional Public Administration
UK	United Kingdom
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNDS	UN Development Systems
USAID	U.S. Agency for International Development
USD	United States Dollar
VAT	Value Added Tax
VDC	Village Development Committees
VLAs	Village Livestock Agents
WB	World Bank
WDR	World Development Report
WTO	World Trade Organization

Foreword

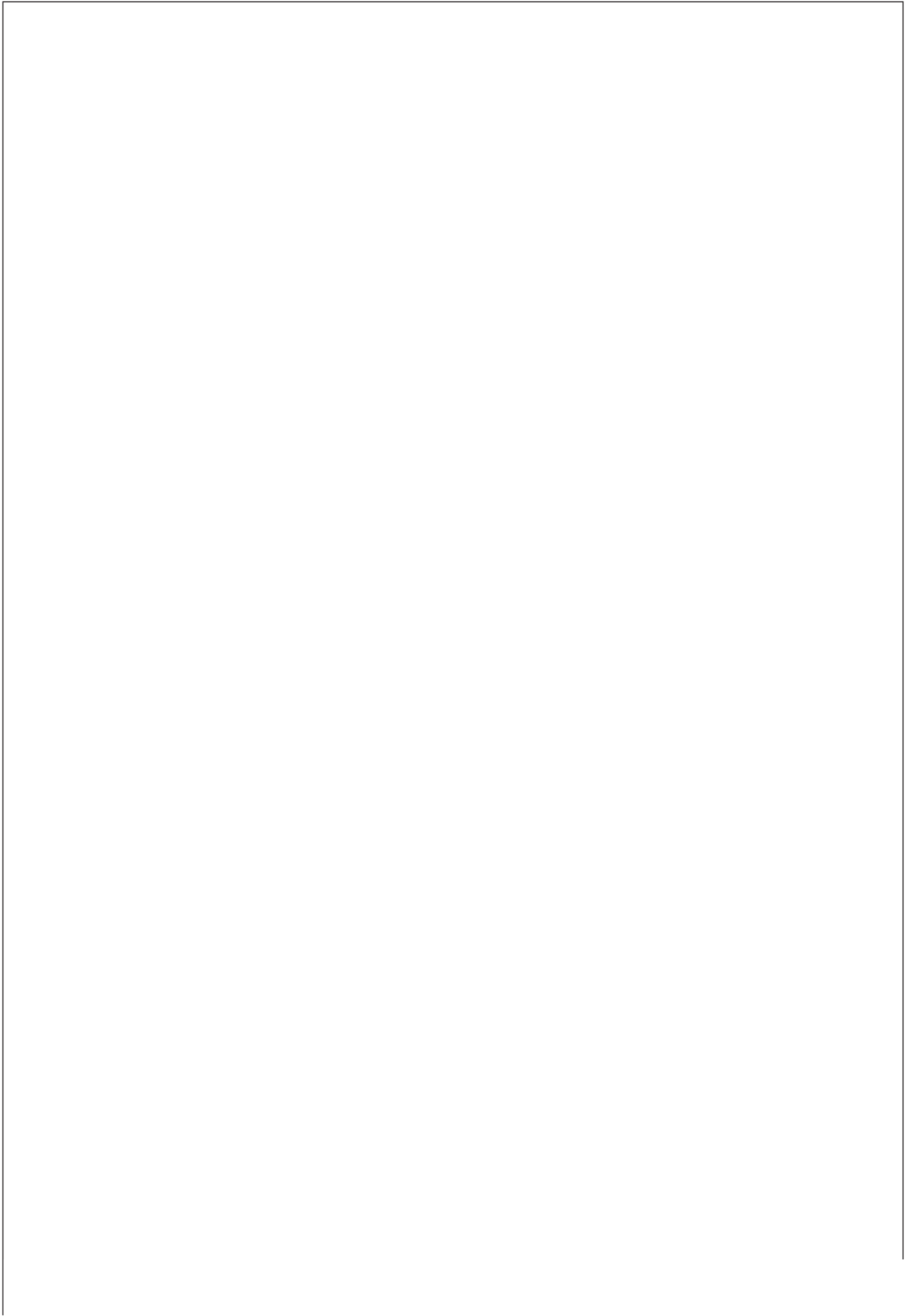
This is CDRI's second Annual Development Review of critical development issues for Cambodia. This year's review focuses on rural poverty, and poverty reduction strategies and policies, reflecting the findings of CDRI's recent major poverty research studies, the Moving Out of Poverty Study and the Participatory Poverty Assessment of the Tonle Sap. This English language edition is accompanied by Khmer language summaries of each chapter contained in a separate volume to broaden the review's audience and accessibility. In selecting articles for this issue, CDRI has sought to ensure that they focus on critical aspects of development in Cambodia, and to provide new information, analysis and insights for policymakers, donors, civil society organizations, the private sector, and other stakeholders. The articles, either individually or collectively, should make a positive contribution to current development dialogue and policy debate, with a focus on the imperative of targeted poverty reduction.

The introduction to this edition of the Annual Development Review provides an overview of recent macroeconomic performance, with particular reference to strategies aimed at promoting growth with stronger poverty reduction capacity. The weak linkages between growth and poverty reduction, and associated inequality, are also highlighted, along with other critical aspects of the Cambodian economy, and its broader development context, including natural resource management, governance, and gender.

This edition of CDRI's Annual Development Review is being released at the inaugural 2007 Cambodia Outlook Conference, a new partnership between CDRI and ANZ Royal, held in Phnom Penh on 22-23 February 2007. The theme of this year's Outlook Conference is *2007 Cambodia Outlook: Opportunities for Growth, Development and Shared Prosperity*. Each year, the Outlook Conference will bring together invited leaders from government, the private sector, research and civil society organizations, and the international development community to consider Cambodia's future.

At CDRI our hope is that the annual Outlook Conference, along with the Annual Development Review and its associated Khmer language summary materials, will make a significant contribution to the broader dissemination of quality development policy research on issues critical to Cambodia's future, and to enhancing its impact on the development policies of the Royal Government of Cambodia, its international development partners and national stakeholders.

Larry Strange
Executive Director CDRI
February 2007



INTRODUCTION: Major Development Trends

C H A P T E R (1)

By:

Brett M. Ballard

Introduction: Major Development Trends

C H A P T E R (1)

1.1. Strong Macroeconomic Performance

The overall macroeconomic performance of the Cambodian economy in 2005¹ was stronger than anticipated, providing encouraging news to government planners, donors, and other key stakeholders. Real GDP expanded by 13.4 percent in 2005, up from 10.0 percent in 2004, and well above the average growth of 8.1 percent from 2000 to 2004. Agriculture grew by 16.6 percent, while the industrial and services sectors each grew by 12.1 percent. These figures exceeded earlier estimates of various institutions in Cambodia that anticipated somewhat sluggish growth. For example, the World Bank, Asian Development Bank, and the IMF all predicted that Cambodia's economy would grow in the range of 2.3 to 2.6 percent. CDRI was more optimistic, predicting an overall growth rate of 6.0 percent.

The government's growth figures for 2005 reflect revisions in the national account estimates, including improved and expanded coverage and improvements in compilation methodology. For example, coverage has been improved for freight transport and private health care, and expanded to include gold mining, petroleum exploration, gas supply and micro-finance. Improved compilation methods included better estimates for household final consumption expenditure (HFCE) and durable equipment expenditures, while the National Institute for Statistics (NIS) introduced changes concerning data sources. Meanwhile, the remarkable growth in the agricultural sector was attributed to a combination of factors, including better weather, improved irrigation, expansion of cultivation areas, as well as changes in technology and agricultural extension services.

Chapter 2 in this volume provides a more detailed analysis of the national accounts, national and sectoral growth rates, the budget and balance of trade and payments, money, interest rates, exchange rates and inflation, as well as a review of employment and the situation of vulnerable workers. The chapter concludes with an assessment of the short-term outlook for the economy.

1.2. Strong Growth, but Increasing Inequality

One year, however, does not constitute a trend, especially with respect to agriculture, and this is no time for government planners and donors to rest easy. Also, the good news at the macro-level may mask some worrying indications that recent economic growth remains based on narrow economic and fragile social foundations. One such indicator concerns the unequal distribution of the benefits of Cambodia's impressive growth. Comparing data from 1993/94 with Cambodia Socio-Economic Survey (CSES) data from 2004, the World Bank's 2006 Poverty Assessment (PA) found that over the past decade Cambodia has reduced poverty by about 1 percent per annum. The distribution of poverty reduction, however, is skewed in favour of the urban sector as poverty fell by 60 percent in Phnom Penh and 44 percent in other major urban areas, while poverty reduction in the rural sector, where over 90 percent of the country's poor reside, was much lower at 22 percent.

¹ The national account data for 2005 was published in June 2006. The data for 2006 is expected to be published mid-2007. The most recent data available for 2006 is the quarterly GDP estimates for the second quarter of 2006, but these are subject to revision.

This uneven pattern of poverty reduction has contributed to a significant increase in inequality, as measured by the Gini coefficient,² which increased from 0.35 to 0.40 over the same period.³ Also of concern is the growing disparity between the rural and urban areas in terms of inequality. Between 1994 and 2004, the Gini coefficient fell from 0.39 to 0.37 in Phnom Penh and remained steady at 0.44 in other urban areas. In rural areas, however, it increased from 0.27 to 0.33 (WB, 2006). According to the PA, the standard of living of the poorest 20 percent has risen on average by 8 percent over the last decade, while that of the richest 20 percent has risen by 45 percent. These figures indicate that the benefits of growth are not evenly distributed between the urban and rural sectors and across different income groups.

1.3. The Need to Strengthen Linkages

One reason for the uneven distribution of the benefits of growth concerns the weak upstream and downstream linkages between the primary growth sectors and the rest of the economy. Despite its recent rapid growth, the Cambodian economy is not able to generate enough new jobs to absorb the rapidly increasing labour force. Agricultural productivity is too low to provide meaningful employment in the rural sector, which in turn pushes more and more of Cambodia's youth out of the villages and on to migratory paths to urban areas or across borders in search of employment. As the economy continues to be narrowly based on the two main sub-sectors of garments and tourism, which are fragile and subject to external shocks, new labour force entrants are forced to compete with one another for a limited number of employment opportunities. The result is a growing number of youth, primarily young men, who are either under-employed or not employed at all. One symptom of the problems associated with unemployment is increased drug use and violence among youth.

Chapter 3 in this volume explores the relationship between foreign direct investment (FDI) and poverty reduction in Cambodia through employment and growth linkages. Although FDI has played an important role in promoting economic growth and is a major source of employment in Cambodia over the past decade, the impact on poverty reduction seems to be very limited for several reasons. Most employment is concentrated in urban area and requires skills and education that the poor do not possess. FDI is overwhelmingly in the industry and services sectors located in urban areas, while the majority of the poor work in agriculture. The chapter discusses ways to increase the contribution of FDI to the government's poverty reduction objectives.

Chapter 4 looks specifically at the oil and gas sub-sector, which is emerging as one of the principal areas attracting significant levels of FDI. Recent discoveries of natural oil and gas and subsequent plans for extraction to commence in 2008-09 seem to be timely given high oil prices and the Cambodian government's dire need for increased revenue to finance ongoing development efforts. This chapter discusses strategies that have been employed by other countries to avoid the "curse" that can arise from windfall revenues generated by a booming minerals sub-sector, and make better use of the potential for social and economic development in ways that distribute the benefits more equitably within society.

² The Gini coefficient is a measure of inequality in the distribution of income or consumption, and is defined as a ratio with values between 0 and 1. A value of 0 corresponds to perfect income equality (i.e. everyone has the same income) and 1 corresponds to perfect income inequality (i.e. one person has all the income, while everyone else has zero income). The Gini coefficient reported in the World Bank's 2006 PA measures inequality in the distribution per capita real consumption in 1994 and 2004.

³ Not all areas of the country were covered in the 1993/94 survey. These figures compare the Gini coefficient between 1993/94 and 2004 and cover comparable areas. Gini coefficient for all of Cambodia, according to the 2004 CSES, is 0.42.

1.4. Strengthening Agriculture

A broad consensus among government, donors, civil society and the research community in Cambodia has emerged concerning the urgent need to focus poverty reduction efforts on stimulating increased agricultural productivity and off-farm employment opportunities in the rural sector. Enhancement of the agricultural sector is a cornerstone of the government's Rectangular Strategy as outlined in the National Strategic Development Plan (NSDP). This strategy includes four components: improving productivity and diversifying the agricultural sector, land reform and mine clearance, fisheries reform, and forestry reform.⁴ The Cambodian Millennium Development Goals (CMDGs) also make explicit reference to strengthening the rural sector in order to achieve the goal of eradicating extreme poverty and hunger.⁵

The World Bank's Poverty Assessment argued that a third engine of growth in the agricultural sector is required in order to achieve the government's poverty reduction objectives.⁶ CDRI strongly supports this approach to poverty reduction. The PA observed that growth in agriculture could be generated by improved land tenure security and infrastructure, particularly in the area of irrigation and water management, which was one of the main factors cited by the government to account for the growth in 2005. While security of tenure and infrastructure are indeed important areas that require urgent attention, recent CDRI research suggests that other services are also required to stimulate this third engine of the economy. These services include affordable credit, improved extension services, and better access to health care and education, as well as social services, all of which are of course subject to policy at the national level, and require implementation at the local level.

Chapter 5 in this volume looks at the livestock sub-sector, which is an important component of Cambodia's agriculture sector, yet receives little attention in policy-oriented research. This chapter provides an overview of livestock production in Cambodia with particular attention to issues associated with the transition from subsistence to commercial livestock production in the context of expanding domestic and regional trade. It also focuses attention on establishing sustainable good quality veterinary services in Cambodia, with particular reference to research concerning village livestock agents (VLAs) in northwest Cambodia.

1.5. Natural Resource Management

The NSDP specifically refers to the need to strengthen natural resource management through reform in the fisheries and forestry sub-sectors. Chapter 6 examines data from several recent studies in order to develop a current state of the art view concerning the linkages between rural poverty and the use of common property resources (CPR) in Cambodia. CDRI's analysis of CSES and its Moving Out of Poverty Study (MOPS) data show that the poverty rates among households relying on forest and fisheries CPR are higher than for rural households relying on other income sources. These results underscore the importance of forests and fisheries for poor households nationwide for both livelihood sources and as a safety net in times of crisis. At the village level, poor households are more dependent on CPR products to maintain their livelihoods, but they tend to benefit less from such resources than better off households in terms of absolute income derived from these resources. Poor households face various obstacles to improving their livelihoods from extractive activities, and some of the underlying causes are discussed. These

⁴ Royal Government of Cambodia (January 2006); National Strategic Development Plan, 2006-2010

⁵ Cambodia Millennium Development Goals Second Progress Report: Challenges and Framework for Action, September 2003.

⁶ World Bank (2006); Halving Poverty by 2015, Cambodia Poverty Assessment

findings are affirmed by CDRI's recent Participatory Poverty Assessment of the Tonle Sap (PPA) that clearly shows the poor and the very poor are increasingly dependent on land and water-based natural resources to sustain their fragile livelihoods. As a result of a deeper penetration of markets serving primarily urban interests, the access to natural resources that the poor have traditionally relied upon is increasingly tenuous and subject to conflict.

1.6. Increasing Migration

CDRI's recent poverty studies show that the rural poor often end up selling their labour to local or outside elites, or, in the absence of such alternative forms of employment, migrate elsewhere within the country or to Thailand, Vietnam, and Malaysia in search of employment. Chapter 7 of this volume observes that so-called "push factors", such as a lack of agricultural productivity, degraded natural resources, and climatic disruptions, are forcing people to migrate to urban areas or across borders in search of employment. In rural Cambodia, migration is largely a function of poverty as people are forced to move due to the pressures of circumstance rather than deliberate choice. In this sense, labour migration can be viewed as a tool to alleviate poverty, but its effect may be more transitory and short term in nature than is otherwise indicated in some of the literature. The chapter also argues that in terms of policy, labour migration should not be necessarily accepted as a substitute for rural development. Urgent efforts are required to promote rural and agricultural development to increase farm productivity and to generate more off-farm employment opportunities.

1.7. Governance

The implementation of poverty reduction strategies, agricultural development policies, the delivery of social services, and the management of natural resources are all critical functions of local institutions of governance. Recent CDRI studies suggest that the picture concerning governance at the local level is decidedly mixed. For example, the Tonle Sap PPA observed encouraging indications of progress concerning service delivery, including infrastructure development and health care. In some villages, local officials have also been able to resolve certain village level conflicts involving local disputants, including cases of domestic violence. At the same time, however, corruption and bribery are so pervasive as to be institutionalised as a hallmark of local governance. While rich and medium income households are also subject to local level corruption, the poor and the very poor are especially vulnerable to its pernicious effects. In many respects, corruption is the primary institutional mechanism by which the poor and the very poor are denied access to natural resources, social services, and legal redress of grievances involving theft, cheating and personal violence, as well as other types of conflict. In short, corruption distorts the balance of power decidedly in favour of the powerful and better off, and decidedly against the interests and well-being of the poor and the very poor.

In response to such challenges, the concept of public sector accountability has been appearing with increasing frequency in official reports and public speeches about good governance, poverty reduction, decentralisation, and democratic development in Cambodia. Chapter 8 of this volume observes that despite the frequent use of the term "accountability", there appears to be confusion and lack of shared understanding among government and donor partners concerning its meaning, which undermines efforts to formulate and implement measures designed to promote public sector reform. This chapter reviews the international literature concerning accountability from two perspectives, beginning with a discussion of various public sector management theories that involve Western liberal approaches to rules-based accountability. It then discusses how Cambodians understand accountability culturally, historically, administratively, and politically, and how such

understanding is shaped in a “neo-patrimonial” context. The chapter provides a contextualised framework for understanding how the two conceptual approaches meet and interact to form a hybrid version of accountability.

1.8. The Gender Dimensions of Poverty

CDRI’s ongoing poverty research, some of which is reflected in this volume, shows that gender continues to be a significant factor in determining individual and household access to social services and control over productive assets. For example, data from CDRI’s rural and urban land titling baseline surveys show that female headed households tend to own less total land than do male headed households. Moreover, they tend to own fewer plots of land that are on average smaller in size and of less value. They have on average less adult labour and fewer economically productive assets. As a result, they are decidedly more vulnerable to problems associated with shocks and emergencies. For example, female headed households at every category of holding size experience greater food shortages than do male headed households. Such disparities undermine the capacity of women to participate equitably in the benefits of Cambodia’s recent economic growth.

CDRI’s PPA research also shows that women from poor and very poor households continue to experience poor health, including common and easily treatable conditions, due to poor hygiene and living conditions, the high costs of health care, and gender attitudes that make women reluctant to talk or seek help for their own health problems. Women also continue to be especially vulnerable in terms of personal security. For example, domestic violence was identified as a contributing factor to moving into poverty in many villages due to lost income and assets, reduced ability to earn and income, and divorce. Women also reported incidences of rape and marital rape with no redress available to victims in most cases. Parents spoke of the risks of sending girls to school as a reason for their lack of participation in education.

The gender dimensions of poverty in Cambodia cut across all the main themes of socio-economic development discussed in this volume, including employment, access to and control over natural resource assets, access to affordable and good quality social services, and governance. The issues associated with the gender dimensions of development and governance in Cambodia require more explicit discussion, and will continue to be a major focus of CDRI’s research and policy work.

Macroeconomic Performance

C H A P T E R (2)

By:

**Phim Runsinarith, Hing Vutha, Phann Dalis
and Pon Dorina**

Macroeconomic Performance

C H A P T E R (2)

2.1. Introduction

This chapter provides an overview of Cambodia's economic performance in 2005.¹ It briefly reviews economic growth and the performance of agriculture, industry and services. Cambodia's economy grew much better than anticipated in 2005. This growth was boosted by agricultural production, which was unexpectedly high, and industrial and services production, which continued to expand at a rapid pace. This chapter also summarises the recent development of the balance of payments, the balance of the government budget, money and prices. The balance of payments registered a surplus, while the government budget balance continued to improve. Cambodia's foreign trade increased significantly, with clothing and textile products continuing to dominate the country's exports. The official exchange rate depreciated slightly, while the inflation rate increased to 5.8 percent. The chapter then briefly discusses employment and the recent situation of vulnerable workers.

Real GDP expanded by 13.4 percent, up from 10.0 percent in 2004, and well above the average growth of 8.1 percent from 2000 to 2004.² The agricultural sector showed unexpected strength thanks largely to favourable weather conditions, while industry and services continued to enjoy double-digit gains.

Agriculture expanded very rapidly, recording 16.6 percent real growth. Crop production bounced back significantly from a year earlier, growing by 28.0 percent due to sufficient rainfall and an increase in cultivated area. Livestock and poultry production strengthened by 5.8 percent in 2005, higher than the 4.5 percent gain registered in 2004. Fishing grew by 5.6 percent, recovering from a decline in 2004. Forestry value added rose by 5.4 percent from the previous year.

The industrial sector grew by 12.1 percent in 2005. The mining sub-sector accelerated by 24.5 percent from 2004. Manufacturing grew by 9.7 percent, despite early expectations of much slower growth arising from the phasing out of the Multi-Fibre Agreement. The electricity, gas and water sub-sector grew relatively slowly by 4.4 percent. Construction remained strong, posting growth of 20.1 percent, up from 13.2 percent in 2004 and above the 17.3 percent average growth over 2000–04.

Services rose by 12.1 percent in 2005. Trade grew by 8.2 percent, reflecting improvements in transport infrastructure and the boost in the agricultural production. Hotels and restaurants, which directly benefited from infrastructure development and tourism growth, strengthened by 17.3 percent. Transport and telecommunications, public administration and other services grew by 13.1 percent, 5.9 percent and 17.7 percent, respectively.

¹ The national account data for 2005 was published in June 2006. The data for 2006 is expected to be published mid-2007. The most recent data available for 2006 is the quarterly GDP estimates for the second quarter of 2006, but these are subject to revision.

² The National Institute of Statistics has refined the method of compiling the national accounts. Accordingly, all figures published in previous years have been revised.

Cambodia is now undergoing a gradual shift from the agricultural economy of the early 1990s towards more emphasis on garments and tourism. Despite the recent growth, the contribution of agriculture to GDP has been declining, while the shares of garments and tourism in Gross Value Added (GVA) have been on an upward trend. Another point worth noting is that the growth figures estimated by the National Institute of Statistics (NIS) sparked considerable controversy among Cambodian commentators. Despite a well-formed explanation from the NIS when the preliminary figures were released, some economists remained unconvinced and believed the NIS was over-optimistic to publish such a high growth estimate. CDRI, however, believes that the growth rate estimates are an accurate reflection of the economy's performance.

Cambodia's overall balance of payments ended 2005 with a surplus of USD5 m, or 0.1 percent of GDP. The current account in 2005 registered a deficit of USD591 m, while the financial account registered a surplus of USD296 m. Cambodia's overall balance, current account balance and capital account balance in 2005 were stable and not a cause for concern for the economy. Cambodia's foreign trade has increased steadily, primarily due to more liberalised economic and trade policies and active participation in bilateral, regional and global trade agreements. Total exports in 2005 were USD2910 m, a 23 percent increase from 2004. Clothing and textile products continue to dominate exports, accounting for 78 percent of the total. Other export products were rubber, forest products and fish. Total imports in 2005 were USD3928 m, or 63 percent of GDP. The major imports were foods, beverages and medicine, construction materials, textiles, vehicles and energy.

The budget deficit has improved over the last three years. In 2004, the deficit was KHR864.6 bn, while in 2005 it was KHR828.0 bn. The deficit was 4.1 percent of GDP in 2004 and 3.3 percent in 2005. The liquidity of the banking system expanded by 16 percent to KHR5024.9 bn in 2005. The official exchange rate continued to depreciate, by 2.2 percent against the US dollar in 2005. The inflation rate in Phnom Penh increased from 3.9 percent in 2004 to 5.8 percent in 2005.

The situation of vulnerable workers in Cambodia improved very little in real terms. This may be due to an increasing number of migrant workers who find jobs in the city. CDRI's survey of vulnerable workers showed that the number of migrants in Phnom Penh increased, as people who have no land, or insufficient land for production, came to the city to support their families. The survey also revealed that young migrants come from rural areas and that most of them drop out of school because they cannot afford education.

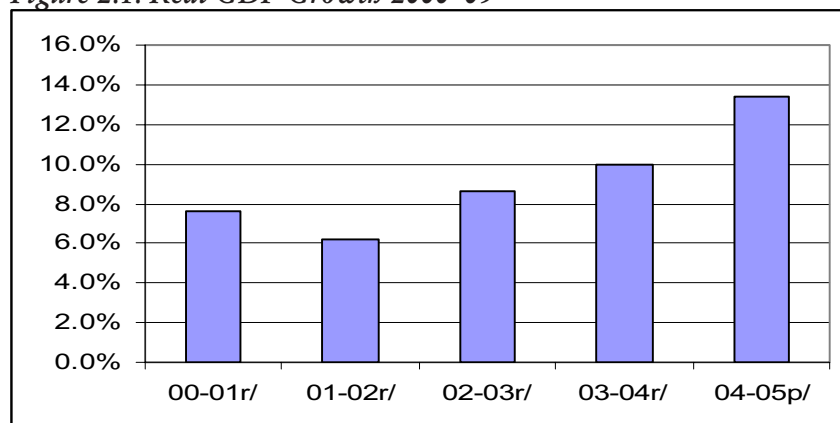
This chapter is organised as follows. Section 2 reviews economic growth and the performance of agriculture, industry and services in 2005. Some statistical evidence is provided concerning the gradual shift of the economy from agriculture to manufacturing and tourism. Section 3 examines consumption expenditure, investment, the balance of payments and trade performance. There is a discussion of how commentators view GDP estimates. In addition, economic growth and equity issues are raised. Section 4 examines fiscal and monetary developments. In particular, it discusses government budget operations, external debt, monetary developments and inflation. Section 5 explores employment and the situation of vulnerable workers. Section 6 concludes the chapter with a short-term economic outlook.

2.2. Recent Developments and Trends

2.2.1. GDP Growth and Sectoral Performance

The economy grew more robustly, by 13.4 percent in 2005, compared to the revised 10.0 percent growth in 2004 and the average of 8.1 percent over 2000–04 (Figure 2.1). Economic growth in 2005 was led by an expansion of paddy production, an increase in manufacturing dominated by garments, and the continuing boom in tourism.

Figure 2.1: Real GDP Growth 2000–05



r/ = revised. /p = provisional

Source: NIS, Ministry of Planning 2006

2.2.1.1. Agriculture

Agriculture, which employed 58 percent of the total labour force, grew faster than any other sector, by 16.6 percent in 2005. Table 2.1, however, shows that although it still makes a very significant contribution to GDP growth, agriculture has shrunk from 45.6 percent of GDP in 1993 and 35.9 percent in 2000 to 31.4 percent in 2005, as the focus of the economy shifts to other sectors. According to the NIS, Cambodia's agricultural production in 2005 benefited from good weather conditions and better irrigation, as well as an expansion in the area of cultivation and better land management, which led to an increase in productivity.

Table 2.1: Agricultural Performance

Real GVA (billion riels)	1993	2000	2001	2002	2003	2004	2005
Agriculture	3874	5065	5294	5180	5809	5880	6854
Crops	1594	2328	2379	2275	2830	2878	3684
Livestock & Poultry	759	757	847	843	898	939	993
Fisheries	1158	1516	1605	1615	1642	1614	1705
Forestry & Logging	362	464	462	447	439	448	473
	<i>Annual Growth Rate (%)</i>						
Agriculture		-1.2	4.5	-2.2	12.1	1.2	16.6
Crops		0.6	2.2	-4.4	24.4	1.7	28.0
Livestock & Poultry		-9.1	11.9	-0.5	6.6	4.5	5.8
Fisheries		5.0	5.9	0.6	1.7	-1.7	5.6
Forestry & Logging		-13.2	-0.4	-3.3	-1.9	2.2	5.4
	<i>Share of GDP (%)</i>						
Agriculture	45.6	35.9	34.9	32.2	33.2	30.6	31.4
Crops	18.8	16.5	15.7	14.1	16.2	15.0	16.9
Livestock & Poultry	8.9	5.4	5.6	5.2	5.1	4.9	4.6
Fisheries	13.6	10.8	10.6	10.0	9.4	8.4	7.8
Forestry & Logging	4.3	3.3	3.0	2.8	2.5	2.3	2.2

Source: NIS 2006

Crop production recovered significantly after growth slowed in 2004. Real value added for crops expanded by 28.0 percent in 2005, compared to only 1.2 percent a year earlier and an average of 2.9 percent over 2000–04. The contribution of crop production to GDP grew to 16.9 percent in 2005, up from 15.0 percent in 2004. The average was 15.5 percent from 2000 to 2004. Much of the growth of this sub-sector came from expansion in paddy production, which accounted for about 50 percent of crop production and which increased by 43.5 percent. This growth reversed a decline of 12.2 percent a year earlier thanks to sufficient rainfall and an increase in cultivated area. Actual growth rates in the sub-sector are variable, marked by peaks and troughs, reflecting the high reliance on natural factors and susceptibility to adverse weather, such as droughts and floods. According to recent statistics from the Ministry of Agriculture, Forestry and Fisheries, however, the average yield per hectare in 2005 was 2.48 tonnes, about 0.5 tonne higher than in 2004, while the total cultivated area of paddy increased by about 3 percent.

Livestock and poultry production plays an important role in poverty alleviation in rural Cambodia, serving as a source of protein, draught animals and income.³ Real value added of livestock and poultry strengthened by 5.8 percent in 2005, more than the 4.5 percent gain in 2004, despite outbreaks of animal diseases including avian influenza and foot and mouth disease. Cattle and buffaloes, pigs and poultry and eggs, which are the main components of this sub-sector, grew by 7.3 percent, 4.2 percent, and 5.4 percent, respectively. Productivity in livestock and poultry is relatively low, however, due to infectious diseases and the continued use of traditional farming techniques. Given the importance of livestock and poultry for the livelihoods of rural Cambodians, it is essential to improve productivity and the marketing systems in order to bring rapid benefits to a large proportion of the rural population.

³ On average, livestock provides 17 percent of national household income (Helmerts *et al.* 2003).

Fishing has traditionally played a significant role in Cambodia's economy, contributing to national income, jobs and food security. Fishing value added in 2005 accounted for about 8 percent of the country's GDP, the fifth largest sub-sector after manufacturing, crops, trade and other services. The inland fish catch, which accounts for 72 percent of total fishing, amounted to 324,000 tonnes in 2005, about 30 percent more than in 2004. The marine fish catch and aquaculture, which together accounted for 28 percent, increased by 7.5 percent and 25 percent, respectively, from a year earlier. Despite the healthy growth in total fish catch, the real value added of the fishery sector grew more slowly at 5.6 percent in 2005, suggesting a reduction in the quantity of good quality fish. Improved fishery management and control of illegal fishing are essential for promoting sustainable fishing and enhancing economic growth.⁴

Real value added in forestry and logging grew by 5.2 percent in 2005. Wood fuel, which contributed a large share of forestry production, expanded by 2 percent. Value added in logging recovered markedly in 2005, growing at 9.7 percent in real terms, after a continual decline since the late 1990s. This could be attributed to the recent boom in construction, which has stimulated the demand for wood. It is possible that the value added in this sub-sector was underestimated due to under-reporting of both extensive illegal logging and the real value of non-timber forest products. According to recent studies by the World Bank and CDRI, the poor rely on forestry resources more than the non-poor.⁵ These studies also revealed that in addition to firewood, non-timber products such as root crops, fruits and vegetables, palm juice and fibrous material contribute to household cash income and nutritional intake. The WB report further showed that poverty rates may have increased in the Plateau region, where most of Cambodia's remaining forest resources are located. It is, therefore, crucial to formulate a policy that ensures the strict monitoring of forest exploitation according to international best practice and to provide adequate forest reserves for domestic consumption.⁶

In short, although the total amount contributed by agriculture to the overall economy grew, its share in GDP has fallen from 45.6 percent in 1993 to 31.4 percent in 2005. As will be discussed later in this section, this gradual decline is mainly attributable to robust growth in industry (particularly garment manufacturing) and services (mainly tourism). Paddy yields, at present around 2.5 tonnes per hectare, are still substantially below the potential of 3–5 tonnes reached in neighbouring countries with similar agricultural and climatic conditions. Even slight but sustained improvements in productivity would have a tremendous and immediate positive impact on poverty reduction.⁷

2.2.1.2. Industry

Industry contributed 28 percent of GDP and employed 13.5 percent of the total labour force in 2005. The growth of real industrial value added, however, declined from 16.4 percent in 2004 to 12.1 percent in 2005. The average was 17.7 percent from 2000 to 2004. This mainly reflected lower gains in manufacturing due to the slowing of garment industry growth. Mining and construction registered steady growth from a year earlier, while electricity, gas and water grew relatively slowly.

⁴ World Bank (2004), *Cambodia at the Crossroads*, Prepared by the World Bank in collaboration with the IMF for the Cambodia Consultative Group Meeting December 6-7 2004. (Phnom Penh).

⁵ World Bank (2006), *Halving Poverty by 2015? Cambodia-Poverty Assessment*, World Bank. See Chapter 6 of this ADR.

⁶ Prom Tola and Bruce McKenney (2003), *Trading Forest Products in Cambodia: Challenges, Threats, and Opportunities for Resin*, CDRI WP 28, (Phnom Penh).

⁷ Royal Government of Cambodia (2006), *National Strategic Development Plan NSDP (2006-2010)*.

Table 2.2: Industry Sector Performance

Real GVA (billion riels)	1993	2000	2001	2002	2003	2004	2005
INDUSTRY	1101	3078	3430	4025	4512	5252	5888
Mining	18	34	37	47	55	69	86
Manufacturing	683	2255	2613	2994	3359	3949	4333
Food, Beverages & Tobacco	359	449	470	466	488	484	522
Textiles, Wearing Apparel & Footwear	63	1297	1666	2021	2360	2947	3250
Wood, Paper & Publishing	68	132	93	94	80	84	90
Rubber Manufacturing	23	69	70	69	62	55	50
Other Manufacturing	171	307	315	343	368	379	421
Electricity, Gas & Water	26	58	61	71	83	86	90
Construction	374	732	718	913	1014	1148	1379
	<i>Annual Growth (%)</i>						
INDUSTRY		31.2	11.4	17.3	12.1	16.4	12.1
Mining		26.0	11.5	25.6	18.1	24.2	24.5
Manufacturing		30.3	15.9	14.6	12.2	17.6	9.7
Food, Beverages & Tobacco		-3.9	4.5	-0.7	4.7	-1.0	8.0
Textiles, Wearing Apparel & Footwear		68.2	28.4	21.4	16.8	24.9	10.3
Wood, Paper & Publishing		-9.7	-29.7	0.7	-14.2	4.4	6.6
Rubber Manufacturing		10.0	0.8	-0.7	-9.8	-11.5	-8.9
Other Manufacturing		8.6	2.8	8.9	7.0	3.2	11.0
Electricity, Gas & Water		6.9	5.1	16.7	15.9	4.6	4.4
Construction		36.8	-1.8	27.1	11.1	13.2	20.1
	<i>Share of GDP (%)</i>						
INDUSTRY	13.0	21.8	22.6	25.0	25.8	27.3	27.0
Mining	0.2	0.2	0.2	0.3	0.3	0.4	0.4
Manufacturing	8.0	16.0	17.2	18.6	19.2	20.5	19.9
Food, Beverages & Tobacco	4.2	3.2	3.1	2.9	2.8	2.5	2.4
Textiles, Wearing Apparel & Footwear	0.7	9.2	11.0	12.5	13.5	15.3	14.9
Wood, Paper & Publishing	0.8	0.9	0.6	0.6	0.5	0.4	0.4
Rubber Manufacturing	0.3	0.5	0.5	0.4	0.4	0.3	0.2
Other Manufacturing	2.0	2.2	2.1	2.1	2.1	2.0	1.9
Electricity, Gas & Water	0.3	0.4	0.4	0.4	0.5	0.4	0.4
Construction	4.4	5.2	4.7	5.7	5.8	6.0	6.3

Source: NIS 2006

Growth in the mining sub-sector rose to 24.5 percent in 2005, slightly up from 24.2 percent in 2004. Although the mining share of GDP remained small, most observers expect this sub-sector to contribute a great deal to Cambodia's economy in the future. Exploratory drilling in one of six offshore exploration blocks has provisionally estimated 400–500 million barrels of recoverable oil and 2–3 trillion cubic feet of gas.⁸ If production were spread over 20–25 years, the annual sales of oil and gas could be \$6–\$7.5 billion, larger than the current size of the country's economy. The challenge is how to use this energy resource, and the substantial revenues it would generate, in an optimal manner to benefit the country and its citizens in the immediate and long term. This challenge is discussed in more detail in Chapter 4.

⁸ Valley et al (2006), *A SWOT Analysis of the Cambodian Economy*. Harvard University Kennedy School of Government, for UNDP Cambodia.

Growth in manufacturing slowed to 9.7 percent in 2005, compared to 17.6 percent in 2004 and slower than the average expansion of 18.1 percent over 2000–04. Garment GVA, which contributes largely to this sub-sector, grew by 10.3 percent, down from 24.9 percent in 2004. The share of the garment industry in total GDP has expanded from 0.7 percent in 1993 and 9.2 percent in 2000 to 14.9 percent in 2005. The vast majority of garment workers are young women from rural villages. CDRI's regular survey of vulnerable workers showed that most garment workers save USD10-15 per month to support their families at home. The World Bank's Cambodia-Poverty Assessment 2006 also indicated that the amount of money garment workers send back home was significant compared to their salaries. Migrant remittances are also discussed in Chapter 7. This export-oriented industry has enjoyed high growth since the mid-1990s, when foreign investors began producing for export by taking advantage of the country's then favourable access to the US and EU markets. Cambodia has not yet been able to reap the full benefit from this sector, however, since most inputs are imported and the industry largely involves cutting and sewing fabrics into finished products, activities in which value added and profit margins are relatively low.⁹ Domestic supply of imported inputs would not only result in more jobs and value added for the economy, but might also make Cambodian garment products more competitive.

Electricity, gas and water, which are crucial for economic development, accounted for 0.4 percent of GDP and expanded by 4.4 percent in 2005. This sub-sector remained underdeveloped and continued to struggle to meet growing demand. The Cambodia Socio-Economic Survey 2003–2004 found that about 80 percent of the total population has no access to electricity or state-provided water. Moreover, the service is often unreliable where it exists. Candles and battery-powered lights have become essential items for home and business alike, since blackouts frequently occur and can last up to four hours at a stretch. Both the cost and reliability of power supplies compare unfavourably with neighbouring countries Vietnam and Thailand.

Construction continued to strengthen, growing by 20.1 percent in 2005, up from 13.2 percent in 2004 and above the 17.3 percent average growth over 2000–04. The construction boom is driven by three major factors: political stability, robust economic performance in recent years and continuing assistance from the international community. According to the municipal Department of Land Management, the number of new apartments built in Phnom Penh is increasing by 8000 to 10,000 a year, and new houses were selling gradually after construction was completed. Also, more restaurants, hotels and guesthouses have been built to meet the demand of increased tourist arrivals in the tourist city of Siem Reap.

2.2.1.3. Services

The services sector, which accounts for 36 percent of GDP and employs 27.5 percent of the labour force, grew by 12.1 percent in 2005, compared to 11.7 percent in 2004. Hotels and restaurants, transport and communications, finance and other services all enjoyed double digit growth, while other sub-sectors also performed satisfactorily.

Trade links production with consumption and is a powerful and important catalyst for socio-economic development. Value added growth in this sub-sector rose from 5.5 percent in 2004 to 8.4 percent in 2005, above the average gain of 3.1 percent over 2000–04 as a result of improvements in transport infrastructure and the boost in agricultural production. Fuel, motor vehicles and wholesale trade, the driving factors for the trade sub-sector, grew very impressively by more than 20 percent. Retail trade also registered healthier growth than the average of the last five

⁹ Omar Bargawi (2005), *Cambodia's Garment Industry – Origins and Future Prospects* ESAU Economic and Statistics Analysis Unit, London: Overseas Development Institute, ESAU Working Paper 13.

years. Facilitating trade in Cambodian products needs more attention as it could provide more employment for people in rural areas where poverty remains pervasive. This could be achieved by providing more market information and by reducing export costs. Studies show that more investment would flow in to take advantage of the country's factor endowments if market outlets were available and export costs lower.¹⁰

Table 2.3: Service Sector Performance

Real GVA (billion riels)	1993	2000	2001	2002	2003	2004	2005
SERVICES	3262	5231	5687	6045	6310	7050	7906
Trade	1233	1512	1544	1565	1596	1685	1826
Hotel & Restaurants	202	521	639	759	632	779	915
Transport & Communications	538	930	996	1078	1092	1174	1328
Finance	28	175	148	164	177	213	254
Public Administration	168	377	353	357	343	321	340
Real Estate & Business	717	855	961	975	1192	1343	1436
Other services	377	861	1047	1147	1278	1535	1806
Tourism	139	821	1026	1118	959	1514	1933*
Non-tourism	3123	4410	4662	4927	5351	5536	5973*
	<i>Annual Growth Rate (%)</i>						
SERVICES		8.9	8.7	6.3	4.4	11.7	12.1
Trade		4.5	2.1	1.4	2	5.5	8.4
Hotel & Restaurants		19	22.6	18.8	-16.8	23.4	17.3
Transport & Communications		6.1	7.1	8.3	1.3	7.5	13.1
Finance		36.3	-15.6	10.9	7.9	20.7	19.3
Public Administration		-0.8	-6.1	1.1	-3.9	-6.4	5.9
Real Estate & Business		7.3	12.3	1.5	22.2	12.6	6.9
Other services		16.7	21.6	9.5	11.4	20.1	17.7
Tourism		46.6	25.5	20.1	-14.3	47	27.7*
Non-tourism		2.2	5.7	5.7	8.6	3.5	7.9*
	<i>Share of GDP (%)</i>						
SERVICES	38.4	37.1	37.5	37.5	36.1	36.7	36.2
Trade	14.5	10.7	10.2	9.7	9.1	8.8	8.4
Hotel & Restaurants	2.4	3.7	4.2	4.7	3.6	4.1	4.2
Transport & Communications	6.3	6.6	6.6	6.7	6.2	6.1	6.1
Finance	0.3	1.2	1	1	1	1.1	1.2
Public Administration	2	2.7	2.3	2.2	2	1.7	1.6
Real Estate & Business	8.4	6.1	6.3	6.1	6.8	7	6.6
Other services	4.4	6.1	6.9	7.1	7.3	8	8.3
Tourism	1.6	5.8	6.9	7.1	5.7	8.4	8.9*
Non-tourism	36.8	31.3	30.7	30.6	30.6	28.8	27.4*

Source: NIS 2006, Statistical Yearbook 2005, and * CDRI estimates

The hotels and restaurants sub-sector, which directly benefited from infrastructure development and tourism, expanded by 17.3 percent in 2005, slowing from 23.4 percent growth in 2004, but

¹⁰ Phim Runsinarith and Ung Luyana (2005), Enhancing Export Competitiveness by Export Cost Reduction: A Case Study of Cambodia, Central Institute of Economics and Management (CIEM) Project Report.

higher than the average of 13.4 percent over 2000–04. According to the Ministry of Tourism, the number of visitor arrivals surged by 34.7 percent in 2005. The value added by hotels, which was positively affected by this increase, grew by about 30 percent over the same period. The value added of restaurants, however, grew only marginally, indicating that restaurants have not gained the full benefits from tourism growth.

Transport and telecommunications growth increased from 7.5 percent in 2004 to 13.1 percent in 2005, thanks to an expansion in transport and post and communications services. Transport, which facilitates trade by fostering integration of domestic markets and promoting regional links, grew by 10.9 percent in 2005. Post and communications expanded by 21.9 percent. These sub-sectors, however, remained largely underdeveloped, while their fees were more costly than in neighbouring countries. More effort is needed to create convenient, comprehensive, safe and cost-effective transport and telecommunication networks that can help facilitate trade and rural development. When producers, especially Cambodian farmers in remote areas, have better access to markets, the costs of trade will become lower, thereby reducing the costs of farm inputs and increasing farm gate prices.

The finance sub-sector continued to grow robustly, expanding by 19.3 percent, compared to an average of 12.0 percent over 2000–04. This may be attributable to a rapid increase in time and savings deposits as well as foreign currency deposits, resulting from improved credibility of the banking system. Despite this rapid growth, many people, especially those in rural areas, remain unable to access affordable loans for either investment or consumption. It is therefore important to find ways and means by which rural credit can be made available at much lower interest rates than prevail now to alleviate poverty through supporting agricultural production and creating or expanding businesses. A recent CDRI action research study, which initiated a new approach to analysing this issue, showed that farmers can access low-interest credit from the Rural Development Bank by forming farmers' associations.¹¹

Public administration value added rose by 5.9 percent in 2005 after declining in both 2004 and 2003. Growth in real estate and business services was 6.9 percent, less than the gain of 12.6 percent in 2004. Real estate continued to enjoy steady growth of 5.0 percent, while business services grew by 23.4 percent. Like construction, this sub-sector was underpinned by the growth in tourism, the shift from agriculture to industry and services, and the stronger domestic demand for housing. During the same period, other services performed very well, growing by 17.7 percent, although slowing from 20.1 percent expansion in 2004. This sub-sector benefited from growth in the casino industry and in private education services.

The Economy Has Been Shifting Away from Agriculture

Cambodia's GDP has expanded rapidly during the past decade. Average annual growth between 1993 and 2005 is estimated at 8.2 percent. Agriculture, which employs the majority of the population, is no longer the only key sector of the economy. Garment manufacturing and tourism¹² have been gradually expanding and have emerged as the main drivers of the country's economy.

¹¹ Nou Keosothea (2006), *Emerging Structures of Agricultural Cooperatives*. Cambodia Development Review, Vol 10, Issue 1, Cambodia Development Resource Institute, Phnom Penh.

¹² The NIS defines a tourist as an individual who travels from her or his place of usual residence and predominant centre of economic interest to another place on a temporary basis. The travel may be undertaken for a variety of purposes, such as: attending conferences and workshops; business; short-term contract work; gambling; holidays; religious or cultural reasons; sporting events; and visiting relatives (NIS 2005).

The share of agriculture in the country's GDP has been gradually declining. Table 4 shows that the ratio of agricultural production to GDP decreased from 45.6 percent in 1993 to 35.9 percent in 2000 and to 31.4 percent in 2005. The growth rate of this sector is erratic and largely dependent on weather conditions. On average, the sector grew by 4.9 percent per year, much less rapidly than the average 8.2 percent rate of the total economy. This means that the agriculture sector has had a diminishing share of overall GDP growth during 1993-2005. On the other hand, the value added of the garment industry and tourism as a percentage of GDP has been growing (Table 4). Their shares, which were only 0.7 percent and 1.6 percent in 1993, expanded to 9.2 percent and 5.8 percent in 2000 and to 27 percent and 8.9 percent in 2005, respectively. These data suggest that the economy has been gradually shifting from agriculture to garment manufacturing and tourism. As discussed later in this chapter, both garment manufacturing and tourism are located primarily in urban areas, particularly in Phnom Penh and Siem Reap, and are not generating sufficient employment to both absorb the new entrants to the labour force and to reduce the unemployment rate.

Table 2.4: Gross Value Added, Growth and Contribution of Key Sectors

Real GVA (billion riels)	1993	2000	2001	2002	2003	2004	2005
Agriculture	3874	5065	5294	5180	5809	5880	6854
Industry							
Garment	63	1297	1666	2021	2360	2947	3250
Non-garment	1038	1781	1764	2004	2151	2306	2639
Services							
Tourism	139	821	1026	1118	959	1514	1933
Non-tourism	3123	4410	4662	4927	5351	5536	5973
	<i>Annual Growth Rate (%)</i>						
Agriculture		-1.2	4.5	-2.2	12.1	1.2	16.6
Industry							
Garment		68.2	28.4	21.4	16.8	24.9	10.3
Non garment		13.1	-0.9	13.6	7.4	7.2	14.4
Services							
Tourism		46.6	25.5	20.1	-14.3	47.0	27.7
Non-tourism		2.2	5.7	5.7	8.6	3.5	7.9
	<i>Share of GDP (%)</i>						
Agriculture	45.6	35.9	34.9	32.2	33.2	30.6	31.4
Industry							
Garment	0.7	9.2	11.0	12.5	13.5	15.3	14.9
Non-garment	12.2	12.6	11.6	12.4	12.3	12.0	12.1
Services							
Tourism	1.6	5.8	6.9	7.1	5.7	8.4	8.9
Non-tourism	36.8	31.3	30.7	30.6	30.6	28.8	27.4

Source: NIS 2006, Statistical Yearbook 2005, and CDRI estimates

GDP and Growth

This section considers the accuracy of the NIS GDP estimate for 2005. NIS has refined and revised GDP data annually to improve the accuracy of the estimates. So far, changes have mainly reflected expanded coverage of economic activities, revised data from government agencies, ministries and other organisations and revised compilation methods. It should be noted that the revisions have resulted in the growth of real GDP increasing by an average of 1.6 percent from 2001 to 2004. This revision has caused considerable controversy among commentators and accordingly prompts the question whether the recent GDP estimate is valid.

Table 2.5: Effect of Revision on Real GDP Growth (%)

	2001	2002	2003	2004	Average
Preliminary 2005 release	7.7	6.2	8.6	10.0	8.2
Previously published	5.5	5.2	7.0	7.7	6.7
Revision	2.2	0.9	1.5	2.3	1.6

Source: NIS 2006, National Accounts of Cambodia 1993–2005

Some are sceptical, believing the growth data to be politically influenced. There are two main reasons for this concern. First, the NIS, which is a government institute, has made a number of revisions regarding estimation techniques, and every time the revised growth rate became higher. Second, non-government institutes, which also produce GDP figures, independently came up with lower figures. Earlier in 2005, a number of institutes anticipated that Cambodia would experience sluggish economic growth. For example, the World Bank predicted that Cambodia's economy was unlikely to grow by more than 2.6 percent; the Asian Development Bank (ADB) put Cambodia's growth at about 2.3 percent; the International Monetary Fund (IMF) predicted 2.5 percent; and the Economic Institute of Cambodia (EIC) initially projected 3.2 percent, which was later revised upward to 5.0 percent. The Cambodia Development Resource Institute (CDRI), which was regarded as being relatively optimistic at the time, predicted 6.0 percent.

The GDP growth figure is difficult and complicated to compute, and careful work is required. Table 8 shows the growth rate of GDP, tax revenue and imports. Theoretically, because of Cambodia's progressive tax system, tax receipts will rise with incomes and because there are many domestically consumed goods that are not produced domestically, it is expected that tax revenues and goods imports will increase at about the same pace as GDP. As can be seen from Table 8, tax revenue and imported goods grew by 21.1 and 22.6 percent, respectively, compared to 19.9 percent (nominal) growth of GDP in 2005. This suggests that the GDP growth estimates may be reasonable. Interestingly, the average and marginal propensity to tax, which are also expected to increase as income increases, were too low compared to GDP growth. It is not clear whether the estimated GDP growth was too high or the tax revenue too low, but some studies indicate that tax collection in Cambodia is weak.¹³ Taking all these factors into account, CDRI concluded that the GDP growth estimates are probably a reasonably accurate reflection of the economy's performance.

¹³ <http://www.eicambodia.org/downloads/index.php?pageid=3> (Economic Institute of Cambodia (EIC))

Table 2.6: Growth, Average and Marginal Propensity

	2000	2001	2002	2003	2004	2005
	<i>At current prices (billion riels)</i>					
Tax Revenue	1,040	1,096	1,227	1,220	1,577	1,911
Import	4,331	4,586	5,208	5,813	6,766	8,293
GDP	14,089	15,579	16,768	18,250	21,141	25,350
	<i>Growth Rate (%)</i>					
Tax Revenue		5.4	11.9	-0.6	29.3	21.1
Import		5.9	13.6	11.6	16.4	22.6
GDP		10.6	7.6	8.8	15.8	19.9
	<i>Average Propensity (%)</i>					
APT	7.4	7.0	7.3	6.7	7.5	7.5
APM	30.7	29.4	31.1	31.8	32.0	32.7
	<i>Marginal Propensity</i>					
MPT		0.04	0.11	-0.00	0.12	0.08
MPM		0.17	0.52	0.41	0.33	0.36

While some people doubt the accuracy of GDP growth, none have questioned the validity of the GDP level, which might be significantly underestimated. In Cambodia, GDP is estimated by both production and expenditure approaches. The latter serves as a cross-check on the former. It is likely, however, that both methods underestimate actual GDP for the following reasons. First, the gross value added for agriculture seems to be correctly estimated, but those of industry and services could be undercounted. The GVA for industry is extrapolated by relying on the last Industrial Establishment Survey (IES) 2000, which may undercount the production of large firms and expanded firms. Also, the GVA for services is possibly underestimated since it cannot fully capture informal activities, which are a significant part of the economy. Accordingly, the GDP, which sums the GVA of these three sectors, may be underestimated. Second, the estimation of gross domestic expenditure (GDE) from the demand side approach is also an issue. In the absence of annual household expenditure surveys, the NIS must extrapolate household final consumption expenditure (HFCE) estimates based on the most recent Cambodian Socio-Economic Survey, 2004. Some high-income households may, however, under-report their expenditures. If so, then, how would that affect GDE estimation? According to some tentative CDRI estimates, if the top three deciles understate their expenditure by 25 percent, the effect is that the HFCE will be under-reported by about 4.0 percent and GDE would be undercounted by about 3.5 percent.¹⁴

To conclude, the estimate of GDP growth seems appropriate, but the GDP level may be undercounted. How much GDP may be undercounted is, however, not clear, but it is likely given the difficult issues regarding data collection and accuracy, particularly concerning the expenditure of high income households.

Growth and Inequality

Cambodia has experienced strong economic growth, averaging 8.2 percent per annum, during the past decade. During this period, however, inequality has also risen considerably, and concerns have been expressed about the relationship between growth and equality. This section briefly explores the inequality associated with economic growth between high and low income households and between urban and rural areas.

¹⁴ Based on work by Keith Carpenter, a research adviser at CDRI (unpublished paper).

The gap between rich and poor is widening. The income gap between the richest and the poorest has steadily increased. The Gini coefficient, which measures the inequality of per capita real consumption, rose from 0.35 in 1994 to 0.40 in 2004 (World Bank 2006). Although economic growth has helped improve the average standard of living and reduce the poverty rate, the benefits are unevenly distributed. According to the World Bank Poverty Assessment 2006, the standard of living of the poorest 20 percent of Cambodians has risen on average by 8 percent over the last decade, while that of the richest 20 percent has risen by 45 percent, almost six times as fast. This is an issue that requires urgent attention, as the widening gap between rich and poor has many undesirable impacts. One impact is environmental destruction as richer groups can afford to over-consume resources, while poorer groups are forced to over-exploit the environment just to survive. Another impact may be potential conflict, as wealthier groups fight to keep what they have, while those suffering a lack of resources struggle to obtain them.

The urban-rural disparity is also growing. The widening urban-rural income gap can be attributed to the urban bias of growth and the slow growth in rural incomes. Cambodia's economic growth has been concentrated in manufacturing and tourism in urban areas. For example, the garment industry, which is the main currency earner and job creator in the Cambodian economy, is largely located in Phnom Penh, while the hotel industry, which is also a growth engine, is centred in Phnom Penh and Siem Reap. By contrast, the main economic activity in the rural areas, where the vast majority of the population resides, is subsistence rice cultivation. The outcome of the income differential between agricultural and non-agricultural areas is migration. People are forced to move to the cities or border areas in search of work. A recent CDRI survey of vulnerable workers in Phnom Penh revealed that about 90 percent of them came from other provinces to work in the city because they had no or insufficient land for production to support their families. This kind of migration leads to overcrowding and adverse social consequences. Migration is discussed in more detailed in Chapter 7.

It is widely accepted that economic growth is vitally important for poverty reduction. Inequality is, however, increasing despite high economic growth. This increased inequality may provoke dissatisfaction and frustration among the poor, which may culminate in economic disruption and social unrest, undermining the social and political basis of economic activities. Solutions to the rich-poor gap include empowering communities, with an emphasis on women and poor minorities, to control local resources and to make sustainable development decisions. Other solutions include building capacity through education, health care and access to credit and improved transport and communication infrastructure.

2.2.2. Consumption Expenditure and Investment

2.2.2.1. Final Consumption Expenditure

According to recent NIS statistics, the growth in household final consumption expenditure in constant prices moderated to 12.3 percent in 2005, compared to 12.6 percent in 2004. As a percentage of GDP, HFCE declined from 83.3 percent in 2004 to 82.5 percent in 2005. Based on the NIS population projection of 13.81 million for 2005, average annual per capita HFCE is estimated at 1,302,800 riels (USD318), up from 1,071,304 riels (USD270) in 2003 and 1,183,227 riels (USD295) in 2004, showing an improvement in the living standard of the average Cambodian. All major consumption categories registered gains, with housing, water, electricity, gas and fuels and transport continuing to be the beneficiaries of the income rise and accounting for much of the increase.

Table 2.7: Household Final Consumption Expenditure (billion riels)

	2000	2001	2002	2003	2004	2005
Food and Non-Alcoholic Beverages	6335.9	6328.7	6330.3	6352.4	6397.8	6550
Alcoholic Beverages and Tobacco	456	447.4	437.7	433.4	433.6	448.5
Clothing and Footwear	343.8	359.1	379.1	404	437	464.4
Housing, Water, Electricity, Gas and Other Fuels	2319	2511.1	2890.2	3371.3	3998.3	4589.6
Household Furnishings, Equipment and Maintenance	124.6	96.2	119.7	154.5	207.2	245.6
Health	718.4	738.3	766.4	797.7	832.3	866.1
Transport	427.1	464.8	577.4	837.9	1469.1	1961.2
Communications	16	19.8	29.3	47.3	85.2	115.1
Recreation and Culture	100.2	117	161	231.2	403.5	628
Education	237.5	256.2	290.7	335.4	393.8	440
Restaurants and Hotels	527.8	523.8	537.1	548.3	594.9	786.6
Miscellaneous Services	604.6	635.4	675.4	721	771.2	892.5
Household Final Consumption Expenditure	12,210.90	12,497.60	13,194.30	14,234.50	16,023.70	17,987.70
	<i>Percentage Change Over Previous Year</i>					
Food and Non-alcoholic Beverages	5.4	-0.1	0	0.4	0.7	2.4
Alcoholic Beverages and Tobacco	5.4	-1.9	-2.2	-1	0	3.5
Clothing and Footwear	3.2	4.4	5.6	6.6	8.2	6.3
Housing, Water, Electricity, Gas and Other Fuels	11.5	8.3	15.1	16.6	18.6	14.8
Household Furnishings, Equipment and Maintenance	13.8	-22.8	24.5	29.1	34.1	18.5
Health	0.1	2.8	3.8	4.1	4.3	4.1
Transport	0.4	8.8	24.2	45.1	75.3	33.5
Communications	17.6	23.9	47.6	61.6	80.1	35.1
Recreation and Culture	10.3	16.8	37.6	43.6	74.5	55.7
Education	12	7.8	13.5	15.4	17.4	11.7
Restaurants and Hotels	5.7	-0.8	2.5	2.1	8.5	32.2
Miscellaneous Services	-15.4	5.1	6.3	6.8	7	15.7
Household Final Consumption Expenditure	4.9	2.3	5.6	7.9	12.6	12.3

Source: NIS 2006

Food and non-alcoholic beverages, which accounted for 36.4 percent of HFCE, grew by 2.4 percent in 2005, compared to increases of 0.4 percent in 2003 and 0.7 percent in 2004. The average per capita expenditure on these items was 474,399 riels per year, or 1300 riels per day, in 2005, about the same as the figure in 2004.

The expenditure on housing, water, electricity, gas and fuels, the second largest share, expanded by 14.8 percent in 2005, less than the 18.6 percent growth in 2004. On average, each household was estimated to spend about 1.66 million riels (about USD406) per year, or 138,507 riels (USD34) per month, on these items.

Transport was the third largest household expenditure item. With a share of 10.9 percent and an impressive expansion of 33.5 percent, transport continued to make a large contribution to the growth of total HFCE in 2005. On average, each household was estimated to spend 710,221 riels (USD173.5) on transport items. The CSES 2004 showed that the number of means of transportation, including cars, bikes and motorcycles, increased annually by 6.0 percent over 2000–04 and that vehicle ownership rate rose from 14.4 per 1000 people in 2000 to 29.1 in 2004.

Other expenditures, including household furnishings, communications, recreation and culture and hotels and restaurants, also registered strong growth in 2005. Expenditure on those items had been growing rapidly during the past several years, and their contribution to total HFCE had been expanding accordingly. The increased spending on these items suggests that more people have access to a higher living standard. In general, growth in this category often encourages manufacturers to invest more and ultimately leads to an expansion of GDP. It is possible that the expenditures are under-reported.

2.2.2.2. Investment

Approvals of new business investment continued at a record pace in 2005. According to the Council for the Development of Cambodia (CDC), the value of total investment project approvals in 2005 amounted to USD1162 million in fixed assets, a significant increase from USD340 million in 2004. The potential job creation from these investments was 107,700 jobs. Both domestic investment and foreign direct investment rose dramatically to USD384 million and USD777 million, respectively, in 2005, up from USD140 million and USD200 million in 2004. China remained the top foreign investor with USD448 million, followed by South Korea with USD61 million, Australia with USD51 million, Thailand with USD50 million and Taiwan with USD47 million. The CDC statistics also show that investments mainly went to energy, garments, cement, mining and hotels.

Industry remained the largest investment sector with new projects accounting for USD931 million, about 80 percent of the total. Of this, USD289 million was allocated to energy, followed by garments with USD200 million, cement with USD181 million and mining also with USD181 million. The CDC statistics show that investment in the energy and garment sectors expanded rapidly in 2005, while there were no investments in cement and mining during 2000–04.

Services were the second largest investment sector in 2005. Investment approvals in this sector reached USD221 million, 38 percent more than in 2004. Capital accumulation in hotels, which accounted for more than half of the services sector, rebounded after a sharp decline a year earlier. In terms of fixed assets, approvals for hotels climbed from USD38 million in 2004 to USD107 million in 2005, making this the fifth largest investment sector after energy, garments, cement and mining.

Table 2.8: Investment Approvals by Sector 2000-2005 (million USD)

		2000	2001	2002	2003	2004	2005
Total		270	235	255	318	340	1162
<i>By Country</i>							
	Cambodia	61	62	94	201	140	384
	China	35	8	24	45	89	448
	South Korea	21	3	82	3	8	61
	Australia	3	0	5	1	0	51
	Thailand	26	15	0	12	1	50
	Taiwan	38	67	10	23	12	47
	Others	85	80	41	35	90	120
<i>By Sector</i>							
Agriculture		0	5	12	0	9	20
Industry		155	105	62	133	176	931
	Building Materials	7	0	0	0	0	0
	Cement	0	0	0	0	0	181
	Energy	33	50	5	3	26	289
	Food Processing	6	3	0	41	1	19
	Garments	87	32	44	65	135	200
	Mining	0	0	0	0	0	181
	Paper	1	1	1	1	3	2
	Petroleum	1	0	4	0	1	0
	Pharmaceutical industry	1	0	1	7	0	7
	Plastic	1	2	1	0	1	10
	Shoes	6	7	0	1	1	2
	Tobacco	1	4	0	3	5	8
	Wood Processing	0	1	3	2	1	1
	Others	10	5	3	11	4	31
Services		114	125	181	185	153	211
	Construction	0	8	0	12	0	30
	Education	0	0	0	0	0	0
	Infrastructure	31	22	68	15	40	58
	Telecommunications	0	0	64	10	0	13
	Transportation	0	0	0	0	0	0
	Others	4	15	2	0	0	3
<i>Tourism</i>							
	Hotel	70	69	47	135	38	107
	Tourism Centres	9	11	0	13	75	0
	Others	0	0	0	0	0	0

Source: Council for the Development of Cambodia

Agriculture attracted only USD20 million, the smallest investment commitment among all sectors. Although Cambodia is an agricultural country in which the majority of the population live in rural areas and depend on rice cultivation for subsistence, this sector remains largely underdeveloped. Despite its decreasing share of GDP, this sector still employs the majority of Cambodians,

especially the poor. Investment that increases agricultural productivity would have a significant impact on food security and poverty reduction.

Cambodia's proposed investment spending reached an all-time high in 2005, exceeding USD1 billion in fixed assets. Domestic investment constituted 33 percent and foreign direct investment 67 percent of this amount. Approved investments in the garment sub-sector continued to strengthen, showing increased confidence in the industry, which had contemplated the end of worldwide garment quotas with apprehension. Many large investments in energy, mining, cement and hotels were also approved. It is worth noting, however, that not all approved investments have been implemented in the past.

2.2.3. Balance of Payments and Trade Performance

Cambodia's trade balance, current account balance and capital account balance in 2005 were stable and not a cause of concern for the economy. Trade performance in 2005 was very satisfactory in terms of increasing external trade and a remarkable increase in exports.

2.2.3.1. Balance of Payments

Current Account

Cambodia's current account ended 2005 with a deficit of USD591 m, compared to USD568 m in 2004. This marginal increase was due to a sharp increase in net service surplus as a result of the sharp increase in tourist arrivals that counterbalanced the trade deficit. The deficit in 2005 looks even better when compared to GDP, as it accounted for 10 percent of GDP compared to 12 percent in 2004.

The trade deficit in 2005 was USD1018 m, a 53 percent increase from 2004. This substantial increase seems at first glance to be a worry for the economy because it seems that imports increased much faster than exports. However, it is not a problem if looked at relative to GDP. The trade deficit was 16 percent of GDP in 2005, compared to 14 percent in 2004. This increase reflected stronger demand for imports as a result of high economic growth and a more liberalised trade regime. Total imports in 2005 increased 29 percent, reaching USD3928 m, or 63 percent of GDP. Retained imports accounted for 97 percent of total imports, USD3822 m. The faster growth in imports was mainly driven by strong growth in the demand for food, beverages and tobacco, construction materials, textiles and vehicles. Total exports in 2005 grew by 23 percent to USD2910 m, or 47 percent of GDP, of which domestic exports were USD2773 m and re-exports USD137 m. Domestic exports were dominated by exports of clothing and apparel products, accounting for approximately 77 percent of total exports.

The services balance in 2005 registered a surplus of USD471 m, a 161 percent increase from the previous year. The sharp increase of the service surplus was mainly caused by a significant increase in receipts from travel services, from USD472 m in 2004 to USD840 m in 2005, or 14 percent of GDP. As international tourist arrivals are expected to increase in 2006 and subsequent years, the service surplus is expected to increase further. This would help offset the increasing trade deficit and thus could lower the current account deficit. As a result, the increase of the service surplus would reduce the burden of mobilising resources to finance the current account deficit.

Capital Account

The capital account surplus in 2005 declined by 25 percent from the previous year to USD296 m, or 5 percent of GDP. Almost half of this surplus was from official sector loans with a total value of USD143 m. The Cambodian economy relies heavily on official development assistance. According to the balance of payment statistics of the National Bank of Cambodia (NBC), official transfers, which include grants, food aid, project aid and technical assistance salaries, and official loans in 2005 amounted to USD469.9 m, or 8 percent of GDP. This amount is almost equal to the current account deficit and has become a major source of funds to finance the deficit. With the receipt of foreign aid, the overall balance in 2005 registers a surplus of USD5 m. Without foreign assistance, the overall balance would be a deficit of USD464 m. Without official assistance, Cambodia would need to mobilise alternative financial resources to finance this deficit.

Table 2.9: Balance of Payments: 2001–05

(millions of US dollars)

	2001	2002	2003	2004	2005
Balance of trade	-523	-563	-531	-665	-1018
Exports	1571	1750	2046	2375	2910
Of which: Domestic exports	1462	1639	1929	2240	2773
Re-exports	109	111	117	134	137
Imports	-2094	-2577	-2577	-3040	-3928
Of which: Retained imports	-1934	-2168	-2426	-2880	-3822
Net Services	177	230	134	180	471
Receipts from travel services	380	453	389	472	840
Private transfers, net	137	149	163	142	209
Balance of Current Account	-344	-353	-417	-568	-591
(excluding official transfers)					
Financial Account	149	248	167	377	296
Official sector loans (excluding IMF)	78	124	149	139	143
Non-official sector investment	71	124	19	238	152
Of which: Foreign direct investment	142	139	77	126	375
Net errors and omissions	-42	-41	-26	50	-26
Overall Balance	67	165	31	127	5
	<i>Annual percentage change</i>				
Trade deficit	-3	8	-6	25	53
Exports	12	11	17	16	23
Imports	8	23	0	18	29
Balance of Current Account (deficit)	-17	3	18	36	4
Balance of Capital Account (surplus)	-19	66	-33	125	-21
Foreign Direct Investment	-8	2	5	15	197
Overall Balance	-30	148	-81	317	-97
	<i>Percent of GDP (current prices)</i>				
Trade balance	(14)	(14)	(12)	(14)	(16)
Exports	41	43	47	49	47
Imports	(55)	(63)	(59)	(62)	(63)
Current Account Balance	(9)	(9)	(10)	(12)	(10)
Capital Account Balance	4	6	4	8	5
Overall Balance	3	8	2	6	0.1

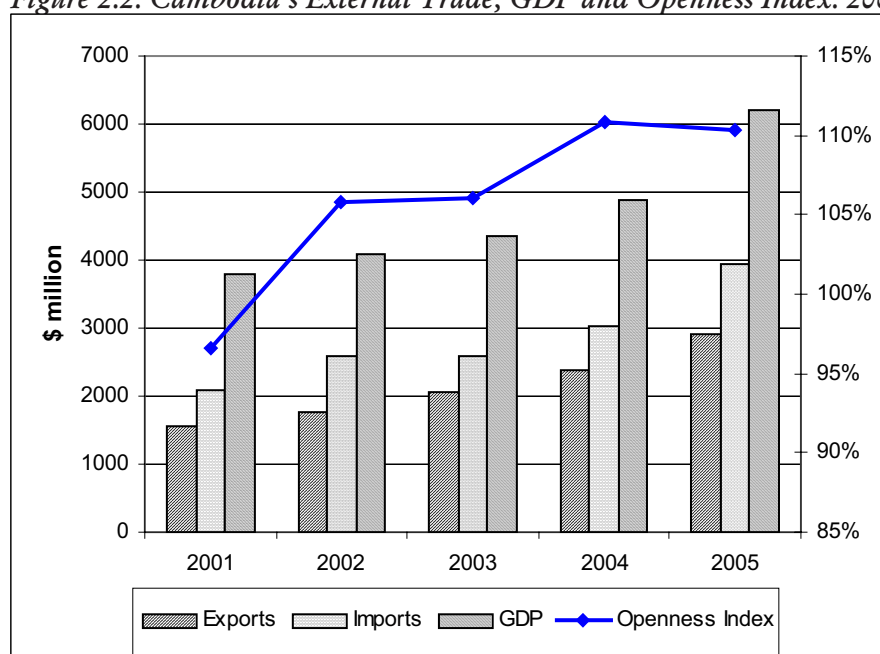
Source: National Bank of Cambodia

2.2.3.2. Trade Performance

External Trade

Cambodia's foreign trade increased steadily over 2001–05 at an annual average rate of 16 percent. The growth in external trade is mainly driven by more liberal economic and trade policies through various regional and global trade arrangements, such as the ASEAN Free Trade Area, the ASEAN-China Free Trade Agreement and the World Trade Organisation. Cambodia's trade dependence index¹⁵ over the past five years grew steadily from 97 percent in 2001 to 110 percent in 2005. The higher ratio indicates that international trade plays a more important role in Cambodia's economy. The total of external trade in 2005 exceeded GDP by USD644 m, while exports of goods and services alone accounted for 71 percent of GDP. Provided that Cambodia negotiates and proceeds with more regional trade agreements, and that many WTO commitments are implemented as required, external trade is expected to increase and play an even more important role in economic growth in the future.

Figure 2.2: Cambodia's External Trade, GDP and Openness Index: 2001-2005



Source: NBC, NIS and CDRI

Exports

Cambodia's export performance in 2005 was strong, increasing by 23 percent from the previous year, compared to 16 percent growth in 2004. The most important single export was garments, accounting for 76 percent of total exports at USD2197.2 m. According to CDRI's Annual Development Review 2004–05,¹⁶ the end of the Agreement on Textiles and Clothing (ATC) in 2005

¹⁵ The dependence index (or openness index) provides important information on a country's involvement in international trade in relation to GDP. The index can also indicate the level of openness and liberalisation of an economy. The formula for trade dependence index is:

$$O_i = \frac{\sum M + \sum X}{GDP}$$

¹⁶ Hing (2005), "Cambodia's Garment Industry Post 2005", Chapter 3 of Annual Development Review 2004–05. (Phnom Penh: Cambodia Development Resource Institute).

had raised great concern over the future of this industry. Many trade economists predicted that Cambodia's garments export would decline due to its high vulnerability to direct competition from China, India, Vietnam and other countries.¹⁷ The garments export in 2005, however, increased 12 percent due to both internal and external factors. Internally, improvements such as trade facilitation, an improved business climate and reduced costs from government reform programmes enhanced the competitiveness of the garment industry, while the factories themselves improved productivity. The government, together with the Garment Manufacturers' Association, also lobbied the United States to continue providing favourable treatment under the generalised system of preferences. Externally, the United States and the EU imposed safeguard measures against textiles and clothing from China even after the end of ATC.¹⁸ As a result, Cambodia's garments and textiles remained relatively competitive in these two major markets even after the elimination of quotas. Garment exports are expected to grow at a modest pace in the next two years. The future of this industry, however, remains doubtful after 2008, by which time the safeguards on China, in particular, will not be allowed by WTO rules (CDRI, 2005).

In addition to garments, Cambodia exports agricultural products such as rubber, wood, fish and rice. In 2005, rubber exports increased by 245 percent from the previous year to USD36.6 m. Exports of forest and fish products in 2005 were USD10.3 m and USD9.9 m, respectively, a 7 percent and 74 percent decline from the previous year.

Table 2.10: Exports by Commodity: 2001–05

	2001	2002	2003	2004	2005
Exports* (USD million)	1571	1750	2046	2375	2910
Of which** : Clothing	1156.2	1290.6	1580.3	1969.0	2197.2
Other textiles products	46.0	65.2	48.1	57.9	56.0
Rubber	23.5	4.3	2.8	10.6	36.6
Forestry	22.3	16.0	10.2	11.1	10.3
Fish	6.0	29.7	35.1	38.3	9.9
	<i>Annual percentage change</i>				
Exports	12	11	17	16	23
Of which : Clothing	25	12	22	25	12
Other textiles products	25	42	-26	21	-3
Rubber	-21	-82	-34	272	245
Forestry	-31	-28	-36	9	-7
Fish	12	395	18	9	-74
	<i>Percent of total exports</i>				
Clothing	74	74	77	83	76
Other textiles products	3	4	2	2	2
Rubber	1	0.2	0.1	0.4	1
Forestry	1	1	0.5	0.5	0.4
Fish	0.4	2	2	2	0.3

* The value of total exports reported here is cited from the NBC's Balance of Payment Bulletin, which includes the value of unrecorded exports. ** The values of exports of these commodities are recorded and reported by the Customs and Excise Department. Source: Customs and Excise Department

¹⁷ The IMF preliminary estimate in 2004 suggested that Cambodia was among the Asian countries most vulnerable to the removal of the quota system and that Cambodia's GDP growth could decrease by 2 percent in 2005. The government of Cambodia also shared this view and estimated that around 30 percent of Cambodia's exports might be at risk due to competition from China and other countries.

¹⁸ <http://aric.adb.org/>.

Imports

Cambodia's imports grew steadily during 2001–05 at an annual average rate of 16 percent. In 2005, total imports reached USD3928 m, a 29 percent increase from the previous year and an 88 percent increase from 2001. The main categories of taxable import commodities are food, beverages and medicine, construction materials, textiles, vehicles and energy products. Imports of food, beverages and medicine increased by 11 percent to USD208.9 m, responding to increasing consumption as a result of growing population and increasing income. Imports of construction materials rose by 26 percent to USD93.3 m, reflecting increased activity in construction, which grew by 20 percent. Imports of textiles and vehicles increased by 20 percent and 27 percent to USD54.3 m and USD160.9 m, respectively. Energy imports declined from USD194.3 m in 2004 to USD181.1 m in 2005. The actual value of imported energy products is, however, likely to be higher because part of the consumed fuel that is smuggled from Vietnam and Thailand.

Table 2.11: Imports by Commodity: 2001–05

	2001	2002	2003	2004	2005
Imports* (USD million)	2094	2577	2577	3040	3928
Of which**: Food/Beverages/Medicine	186.9	176.9	163.5	187.6	208.9
Construction materials	69.2	74.4	68.0	74.0	93.3
Textile	39.9	44.8	43.7	45.4	54.3
Vehicle	51.8	73.5	77.4	126.6	160.9
Energy	200.3	159.6	197.0	194.3	181.1
	<i>Annual percentage change</i>				
Imports	8	23	0	18	29
Of which: Food/Beverages/Medicine	12	-5	-8	15	11
Construction materials	13	8	-9	9	26
Textile	-19	12	-2	4	20
Vehicle	-13	42	5	64	27
Energy	25	-20	23	-1	-7
	<i>Percent of total imports</i>				
Food/Beverages/Medicine	9	7	6	6	5
Construction materials	3	3	3	2	2
Textile	2	2	2	1	1
Vehicle	2	3	3	4	4
Energy	10	6	8	6	5

* The value of total imports reported here is cited from NBC's Balance of Payment Bulletin, which includes the value of unrecorded imports. ** Taxable imports recorded by Customs and Excise Department

Source: Customs and Excise Department

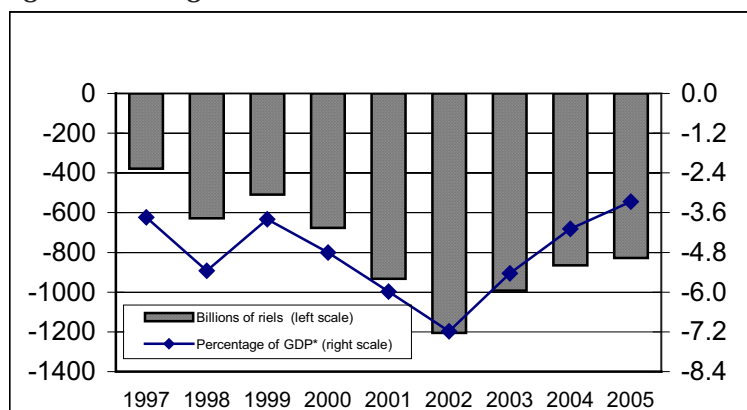
2.4. Fiscal and Monetary Developments

2.4.1. Fiscal Developments

The national budget should be viewed as a macroeconomic tool that can be used to enhance economic stability and development. Through effective budgeting and implementation, a government serves its people by delivering services such as health, education and rural development, which provide basic social needs and safety nets. Strengthening revenue collection and the effectiveness of social spending will help achieve the poverty reduction goals of the government.

Domestic revenue has increased for several years, while government expenditure has also increased. In 2005, domestic revenue was larger than planned due to current revenue, especially tax collection (110 percent), being above the government's projections. Expenditure, however, also exceeded the budget. Capital expenditure was larger (121 percent) than the plan due to provincial and rural infrastructure projects expanding beyond what was planned. Capital expenditure was funded both locally (91 percent of the plan) and by foreign sources (135 percent of the budget forecast). Although expenditure was greater than revenue, and more than planned, foreign funds largely financed the additional deficit.

Figure 2.3: Budget Balance



Source: Data from Ministry of Economy and Finance

*GDP estimated by NIS, releases in July 2005

Cambodia's budget deficit has declined for three consecutive years after an increase in 2002, to KHR 1,204.4 bn. In 2005, the overall deficit, on a cash basis (including expenditure adjustment), was KHR 828.0 bn, 4.2 percent lower than in 2004 (KHR 864.6 bn). Although government expenditure increased, total revenue also rose. The deficit amounted to 3.3 percent of GDP in 2005, compared with 4.1 percent in 2004.

Budget Revenue

For several years, the major sources of domestic revenue have been Value Added Tax (VAT), profit tax, excise duties, customs duties, postal and telecommunications income and quota and export licences. In 2005, these sources continued to dominate total domestic revenue, except for quota and export licences. Domestic revenue was 10 percent of GDP, equivalent to KHR 2,625.3 bn, an increase of 23 percent from 2004. This increase was a result of government reforms that have strengthened revenue collections and the revised law for modern customs operations, which enables the government to meet international commitments and standards.¹⁹

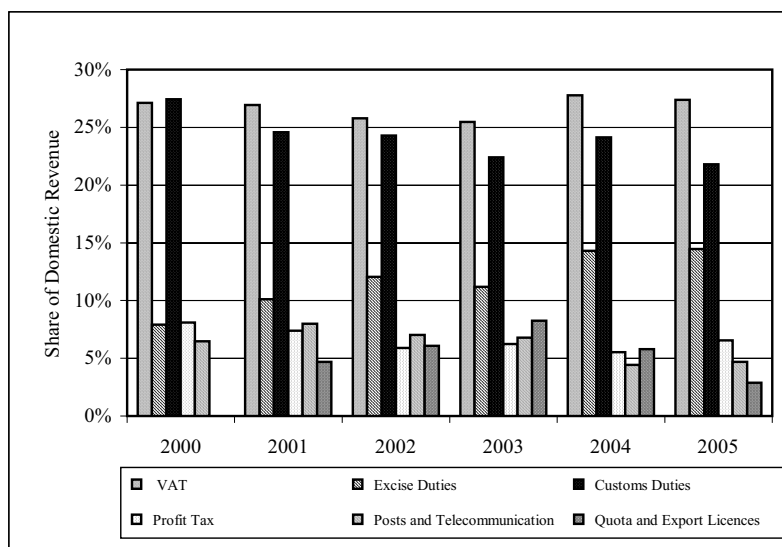
Furthermore, the increased receipts from public enterprises, including receipts from tourism (e.g. APSARA²⁰ Authority), and posts and telecommunications have also expanded revenue. Quota auction receipts increased by 47 percent, while export licence fees decreased by 61 percent from the preceding year. The Cambodian government uses these items as revenue-raising mechanisms; quota auctions sell the right to produce garments for export under quota to the USA; and export

¹⁹ Source: Cambodia Customs and Excise Department, Website: www.customs.gov.kh, 'Work Programme for Customs Reform', 2003-2008

²⁰ Autorité pour la Protection du Site et L'Aménagement de la Région d'Angkor (Authority for the Protection and Management of Angkor and the Region of Siem Reap)

licences allow garments to be exported to the USA and to other destinations. The difference between the quota receipts increase and the export fees decrease is possibly the result of quotas being sold to permit exports to be produced, while the relevant goods are still in production and thus have not yet been exported and subjected to an export licence fees.

Figure 2.4: Major Sources of Domestic Revenue



Source: Ministry of Economy and Finance

Current revenue was 94 percent of total domestic revenue and reached 9.8 percent of GDP in 2005. Compared to 2004, current revenue increased by 17 percent to KHR 2,473.8 bn. This increase was caused by the growth of direct tax revenue, which is a major component of domestic revenue. Moreover, current revenue was 108 percent of the budget plan in 2005, largely due to anti-smuggling efforts.

In 2005, total excise duties collection was KHR 380.0 bn (USD92.7 m), of which collection from imports was KHR 319.6 bn, or 84 percent of total excise revenue. The total of excise duties was 25 percent more than the previous year and 15 percent of total domestic revenue. Moreover, excise duties collection was 1.5 percent of GDP in 2005, compared with 1.4 percent of the GDP in 2004.

Revenue from VAT was KHR 719.1 bn (USD175.4 m) in 2005, of which KHR461.9 bn, or 64 percent of the total VAT, was from imports. VAT revenue was 27 percent of total domestic revenue and 0.3 percent of GDP. In 2005, revenue from VAT was 14 percent more than in the previous year.

Custom collections consist of import and export duties and custom penalties. They totalled KHR 572.6 bn, or USD140.0 m, 2.6 percent of GDP in 2005. Imports accounted for 97 percent of total revenue from customs duties, 12 percent more than in 2004. The government's budget reform plan for 2003-2008, which aims to improve both tax and customs administration, and revenue collections from the private sector, has helped customs collections to increase during this period. Non-tax revenue has increased every year since 2000. In 2005, non-tax revenue represented 21 percent of total domestic revenue and 2.2 percent of GDP, amounting to KHR 563.0 bn (USD 137.0 m). Non-tax revenue rose by 6.2 percent from the preceding year. Major sources of non-tax revenue are tourism receipts, which increased 54 percent, posts and telecommunications, which increased 30 percent, forest exploitation, which increased by 82 percent, civil aviation which

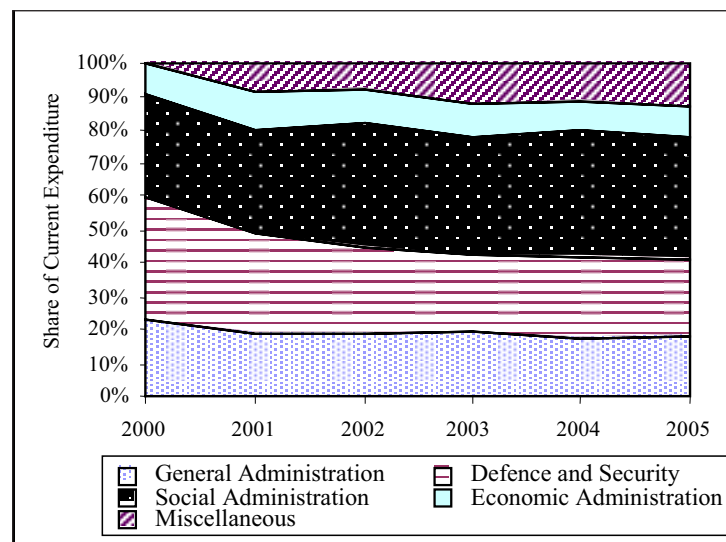
increased by 12 percent, visa fees, which increased 37 percent, and quota and export licences, which fell by 39 percent.

Domestic capital revenue was KHR 151.6 bn, or 5.7 percent of total domestic revenue and 0.6 percent of GDP. It increased from KHR 19.5 bn over 2004. The sources of capital revenue were predominantly privatisation receipts, of which the sale of the Foreign Trade Bank provided KHR 65.0 bn. This revenue, by its nature, is unstable and will vary from year to year.

Budget Expenditures

Total government spending amounted to KHR 3,417.4 bn (USD 833.5 m) in 2005, 15 percent more than in the previous year. As a share of GDP, total expenditure fell from 16 percent in 2003 and 14 percent in 2004 to 13 percent in 2005, due to the expansion of expenditure at the same time of fast growth of GDP. Capital expenditure declined from 6.4 percent in 2003 and 5.8 percent in 2004 to 5.7 percent of GDP (KHR 1,449.9 bn) in 2005.

Figure 2.5: Main Areas of Current Expenditure



Source: Ministry of Economy and Finance

Cambodia's pro-poor fiscal policy aims to strengthen revenue collection and increase public investment with emphasis on priority spending on health, education, agriculture and rural development. Following the expenditure on priority sectors, spending on defence and security is the second largest of the government's expenditure items.

In 2005, government current expenditure was KHR 1,968.0 bn, 13 percent higher than in 2004. The government has expanded spending in major sectors: education and health, agriculture and rural development, general administration and defence and security. This expansion went mainly for increased wages and operating costs (i.e. general administrative cost). Among these major items of current expenditure, social administration accounted for the largest share, about 37 percent. Defence and security had the second largest share at 23 percent, while expenditures on general and economic administration were 18 and 9.1 percent of total current expenditure, respectively. Compared to the preceding year, social spending increased by 7.2 percent to KHR 720.9 bn, but its share of GDP fell from 3.2 percent in 2004 to 3.0 percent in 2005. Expenditure on defence and security was 23 percent of current expenditure and 1.8 percent of GDP in 2005. Compared to 2004, it rose by 6.7 percent to KHR 451.2 bn. Expenditure on general administration rose by 18

percent to KHR 355.6 bn and 1.4 percent of GDP in 2005. Economic transfers (e.g. road repairs) increased 18 percent, after a decline of 11 percent in 2004. The expenditure on wages rose by 11 percent from 2004 to KHR 711.0 bn due to civil service reform measures that increased the wages of civil servants and the military by 15 percent.

Cambodia's civil service is overstaffed, lacking in skills and underproductive. It would make economic sense in terms of efficiency to downsize the civil service or to provide them with an opportunity for capacity building, while paying better wages in order to increase productivity.

Table 2.12: Government Expenditure

	2000	2001	2002	2003	2004	2005	Average 2001–05
	<i>Annual Percentage Change</i>						
Total Budget Expenditure (cash basis)		19.2	17.7	-1.2	1.4	15.1	10.4
Current Expenditure		16.5	11.3	11.6	-0.7	12.7	10.3
General Administration		-4.9	10.9	12.8	-10.2	17.7	5.3
Defence and Security		-5.2	-2.5	1.0	2.9	6.7	0.6
Social Administration		19.1	29.7	5.6	9.2	7.2	14.2
-Ministry of Public Health		28.7	26.7	5.2	11.0	16.9	17.7
-Ministry of Education, Youth and Sport		19.2	38.4	3.7	8.5	7.6	15.5
Economic Administration		34.4	5.8	6.9	-11.3	17.8	10.7
-Ministry of Agriculture, Forestry and Fisheries		28.5	30.1	-1.6	-1.2	22.2	15.6
-Ministry of Rural Development		65.8	47.8	-8.1	-1.6	33.2	27.4
Miscellaneous			-1.9	77.1	-12.1	32.7	23.9
Capital Expenditure		22.9	26.1	-15.7	4.6	18.4	11.3
	<i>Percentage of Gross Domestic Product*</i>						
Total Budget Expenditure (cash basis)	15.0	16.2	17.7	16.0	14.0	13.5	15.4
Current Expenditure	8.6	9.1	9.4	9.6	8.3	7.8	8.8
General Administration	2.0	1.7	1.8	1.8	1.4	1.4	1.7
Defense and Security	3.1	2.7	2.4	2.3	2.0	1.8	2.4
Social Administration	2.7	2.9	3.5	3.4	3.2	2.8	3.1
-Ministry of Public Health	0.7	0.8	1.0	0.9	0.9	0.9	0.9
-Ministry of Education, Youth and Sport	1.2	1.3	1.7	1.6	1.5	1.4	1.5
Economic Administration	0.8	1.0	1.0	0.9	0.7	0.7	0.8
-Ministry of Agriculture, Forestry and Fishery	0.2	0.2	0.2	0.2	0.2	0.2	0.2
-Ministry of Rural Development	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Miscellaneous	0.0	0.8	0.8	1.2	0.9	1.0	0.8
Capital Expenditure	6.4	7.1	8.3	6.4	5.8	5.7	6.6

*GDP share calculated by NIS

Source: Ministry of Economy and Finance

2.2.4.2. *External Debt*

At the end of 2005, total public debt amounted to USD3.4 bn, of which USD3.2 bn was external. About 36 percent of total external debt was owed to multilateral sources, mainly the Asian Development Bank (ADB), International Monetary Fund and World Bank. Nearly two-thirds of total external public debt is bilateral debt owed to the United States and the Russian Federation.²¹ The principal owed to the United States is USD162.0 m, incurred initially during the Lon Nol regime for US commodity aid that was contracted or provided starting in 1972. Outstanding interest payments are estimated at USD155.0 m by the United States. The two parties have agreed to renegotiate the debt under the Paris Club rules. The USD1,520 m owed to the Russian Federation was incurred after the collapse of the Khmer Rouge regime in 1979 and the establishment of the People's Revolutionary Party of Kampuchea (PRPK) government. During the PRPK period, Cambodia was allied with Vietnam, which in turn was associated with the Soviet Union. The Russian debt was incurred in the context of the Council for Mutual Economic Assistance system that linked the Soviet bloc countries. Little domestic debt has been contracted over the past decade, and domestic public debt for general financing purposes amounts to 3.7 percent of GDP, all denominated in local currency.²²

Cambodia has recently received 100 percent relief, worth around USD82.0 m, on its debt to the IMF through the Multilateral Debt Relief Initiative. Once debt rescheduling agreements with the United States and the Russian Federation are concluded, Cambodia's public sector debt will be 47 percent of 2005 GDP. The net present value of public external debt, however, still represents around 230 percent of total revenues.²³

Cambodia lacks the infrastructure necessary for sustained development, but domestic revenue is not sufficient to fund needed government capital expenditures and social and economic investments. As a result, Cambodia requires foreign funds to support its capital activities. Furthermore, funds from foreign countries are not a long-term solution to problems associated with expanded government expenditure, as they typically can be used only to ameliorate disbursement bottlenecks for highly specific expenditures.²⁴ A comprehensive and sustainable solution is needed to the problem of public expenditure that ensures that government resources are used effectively.

During 2005, three loans and grants amounting to USD43.0 m were approved for Cambodia by the ADB, including two exclusive grants assistance projects for rural water supply and sanitation. ADB investment in the Greater Mekong Sub-region countries is aimed at speeding up social and economic development as well as reducing poverty. In 2004, projected loan disbursements by the ADB were USD103.2 m. During the same period, the World Bank provided loans of USD 60.0 m for provincial and rural infrastructure (e.g., road building, irrigation) and for a rural electrification and transmission project.²⁵

Cambodia is heavily dependent on concessional donor finance for its development initiatives. This raises concerns regarding future debt service ratios, as debts incurred need to be repaid from future revenue streams. Concerns over debt servicing capacity are likely to continue in the medium term. Furthermore, disbursement is not simply a matter of making cash available at the

²¹ International Monetary Fund, "Selected Issues and Statistical Appendix", June 2006.

²² The Asian Development Bank, <http://www.adb.org/Documents/Books/ADO/2006/documents/cam.pdf>, 'Asian Development Outlook 2006'

²³ International Monetary Fund, Staff Report, 'Cambodia: 2006 article IV consultation discussions'

²⁴ World Bank, ADB & CDRI, Working Paper, 'Researching the People: Public Expenditure Tracking and Service Delivery Survey in Primary Education', December 2005.

²⁵ The Asian Development Bank (ADB), Assistance for GMS, 'Cambodia: Tonle Sap Initiative'

right time and the right place. There are more complex problems associated with the release and disbursement of cash funds. For example, 30 percent of provincial priority sector funding was released for immediate expenditure. A typical example would be petty cash for school equipment. The remaining funds, over 60 percent, were either disbursed following a satisfactory accounting for expenditure incurred in the first tranche or were spent in the last quarter of each year. The restriction on disbursements causes cash flow problems that need to be addressed. The Priority Action Programme (PAP) has somewhat ameliorated the problem, but is not a long-term solution. In fact, too much time is spent releasing only a small amount of money from the total disbursement and projects are delayed as a result. The projects are eventually completed, but only after delays caused by funding disbursement issues.

2.2.4.3. Money, Interest Rates, Exchange Rates and Inflation

Money

The monetary policy of Cambodia focuses on maintaining low inflation and a stable exchange rate of the national currency. The high degree of dollarisation of the economy limits the scope of monetary policy because the US dollar serves all the functions of money in Cambodia. It is used as a valuation instrument (price of goods and services are often indicated in dollars), a settlement instrument (large transactions are mostly made in US dollar cash and cheques) and a savings instrument by Cambodians. To help formulate and implement a monetary policy of international standard, an IMF programme has supported the National Bank of Cambodia (NBC) with supporting efforts to make the bank's staff a standard setter. The IMF has also supported the provision of an adequate geographical distribution of financial services, as well as providing auditing systems and a framework for the supervision of commercial banks' internal controls.

Cambodia can be characterised as a multiple currency zone, as the riel, Thai baht and US dollar are all in circulation. The US dollar is the most widely used of the three. This is not a result of a policy decision but a consequence of low confidence in the political and economic environment that drives economic agents to prefer US dollars to the local currency. The dollar is used by both residents and non-residents. Many agencies and firms spend in dollars, including salary payments for their employees. Banks prefer foreign currency deposits because of a large demand for loans in US dollars and a limited demand for loans in riels. Thus, Cambodia is a highly but not fully dollarised economy. The government, through the Ministry of Economy and Finance (MEF), remains the core institution that injects riels into circulation (e.g., government officials' salaries). Furthermore, the riel remains the currency of the poor. Maintaining the value of the riel is therefore very important for the living standards of the poor. If the riel depreciates, people have to spend more to maintain their standard of living.

Table 2.13: Monetary Survey

	2000	2001	2002	2003	2004	2005	May 2006
	<i>Billion Riels</i>						
Net Foreign Assets	2589	3077	3737	4027	4797	5475	6761
Net Domestic Assets	-758	-879	-849	-698	-467	-450	-797
Domestic Credit	905	865	942	1209	1608	1973	2079
Net Claim on Government	3	-75	-119	-128	-209	-421	-841
Claim on Government	272	271	310	360	360	327	273
Government Deposit	-269	-346	-429	-488	-569	-748	-1115
Private Sector Credit	902	943	1061	1337	1817	2394	2920
Other	-15	5	3	7	9	17	19
Liquidity	27	20	31	15	30	16	19
	<i>Percentage Change</i>						
Net Foreign Assets	28	19	21	8	19	14	23
Net Domestic Assets	32	16	-3	-18	-33	-4	77
Domestic Credit	3	-4	9	28	33	23	5
Net Claim on Government	-97	-2373	59	7	63	102	100
Claim on Government	-4	0	14	16	0	-9	-16
Government Deposit	49	29	24	14	17	31	49
Private Sector Credit	17	5	13	26	36	32	22
Other	-15	5	3	7	9	17	19
Liquidity	27	20	31	15	30	16	19
	<i>Percent of Total Liquidity</i>						
Net Foreign Assets	141	140	129	121	111	109	113
Net Domestic Assets	-41	-40	-29	-21	-11	-9	-13
Domestic Credit	49	39	33	36	37	39	35
Net Claim on Government	0	-3	-4	-4	-5	-8	-14
Claim on Government	15	12	11	11	8	6	5
Government Deposit	-15	-16	-15	-15	-13	-15	-19
Private Sector Credit	49	43	37	40	42	48	49
Other	-91	-79	-62	-57	-48	-48	-48
Liquidity	100	100	100	100	100	100	100

Source: National Bank of Cambodia

According to the monetary survey of the NBC, as shown in Table 2.13, liquidity is driven by growth in net foreign assets (NFA), which is the result of foreign exchange surpluses generated from Cambodian sources and from inflows of foreign aid. NFA growth (14 percent in 2005) is offset by a reduction in net domestic assets (NDA). This NDA reduction comprises growth in private sector credit (32 percent), which is offset by reductions in net government credit (net claims on government). Such reductions mean that government deposits have been increasing (31 percent) and, hence, money has been taken out of circulation. The balance of the reduction is taken up in an item called “other”, which comprises bank capital, reserves and undistributed profits plus restricted deposits. All the growth amounts of NFA and NDA, the components of which are net government credit, private sector credit and “other”, are translated into asset shares in the Cambodian monetary system.

NFA represent 109 percent of the total liquidity of the Cambodian monetary system. They are offset by net domestic assets, which represent -9.0 percent of the liquidity of the financial system. Thus, it appears that net foreign assets growth is offset by declines in net domestic assets. Net domestic assets comprise private credit and government credit. Private sector credit comprises 48 percent of total liquidity, which is offset by government credit (-8.0 percent) and “other” (-48 percent). Any expansion of private sector credit that adds liquidity is offset by increases in government deposits, which draw liquidity out of the system, and increases in “other”, which has the same effect. In this way, the potential inflationary effects of increases in net foreign assets and private sector credit are offset by increasing government deposits (i.e. cash holdings) and increasing the item “other”. This monetary management is the means by which the NBC controls liquidity and hence the rate of inflation through monetary effects; money supply has been managed by offsetting monetary assets with government deposits. Other inflationary effects can arise from increases in the prices of imports (e.g. gasoline), but these are obviously outside the control of the NBC. The NBC is following a very conservative monetary policy that restricts the growth in liquidity by offsetting the growth in NFA and hence limiting the rate of inflation.

The increase in liquidity translates into various components, which include riel cash and demand deposits and foreign currency deposits. In 2005, riels (both cash and demand deposits) increased by 15 percent to KHR 1,435.5 bn, or 28 percent of total liquidity. Local currency in circulation increased by 15 percent to KHR 1,282.1 bn, or 25 percent of total liquidity, and riel deposits rose by 13 percent to KHR 153.4 bn, or 3.0 percent of total liquidity. Foreign currency deposits continued to dominate total liquidity, increasing to KHR 3,589.4 bn (USD875.4 m), 71 percent of total liquidity and a rise of 17 percent compared to 2004. The increase of net foreign assets leading to a liquidity increase indicates a potential for banks to make more loans when bank deposits rise. Through the increase of credit to the private sector, it can be seen that Cambodia’s economy has been in a period of robust growth and that confidence in the banking system has increased. Apart from bank loans, however, enterprises can obtain operating funds from other sources, such as internal funds, family funds or shares from neighbours and money lenders in the informal market. Businesses in Cambodia are, however, mostly small and medium enterprises or family businesses; hence they have low levels of capital and assets. Banks are unlikely to make large loans to these borrowers because of the perceived high risk.

Banks play a very important role in providing liquidity to an economy. The central bank is the primary agent of monetary policy. Its actions influence the flow of money and credit by managing liquidity to control inflation and to influence the economic environment. The growth in liquidity was reflected in an inflation rate of 5.8 percent in 2005, which was more than the government estimate of 5.5 percent in 2005. This higher inflation has negatively affected the poor, who are the first to suffer from any loss in purchasing power.

Interest Rates

Normally, the lower the cost of borrowing money, the more loans will be demanded; conversely, the higher the rate of interest, the more loan funds that will be supplied. Low confidence in the banking system and low interest rates mean deposits in Cambodian banks provide only a small amount of total liquidity. Moreover, for banks the policy of reducing risks leads to increasing loan interest rates. High interest rate spreads are characteristic of less developed economies.²⁶ This is so in Cambodia, as the interest rate spread between bank US dollar loans and deposits was 12–13 percent in 2005. Access to financial services remains poor in rural areas, limiting the opportunities to mobilise rural savings. This means that rural savings are not available to support

²⁶ United Nation Development Programme (UNDP), ‘The macroeconomics of poverty reduction in Cambodia’, 2004

those who wish to borrow for productive purposes. Such financial services that are available tend to be expensive (e.g., interest rates of up to 48 percent per annum for small borrowers) or require complex procedures and documentation to access loans, which is a further disincentive for rural borrowers such effects tend to push potential borrowers into the informal market, which also charge rates as high or higher as banks.

In December 2005, the average interest rate on a 12-month dollar loan was 16.5 percent, down from 16.65 percent in December 2004 and 18.85 percent in December 2000. The interest rate on US dollar loans declined, while the growth of the economy led to an increase in demand for credit, as has been shown by the growth of lending to the private sector (See Table 2.14-Private Sector Credit).

The average 12-month loan rate for riels was 18.6 percent in December 2005, a slight decline from 18.7 percent in December 2004, but still higher than the 16.67 percent rate in December 2000. The average interest rate on a 12-month dollar deposit was 3.8 percent in December 2005, compared to 3.6 percent in December 2004 and 5.97 percent in December 2000. The average interest rate on 12-month riel deposits rose to 6.7 percent in December 2005, compared to 6.6 percent in December 2004 and 7.2 percent in December 2000. Interest rates on both riel and dollar deposits were high in 2000, when the banking system was weak. There are now many banks in Cambodia with many services, but deposit interest rates are low.

Table 2.14: Cambodian Interest Rates 2000–05 (percent per annum, as of December)

	2000	2001	2002	2003	2004	2005
Dollar 12-month lending rate	18.85	16.50	18.18	17.33	16.65	16.50
Riel 12-month lending rate	16.67	21.33	21.00	21.10	18.70	18.60
Dollar 12-month deposit rate	5.97	4.83	4.17	4.00	3.66	3.80
Riel 12-month deposit rate	7.20	8.33	7.20	7.00	6.60	6.70

Source: National Bank of Cambodia

Exchange Rate

The official exchange rate is mainly used for transactions between the NBC and the public sector. The parallel market rate is a freely floating exchange rate, whereas the official rate is determined by the NBC in view of developments in the parallel market. The central bank has been actively taking measures to keep the spread between the official and market exchange rates at less than 1.0 percent. This means that Cambodia has adopted a market-oriented exchange rate policy, the official rate adjusting to movements in the parallel market rate, although with some lag in time.

According to a report by the NBC, in 2005 the average official exchange rate depreciated by 2.2 percent to 4,103 riels/US dollar, compared with 1.08 percent depreciation in 2004.²⁷ Against the baht in 2005, the riel traded at 102.6, a rise of 2.8 percent compared to 2004. The riel depreciated by 1.6 percent against the Vietnam dong (VND), to 25.8 riels per 100 VND in 2005, after appreciating slightly by 0.78 percent in 2004. The trade balance continued in deficit, which required more foreign currencies to pay for imports and so put downward pressure on the exchange rate.

The riel's exchange rate is also influenced by political and psychological factors. Political experience has led traders to prefer to hold foreign currency. Low public confidence, weak financial markets, lack of transmission mechanisms and a high degree of foreign currency (mainly dollars) used in

²⁷ CDRI estimate based on data in National Bank of Cambodia, Economic and Monetary Statistics, Phnom Penh (Monthly)

the economy affect the exchange rate policy, which is confined to promoting price stability rather than supporting export industries. Cambodia's exports were insufficient to earn enough foreign currencies, and this is the basic cause of the decline of the value of the riel.

Inflation

The movement in the consumer price index (CPI) measures inflation in Phnom Penh. According to the NIS, the inflation rate for the riel in Phnom Penh was 5.8 percent in 2005, rising from 3.9 percent in 2004. This was due to a dramatic increase in oil prices, higher food prices and higher rice prices. General food prices rose by 8.6 percent in 2005, compared to 6.3 percent in 2004, while the price of gasoline surged by 24 percent. The large increase in food prices was a direct result of the rise in the prices of fish, meat and poultry. High poultry prices reflected the effects of bird flu which restricted supplies to the market. The scarcity of fish may be due to over-fishing in the past.

Table 2.15: Main Items in Consumer Price Index, Phnom Penh (July–December 2000=100)

	2001	2002	2003	2004	2005	2006*
	<i>Annual Consumer Price Index</i>					
All Items	100.3	103.7	104.8	108.9	115.2	118.4
Food	97.9	99.6	101.1	107.5	116.7	121.2
Transportation & Communication	95.6	95.9	100.4	110.4	123.0	130.0
	<i>Percentage Change</i>					
All Items		3.3	1.2	3.9	5.8	5.6
Food		1.8	1.5	6.3	8.6	9.2
Transportation & Communication		0.3	4.7	10.0	11.4	9.8

* Data are from January to May 2006. Source: NIS

The depreciation of the riel in 2005 also pushed up the domestic cost of imports that are included in the CPI basket (e.g., gasoline, which affects the cost of transportation). Although inflation in 2005 did not seem to deter economic growth, the sharp increases in all items in the CPI basket have been a strong concern to people in both urban and rural areas, affecting their real income and requiring more spending to achieve the same standard of living as in the past.

2.2.5. Employment and the Situation of Vulnerable Workers

2.2.5.1. Employment

The population of Cambodia grew at an average annual rate of 2.1 percent from 1993 to 2005, and reached 13.7 million in 2005. As a result of this population growth, 7.5 million people, or approximately 74.6 percent of the population 10 years of age and older, participated in the labour force in 2004. A study by SIDA estimated that the labour force increased by 221,000, or 3.6 percent per year between 1998 and 2004, and the same absolute rate of increase, i.e. about 200,000 p.a., will continue until 2010.²⁸ About 99.2 percent of labour force participants were employed, having worked at least one hour in the previous week.²⁹ According to IMF data (Table 2.18), the total employment in all sectors reached 7,878,000 in 2005. As a result, about 58 percent of the population were employed in some form. Of the three sectors of the economy, agriculture, forestry

²⁸ Susanna Lundstrom and Per Ronnas, (2006:2), Employment and Growth in Cambodia - An Integrated Economic Analysis. Sida, Country Economic Report. www.sida.se/publications

²⁹ Data 2005 from NIS. Employed people are defined as those whose ages are 10 years or over and who worked for at least for one hour during the reference period (past calendar week).

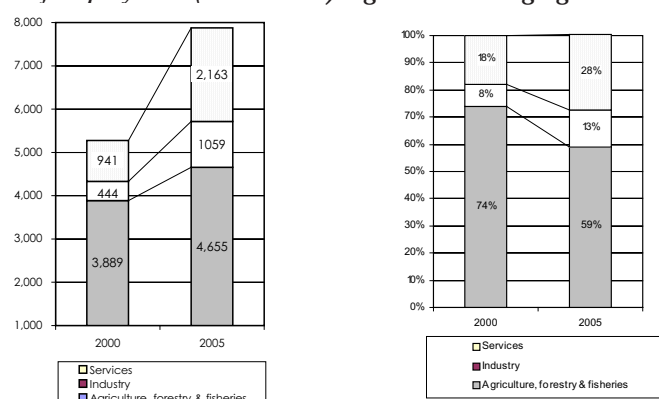
and fisheries accounted for 59 percent of total employment, while industry and services accounted for 13 percent and 27 percent, respectively. According to data from the CDC, investment projects approved would have created 107,700 jobs in 2005 if all projects were fully implemented. Of total employment growth, 92.3 percent was in the industry sector, 2.7 percent in agriculture, forestry and fisheries and 5.0 percent in services, including 3.3 percent in tourism.

In 2005, employment was 5.0 percent higher than 2004, up from 7,496,000. Industry had the largest increase, 12 percent, of which manufacturing and construction absorbed 789,000 workers. Service sector jobs increased by 7.0 percent; health increased by 16 percent and education and trade increased around 6 percent each. In agriculture, forestry and fisheries, the labour force grew by only 3.0 percent; fisheries increased by 11 percent, but agriculture and forestry each increased by only 2 percent.

From 2000 to 2005, the annual growth rate of total employment was around 8 percent. Industry had the most significant growth at an annual rate of 19 percent. The average growth was 45 percent in mining and quarrying, 37 percent in utilities, 27 percent in construction and 17 percent in manufacturing. In the services sector, the annual growth rate of the labour force was around 18 percent, including trade 20.5 percent, transportation and communications 11 percent, health 7.5 percent and education 5.0 percent. In agriculture, forestry and fisheries, the average rate of labour force growth was 4.0 percent during 2000–2005.

While there was a high growth rate of employment in all sectors in 2005, the distribution of the labour force changed. Agriculture, forestry and fisheries declined from 74 percent of total labour force in 2000 to 59 percent in 2005 (see Figure 8). The declining share of employment in agriculture, forestry and fisheries was taken up by an increase in the labour force share in industry and services, especially as the younger generation became increasingly employed in garment factories and in construction. According to data from the US Embassy,³⁰ the garment sector in Cambodia employed around 284,000 people, 30 percent of the total labour force in industry, representing a 9.0 percent increase in 2005, compared to 2004, and an increase of 131 percent compared to 2000. Moreover, with the changing distribution of the labour force, the industry share of the labour force rose from 8 percent in 2000 to 13 percent in 2005. Of this 5 percent increase, 3 percent was in manufacturing and 2 percent in construction. At the same time, the share of the labour force in the services sector increased by 10 percent in 2005, of which 6.0 percent was in trade and 4.0 percent in other services.

Figure 2.6: Distribution of employment (in thousand) **Figure 2.7: Changing distribution of employment**



Sources: IMF and NIS

³⁰ http://phnompenh.usembassy.gov/uploads/images/Ta4hwMRNmySG3i7Kd3Ffxw/Trade_Performance_of_the_Garment_Industry--_Dec_20051.pdf As reported by Kim Chhay Ly-January 2006.

2.2.5.2. *Vulnerable Workers*

CDRI currently conducts regular surveys of vulnerable workers, in Phnom Penh and in Kandal and Kompong Speu provinces. The surveys focus on the most disadvantaged groups in society and cover both self-employed and wage earners. The surveys seek information on the links between the labour market, economic growth and poverty alleviation efforts affecting the poorest in society, and about accessibility of work, earnings and labour migration at the grass roots level. Five of the 10 groups surveyed are composed mostly of women, (small traders, scavengers, waiters, rice field workers and garment workers), while the other five groups are mainly concerned of men (cyclo drivers, porters, motorcycle taxi drivers, unskilled workers and skilled construction workers).

The political clash on 5-6 July 1997, together with the economic crisis in Asia at the same time, was believed to have had an impact on the Cambodian economy in many areas. CDRI publications, including the quarterly *Cambodia Development Review (CDR)* and the *Annual Development Review (ADR)*, covered the impacts of these events on macroeconomic indicators and on other important activities. There was, however, a gap in information concerning the impact on the most vulnerable and the poor, including both workers and petty traders. As a result, CDRI in 1998 initiated a survey in Phnom Penh to monitor the earnings of four low-income groups—cyclo drivers, porters, small vegetable traders and scavengers—on a regular basis each February, May, August and November.

The results of the survey were reported initially in the CDR and ADR, and later in issues of the monthly Flash Report. To develop a better picture of the earnings of the most vulnerable and poor workers, CDRI expanded the survey in 2000 to cover the six other groups. The sample consists of 40 workers in each group³¹ at six large markets in Phnom Penh.

The daily earnings of vulnerable workers have fluctuated since the survey included all groups in 2000. In 2005, their nominal daily earnings rose by 7.7 percent compared to 2004 (see Table A.4), but fell by 1.3 percent in real earnings (see Table A.6). Generally, the average earnings of women workers were lower than men's by 36.4 percent—5,973 riels (excluding garment workers) as opposed to 9,390 riels. In 2005, the survey also indicated that vulnerable workers spent about 3,000 riels for daily living expenses, 20 percent more than in 2004. At the same time, 86 percent of all vulnerable workers surveyed complained about the increase in food prices, and the other 14 percent (mostly motorcycle taxi drivers) complained about increasing gasoline prices. About 12 percent of total respondents in 2005 (1924 workers) stated that they had not attended school (of whom 20 percent were male and 80 percent female), 52 percent had attended primary school (48 percent male, 52 percent female), 34 percent had attended secondary school (58 percent male and 42 percent female), and only 2.0 percent (81 percent male, 19 percent female) had completed high school (see Table A.8).

Over the past five years, the nominal daily earnings of restaurant serving staff increased by 37.7 percent, but this amount does not include food three times a day and accommodation provided by restaurant owners. The nominal daily earnings of both waitresses and waiters increased from 2,560 riels in 2000 to 4,900 riels in 2005, 2.8 percent more than in 2004. Surveys indicate that waitresses earned 15 percent less than waiters; females earned 4,545 riels and males 5,364 riels per day. Both men and women stated that their daily earnings could not support their families because commodity prices had increased each year.

The survey found that the nominal average earnings of motorcycle taxi drivers increased by 21 percent from 9,850 riels in 2004 to 11,950 riels in 2005. The perception of the respondents differed

³¹ Except in the case of garment workers of whom 120 are interviewed.

from this survey result, as 67 percent of respondents reported their earnings declined, while only 18 percent reported increases and 15 percent stayed the same. In 2004 and 2005, motorcycle taxi drivers spent around 141,000 riels a month, mostly for food during the time they were working in Phnom Penh, and they used about 2.5 litres of gasoline each day. Normally, they worked 10–12 hours per day.

Data from the Customs and Excise Department show that the total value of garments exported increased to USD2253.3 million in 2005, up 11.2 percent from USD2027 million in 2004. According to the CDRI surveys in 2005, the nominal daily earnings of garment workers, however, fell by 3.5 percent to USD2.30 (9,600 riels), down from USD2.50 in 2004. The reason for this decline was less overtime, while the number of workers increased, including temporary workers. Normally, garment workers spent around USD27 per month on food and other living expenses in 2005, an 11 percent increase compared with 2004. Seventy percent of garment workers, however, reported that they saved USD10–15 per month to support their families at home. Ninety percent of garment workers were migrants from rural areas with a low education level; 52 percent of respondents had attended primary school and 45 percent had attended secondary school (Table A.8). Some 78 percent of garment workers reported that they or their families have agricultural land under one hectare, 14 percent have more than one hectare and 8 percent are landless.

The average nominal daily earnings of small vegetable traders increased by 11.7 percent to 8,308 riels in 2005, up from 7441 riels in 2004. These were their highest earnings since the survey started in 1998. Ninety-four percent of small vegetable traders were the main income earners in their family, while the earnings of the other 6 percent helped provide family support. Generally, small vegetable traders used capital of USD10–15 for running their businesses every day. Twenty-five percent of small traders, however, stated that they used loans from money lenders, and they complained about high interest rates of 10–20 percent per month (i.e. about 120–240 percent per year). The survey showed that 42 percent of respondents are from Phnom Penh, 26 percent from Kandal province, 17 percent from Takeo province and 15 percent from other provinces.

After falling in 2003 and 2004, the daily earnings of cyclo drivers improved by 11 percent to 9,000 riels in 2005. The increase was due to some cyclo drivers spending more time (10–12 hours) driving, while others had permanent clients and benefited from an increasing number of tourists. According to data from the Ministry of Tourism, in 2005 the number of tourists increased by 34 percent compared to 2004. Generally, cyclo drivers are temporary workers who spend about seven months per year working in Phnom Penh. It is not clear from the survey data which months the workers spend in Phnom Penh, but it is believed they come to Phnom Penh after the end of the harvest in the dry season. Seventy-seven percent of cyclo drivers reported that their families have agricultural land of under one hectare for rice production. Normally, cyclo drivers spent 107,000 riels monthly in 2005, a 14 percent increase compared to 2004.

The average nominal daily earnings of porters were around 7,400 riels in both 2004 and 2005, but compared to earlier surveys, their earnings improved. In 2005, 70 percent of responding porters were under 25 year old. Most of them had left school; 55 percent had attended primary school, 30 percent lower secondary, only 4 percent high school and 11 percent had not attended school. All porters were migrants from rural areas, 58 percent from Prey Veng province, 27 percent from Svay Rieng province and the rest from other provinces near Phnom Penh. Porters worked 20–25 days per month in 2005, around 10 hours per day. The total spending of porters was about 125,000 riels per month, including 3,400 riels for food per day, an 18 percent increase compared to 2004. Most porters said that their earnings were just sufficient for them to survive, but not enough to contribute to their families.

The daily earnings of skilled construction workers increased by 0.3 percent to 13,600 riels in 2005. Their earnings have increased only gradually since 2001. The increase is mainly attributable to a rise in construction activities, according to skilled construction workers. According to data from the Department of Cadastre and Geography of Phnom Penh, the value of construction increased by 36.2 percent in 2005 to USD358.8 million, up from USD263.4 million in 2004, while the volume of construction projects increased by 35 percent to 2,225,057 square metres. The survey found that nominal earnings of 50 percent of skilled workers interviewed increased in 2005, 12 percent declined and 38 percent stayed the same. Ninety percent reported that the number of workers increased from year to year. In addition, 94 percent of those interviewed said that they came from rural areas. Some of them had followed relatives or neighbours from the same village and others came with friends. Most of the skilled workers said that their situation was better since they decided to migrate to Phnom Penh. Generally, they stayed near the construction site, using awnings or tents for shelter. Most work without contracts as day labourers, and they normally spend around 4,000 riels per day, an 11 percent increase compared to 2004. They work about seven months per year, and 25 days per month.

The survey of unskilled workers revealed that their daily earnings rose by 10.5 percent to 7,552 riels, up from 6,831 riels in 2004, and higher by 14 percent compared to 2002. The reason earnings increased is that some unskilled workers became skilled workers, while construction in Phnom Penh increased, especially in 2005. Forty-nine percent of these respondents rented accommodations and 46 percent were homeless or stayed in pagodas, while the remaining 5 percent stayed at relatives' houses. Most unskilled workers reported that they can not save much from their earnings to support their families, because they spend 100,000–120,000 riels per month for living expenses.

Nominal daily earnings of scavengers in 2005 increased by 17.5 percent to 5,600 riels, up from 4,766 riels in 2004. These were their highest earnings since the surveys started in 1998. Seventy-eight percent of scavengers came to Phnom Penh with their families, some of them renting houses in villages around the dumps for about USD5 per month and others living near rubbish dumps. Generally, they spent a lot of time collecting rubbish each day, some working days and some nights, because they depend on the schedule of the rubbish trucks. There were many children working in the dump. On average, the children, some of whom attended school, earned about 1,500–2,000 riels per day. According to informal interviews with some children, some give their earnings to their parents, while some spend the money at school or buy materials for schooling. Most scavengers complained that their earnings are unstable and can not sustain them because the number of scavengers increases yearly.

According to the survey through May 2006, the nominal daily earnings of vulnerable workers in all 10 groups fell by 1.1 percent compared to 2005 (see Table A.3 & A.4). For five groups (waitresses, rice field workers, porters, cyclo drivers and garment workers), however, earnings increased. Motorcycle taxi drivers', small traders' and skilled construction workers' earnings declined by 13.5 percent, 11 percent and 8 percent, respectively. The reason for the decline was that the number of new workers increased. Some, such as motorcycle taxi drivers, complained that the price of gasoline had increased. According to data published by the NIS, the price of gasoline in Phnom Penh went up to 3880 riels in May 2006, a 13 percent increase compared to the price in 2005. Workers on average spent about 125,700 riels per month for living expenses while working in Phnom Penh. Men spent an average of about 131,500 riels and women 119,800 riels per month. Most workers migrated from rural areas, spending five to six months per year working in Phnom Penh. Some 63 percent of respondents reported that they have land for cultivation of a hectare or less, around 20 percent are landless, and the rest have more than one hectare.

2.3. Conclusions and Projected Outlook for 2006

Cambodia's economy expanded much faster than expected in 2005. Agriculture grew at an unexpectedly high rate and contributed significantly to economic growth. Garment manufacturing and tourism, however, remained the main engines of growth. The economy is shifting from an agricultural basis towards textiles and tourism. The industry and services sectors, however, employed only 13.4 percent and 27.5 percent of the labour force, respectively, in 2005, despite their phenomenal growth and significant shares in the economy.

The sources of growth remain narrow, although the economy is growing rapidly. Cambodia's economy is thus exposed to risks arising from the changes in the global market. To reduce such vulnerability, more domestic investment, particularly in Small and Medium Enterprises (SMEs), is essential. Although economic growth during the past decade has been strong, its link to poverty reduction remains weak. The challenge is how to strengthen upstream and downstream linkages. To make growth more pro-poor, policies to promote faster agricultural development and to generate employment are crucial. Such policies should include diversifying agriculture into labour-intensive high-value crops, improved marketing systems, better storage facilities and easier access to credit for small farmers. The employment generating policies may consist of increased off-farm employment opportunities through promotion of SMEs and improved credit access for small scale entrepreneurs.

The balance of payments in Cambodia is stable and not now a concern for the economy. Cambodia relies on external assistance to finance the current account deficit. Therefore, the government needs to formulate a strategy to mobilise resources to finance the deficit without external assistance. Liquidity has been managed to control inflation. Banks play an important role in facilitating economic growth. Through their actions they influence the flows of money and credit and, therefore, the economic situation. The inflation rate of the riel rose in 2005 due to a dramatic increase in oil prices and higher food prices, including higher rice prices. The depreciation of the riel also drove price increases of imports. Although inflation did not seem to affect economic growth, it was a serious concern to low-income people. If basic goods prices keep rising, it may affect development.

GDP is projected to have grown by about 9 percent in 2006. Growth is coming from all sectors, but is still heavily dependent on industry, led by garment exports, and services, led by tourism. Agriculture is anticipated to grow by about 6 percent, with crops and livestock the leading sub-sectors.³² Industrial growth is projected to moderate to about 10 percent. Textile manufacturing and construction are expected to grow by 12 percent and 8 percent, respectively, while the other sub-sectors are anticipated to expand by the average growth of the past four years. Growth in services is expected to remain at about 9 percent. Major contributions to service growth are projected to come from trade, hotels and restaurants, and transport and telecommunications, which are closely linked to the tourism industry. Cambodia's external trade is expected to increase steadily in the coming years and to play an even more important role in the economy. Imports are expected to increase further in response to increasing demand as a result of high economic and population growth. Exports are also expected to increase, especially textiles and clothing products. Given changes in international policies governing trade in textiles and clothing, ongoing efforts to increase productivity and competitiveness of the garment sector, as well as to diversify exports, are likely to promote further economic growth.

³² Agricultural growth usually follows a pattern in Cambodia that a good harvest year is followed by a poorer one. It is expected that the agricultural sector may grow at about 6 percent in 2006, dropping from 16.6 percent in 2005.

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Statistical Appendix

Table A.1. Government Budget Operations

	2000	2001	2002	2003	2004	2005**
	<i>In Billion Riels</i>					
Total Domestic Revenue	1422.8	1529.4	1743.9	1764.6	2126.7	2625.3
Current Revenue	1393.5	1520.4	1727.6	1733.2	2107.3	2473.8
Tax Revenue	1040.2	1096.4	1211.1	1211.1	1351.1	1911.1
- VAT	115.1	112.8	102.5	109.9	117.3	120.1
- Excise Duties	385.7	420.1	414.4	414.4	490.6	479.1
- Customs Duties	112.7	118.3	120.3	119.6	104.4	110.0
- Profit Tax	390.5	371.1	311.3	352.1	333.3	311.1
Non-Tax Revenue	353.3	423.9	500.5	513.1	529.8	562.7
- Forest Exploitation	41.0	29.3	14.9	6.7	1.8	3.3
- Tourism		14.4	19.5	20.2	28.8	44.4
- Civil Aviation	24.8	40.5	33.5	21.7	26.9	30.1
- Posts and Telecommunications	92.0	122.3	122.6	119.8	94.2	122.9
- Visa Fees		27.9	40.5	41.1	62.2	85.1
- Quota and Export Licences		71.6	106.1	145.8	122.9	75.3
Capital Revenue	29.3	9.1	16.3	31.4	19.5	151.6
Total Budget Expenditure (cash basis)	2111.4	2516.9	2963.2	2928.8	2970.2	3417.4
Current Expenditure	1215.5	1415.6	1574.9	1758.1	1745.7	1967.5
General Administration	282.8	269.0	298.2	336.4	302.2	355.6
Defence and Security	440.2	417.3	406.8	411.0	422.8	451.2
Social Administration	377.4	449.5	583.0	615.9	672.3	720.9
- Ministry of Public health	100.8	129.7	164.4	173.0	192.1	224.6
- Ministry of Education, Youth and Sport	175.6	209.2	289.7	300.5	325.9	350.8
Economic Administration	112.1	150.7	159.5	170.5	151.3	178.1
- Ministry of Agriculture, Forestry and Fisheries	23.7	30.5	39.7	39.0	38.6	47.1
- Ministry of Rural Development	7.5	12.4	18.4	16.9	16.6	22.1
Miscellaneous		129.2	126.7	224.3	197.1	261.6
Capital Expenditure	895.9	1101.3	1388.3	1170.7	1224.5	1449.9
Overall Budget Balance (cash basis)	-677.0	-932.4	-1204.4	-992.0	-864.6	-828.0
Financing	677.0	932.4	1204.4	992.0	864.6	828.0
Foreign Financing	707.5	889.4	1249.4	886.1	925.1	1249.3
Budget Support	113.2	54.3	178.2	139.0	44.5	119.7
Project Aid	594.4	839.4	1079.1	806.3	905.3	1167.2
Amortisation of External Debt		-4.3	-8.0	-59.3	-24.9	-37.6
Domestic Financing	-18.1	10.7	-160.2	100.4	-110.0	-398.1
Net Bank Financing (Monetary Survey)	-113.2	-63.6	-104.7	-5.3	24.1	-169.8
Other MEF Accounts	-1.4	4.0	-7.0	2.1	-6.3	-2.8
Treasury Bills (Form Bidding)				49.9		-34.0
Private Sector	103.4	72.7	-46.0	51.8	-125.8	-165.5
\$Acc—Gap between NBC&MEF		-2.4	-2.5	2.0	-2.2	-26.0
Outstanding Operations	-12.5	32.3	115.3	5.5	49.5	-23.2
	<i>Annual Percentage Change</i>					
Total Domestic Revenue		7.5	14.0	1.2	20.5	23.4
Current Revenue		9.1	13.6	0.3	21.6	17.4
Tax Revenue		5.4	11.9	-0.6	29.3	21.1
- VAT		6.8	9.1	0.0	31.4	21.8
- Excise Duties		37.4	35.9	-6.0	54.0	24.8
- Customs Duties		-3.8	12.8	-6.7	29.9	11.5
- Profit Tax		-2.0	-9.1	7.1	6.8	46.6
Non Tax Revenue		20.0	18.1	2.5	3.2	6.2

	2000	2001	2002	2003	2004	2005**
-Forest Exploitation		-28.5	-49.2	-55.2	-72.8	82.4
-Tourism			35.6	3.8	42.5	53.9
-Civil Aviation		63.4	-17.2	-35.3	24.0	11.8
-Posts and Telecommunications		32.9	0.2	-2.2	-21.4	30.4
-Visa Fees			45.1	1.6	51.3	36.9
-Quota and Export Licences			48.1	37.4	-15.7	-38.7
Capital Revenue		-69.1	79.5	93.0	-38.0	679.1
Total Budget Expenditure (cash basis)		19.2	17.7	-1.2	1.4	15.1
Current expenditure		16.5	11.3	11.6	-0.7	12.7
General Administration		-4.9	10.9	12.8	-10.2	17.7
Defence and Security		-5.2	-2.5	1.0	2.9	6.7
Social Administration		19.1	29.7	5.6	9.2	7.2
-Ministry of Public health		28.7	26.7	5.2	11.0	16.9
-Ministry of Education, youth and sport		19.2	38.4	3.7	8.5	7.6
Economic Administration		34.4	5.8	6.9	-11.3	17.8
-Ministry of Agriculture, Forestry and Fishery		28.5	30.1	-1.6	-1.2	22.2
-Ministry of Rural Development		65.8	47.8	-8.1	-1.6	33.2
Miscellaneous			-1.9	77.1	-12.1	32.7
Capital Expenditure		22.9	26.1	-15.7	4.6	18.4
Overall Budget Balance (cash basis)		37.7	29.2	-17.6	-12.8	-4.2
	<i>Percentage of GDP*(at current prices)</i>					
Total Domestic Revenue	10.1	9.8	10.4	9.7	10.1	10.4
Current Revenue	9.9	9.8	10.3	9.5	10.0	9.8
Tax Revenue	7.4	7.0	7.3	6.7	7.5	7.5
-VAT	2.7	2.6	2.7	2.5	2.8	2.8
-Excise Duties	0.8	1.0	1.3	1.1	1.4	1.5
-Customs Duties	2.8	2.4	2.5	2.2	2.4	2.3
-Profit Tax	0.8	0.7	0.6	0.6	0.6	0.7
Non Tax revenue	2.5	2.7	3.0	2.8	2.5	2.2
-Forest Exploitation	0.3	0.2	0.1	0.0	0.0	0.0
-Tourism		0.1	0.1	0.1	0.1	0.2
-Civil Aviation	0.2	0.3	0.2	0.1	0.1	0.1
-Posts and Telecommunications	0.7	0.8	0.7	0.7	0.4	0.5
-Visa Fees		0.2	0.2	0.2	0.3	0.3
-Quota and Export Licences		0.5	0.6	0.8	0.6	0.3
Capital Revenue	0.2	0.1	0.1	0.2	0.1	0.6
Total Budget Expenditure (cash basis)	15.0	16.2	17.7	16.0	14.0	13.5
Current Expenditure	8.6	9.1	9.4	9.6	8.3	7.8
General Administration	2.0	1.7	1.8	1.8	1.4	1.4
Defence and Security	3.1	2.7	2.4	2.3	2.0	1.8
Social Administration	2.7	2.9	3.5	3.4	3.2	2.8
-Ministry of Public health	0.7	0.8	1.0	0.9	0.9	0.9
-Ministry of Education, Youth and Sport	1.2	1.3	1.7	1.6	1.5	1.4
Economic Administration	0.8	1.0	1.0	0.9	0.7	0.7
-Ministry of Agriculture, Forestry and Fisheries	0.2	0.2	0.2	0.2	0.2	0.2
-Ministry of Rural Development	0.1	0.1	0.1	0.1	0.1	0.1
Miscellaneous	0.0	0.8	0.8	1.2	0.9	1.0
Capital Expenditure	6.4	7.1	8.3	6.4	5.8	5.7
Overall Budget Balance (cash basis)	-4.8	-6.0	-7.2	-5.4	-4.1	-3.3
GDP at current prices (billion riels)	14089	15579	16768	18250	21141	25350

*GDP calculated by NIS; **GDP preliminary estimates. Source: Ministry of Economy and Finance

Table A.2. Monetary Survey

	2000	2001	2002	2003	2004	2005	May 2006
	<i>In billion of riel</i>						
Net Foreign Assets	2589	3077	3737	4027	4797	5475	6761
Foreign Assets	3047	3583	4279	4740	5482	6142	7134
Foreign Liabilities	-458	-507	-542	-714	-685	-667	-373
Net Domestic Assets	-758	-879	-849	-698	-467	-450	-797
Domestic Credit	905	865	942	1209	1608	1973	2079
<i>Net Claim on Government</i>	3	-75	-119	-128	-209	-421	-841
Claim on Government	272	271	310	360	360	327	273
Deposits of Government	-269	-346	-429	-488	-569	-748	-1115
<i>Private Sector Credit</i>	902	943	1061	1337	1817	2394	2920
State Enterprises	4	7	2	0	0	0	0
Private Sector	899	936	1059	1337	1817	2394	2920
Other	-1663	-1744	-1791	-1907	-2075	-2423	-2876
Restricted Deposits	-86	-100	-96	-109	-102	-123	-124
Capital & Reserves	-1791	-1959	-1943	-2089	-2192	-2640	-3040
Others	214	314	248	291	219	341	188
Liquidity	1831	2204	2888	3329	4329	5025	5964
Money	540	610	813	938	1153	1323	1481
Currency Outside Banks	495	578	766	908	1115	1282	1427
Demand Deposits	45	32	47	29	38	41	54
Quasi-Money	1291	1594	2075	2392	3176	3702	4483
Time & Saving Deposits	46	56	74	82	97	113	109
Foreign Currency Deposits	1245	1539	2001	2310	3079	3589	4375
	<i>Percentage Change</i>						
Net Foreign Assets	28	19	21	8	19	14	23
Foreign Assets	22	18	19	11	16	12	16
Foreign Liabilities	7	11	7	32	-4	-3	-44
Net Domestic Assets	32	16	-3	-18	-33	-4	77
Domestic Credit	3	-4	9	28	33	23	5
<i>Net Claim on Government</i>	-97	-2373	59	7	63	102	100
Claim on Government	-4	0	14	16	0	-9	-16
Deposits of Government	49	29	24	14	17	31	49
<i>Private Sector Credit</i>	17	5	13	26	36	32	22
State Enterprises	-64	92	-71	-100			
Private Sector	18	4	13	26	36	32	22
Other	-15	5	3	7	9	17	19
Restricted Deposits	-8	16	-4	14	-7	21	1
Capital & Reserves	-9	9	-1	8	5	20	15
Others	-19	47	-21	17	-25	56	-45
Liquidity	27	20	31	15	30	16	19
Money	1	13	33	15	23	15	12
Currency Outside Banks	1	17	33	19	23	15	11
Demand Deposit	7	-29	48	-38	30	7	32
Quasi-Money	42	23	30	15	33	17	21
Time & Saving Deposits	45	21	34	10	19	16	-4
Foreign Currency Deposits	42	24	30	15	33	17	22

	2000	2001	2002	2003	2004	2005	May 2006
	<i>Share of total liquidity</i>						
Net Foreign Assets	141	140	129	121	111	109	113
Foreign Assets	166	163	148	142	127	122	120
Foreign Liabilities	-25	-23	-19	-21	-16	-13	-6
Net Domestic Assets	-41	-40	-29	-21	-11	-9	-13
Domestic Credit	49	39	33	36	37	39	35
<i>Net Claim on Government</i>	0	-3	-4	-4	-5	-8	-14
Claim on Government	15	12	11	11	8	6	5
Deposits of Government	-15	-16	-15	-15	-13	-15	-19
<i>Private Sector Credit</i>	49	43	37	40	42	48	49
State Enterprises	0	0	0	0	0	0	0
Private Sector	49	42	37	40	42	48	49
Other	-91	-79	-62	-57	-48	-48	-48
Restricted Deposits	-5	-5	-3	-3	-2	-2	-2
Capital Reserves	-98	-89	-67	-63	-51	-53	-51
Others	12	14	9	9	5	7	3
Liquidity	100	100	100	100	100	100	100
Money	29	28	28	28	27	26	25
Currency Outside Banks	27	26	27	27	26	26	24
Demand Deposit	2	1	2	1	1	1	1
Quasi-Money	71	72	72	72	73	74	75
Time & Saving Deposits	3	3	3	2	2	2	2
Foreign Currency Deposits	68	70	69	69	71	71	73

Source: National Bank of Cambodia

Table A3. Cambodia: Employment by Sector, 2000–05 (in thousands)

	2000	2001	2002	2003	2004	2005
Total	5275	6243	6571	6965	7496	7878
Agriculture, Forestry and Fisheries	3889	4384	4426	4471	4520	4655
Agriculture	3688	4068	4080	4091	4103	4197
Forestry	54	55	56	56	57	58
Fisheries	147	261	291	323	360	400
Industry	444	641	741	835	947	1059
Mining and Quarrying	3	4	15	16	17	19
Manufacturing	367	549	601	656	720	789
Utilities	4	4	6	10	16	17
Construction	70	84	120	153	195	234
Services	941	1217	1404	1660	2027	2163
Trade	436	644	756	888	1042	1104
Transportation and Communications	120	167	178	187	196	206
Education	87	88	94	100	106	113
Health and Social Work	30	25	28	33	37	43
Other	268	293	348	452	646	697
<i>Percentage of Total Employment</i>						
	2000	2001	2002	2003	2004	2005
Agriculture, Forestry and Fisheries	73.7	70.2	67.4	64.2	60.3	59.1
Agriculture	69.9	65.2	62.1	58.7	54.7	53.3
Forestry	1	0.9	0.9	0.8	0.8	0.7
Fisheries	2.8	4.2	4.4	4.6	4.8	5.1
Industry	8.4	10.3	11.3	12	12.6	13.4
Mining and Quarrying	0.1	0.1	0.2	0.2	0.2	0.2
Manufacturing	7	8.8	9.1	9.4	9.6	10
Utilities	0.1	0.1	0.1	0.1	0.2	0.2
Construction	1.3	1.3	1.8	2.2	2.6	3
Services	17.8	19.5	21.4	23.8	27	27.5
Trade	8.3	10.3	11.5	12.7	13.9	14
Transportation and Communications	2.3	2.7	2.7	2.7	2.6	2.6
Education	1.6	1.4	1.4	1.4	1.4	1.4
Health and Social Work	0.6	0.4	0.4	0.5	0.5	0.5
Other	5.1	4.7	5.3	6.5	8.6	8.8
Total	100	100	100	100	100	100
<i>Percentage Change on Previous Year</i>						
	2001	2002	2003	2004	2005	Avr 2000-05
Total Employment	18.4	5.3	6	7.6	5.1	8.4
Agriculture, Forestry and Fisheries	12.7	1	1	1.1	3	3.7
Agriculture	10.3	0.3	0.3	0.3	2.3	2.6
Forestry	1.9	1.8	0	1.8	1.8	1.4
Fisheries	77.6	11.5	11	11.5	11.1	22.2
Industry	44.4	15.6	12.7	13.4	11.8	19
Mining and Quarrying	33.3	275	6.7	6.3	11.8	44.7
Manufacturing	49.6	9.5	9.2	9.8	9.6	16.5
Utilities	0	50	66.7	60	6.3	33.6
Construction	20	42.9	27.5	27.5	20	27.3
Services	29.3	15.4	18.2	22.1	6.7	18.1
Trade	47.7	17.4	17.5	17.3	6	20.4
Transportation and Communications	39.2	6.6	5.1	4.8	5.1	11.4
Education	1.1	6.8	6.4	6	6.6	5.4
Health and Social Work	-16.7	12	17.9	12.1	16.2	7.5
Other	9.3	18.8	29.9	42.9	7.9	21.1

Sources: ~~Ministry~~ *Ministry*

Table A.4. Nominal Daily Earnings of Vulnerable Workers (in riels)

	2000	2001	2002	2003	2004	2005	2006*
Waitresses**	2,122	2,560	3,855	4,484	4,766	4,901	5,209
Scavengers	4,228	3,162	3,758	4,073	4,766	5,600	5,550
Rice field workers	4,057	3,958	4,284	4,246	4,420	4,972	6,069
Small traders	6,889	6,388	6,699	6,743	7,441	8,308	7,413
Unskilled workers	9,579	6,557	6,578	6,770	6,831	7,552	7,239
Porters	7,809	6,637	7,181	6,892	7,364	7,494	8,125
Cyclo drivers	9,321	8,272	9,151	8,850	8,136	9,031	9,600
Garment workers	7,866	8,483	9,087	9,888	9,945	9,600	9,960
Motorcycle taxi drivers	8,459	10,600	12,420	10,418	9,850	11,950	10,333
Construction workers	15,220	10,937	12,856	13,538	13,594	13,631	12,613
Total average	7,555	6,755	7,587	7,590	7,711	8,304	8,211

* Up to May 2006; ** Waitresses' earnings do not include meals provided by shop owners. Source: CDRI surveys

Table A.5: Percentage Change of Nominal Earnings from Previous Year

	2001	2002	2003	2004	2005	2006*
Waitresses**	20.6	50.6	16.3	6.3	2.8	6.3
Scavengers	-25.2	18.8	8.4	17.0	17.5	-0.9
Rice field workers	-2.4	8.2	-0.9	4.1	12.5	22.1
Small traders	-7.3	4.9	0.7	10.3	11.7	-10.8
Unskilled workers	-31.5	0.3	2.9	0.9	10.5	-4.1
Porters	-15.0	8.2	-4.0	6.8	1.8	8.4
Cyclo drivers	-11.3	10.6	-3.3	-8.1	11.0	6.3
Garment workers	7.8	7.1	8.8	0.6	-3.5	3.8
Motorcycle taxi drivers	25.3	17.2	-16.1	-5.5	21.3	-13.5
Construction workers	-28.1	17.6	5.3	0.4	0.3	-7.5
Percentage change	-10.6	12.3	0.0	1.6	7.7	-1.1

Source: CDRI survey, * and ** (see table A.3)

Table A.6: Real Daily Earnings of Vulnerable Workers (in riels)

	2000	2001	2002	2003	2004	2005	2006*
Waitresses**	2149	2561	3721	4320	4381	4259	4389
Scavengers	4298	3163	3630	3930	4380	4872	4677
Rice field workers	4314	4167	4585	4406	3917	3772	4082
Small traders	6994	6395	6467	6496	6842	7211	6244
Unskilled workers	9747	6572	6356	6529	6286	6559	6097
Porters	7925	6645	6938	6642	6791	6517	6843
Cyclo drivers	9457	8281	8840	8528	7499	7850	8086
Garment workers	7979	8479	8770	9527	9138	8338	8394
Motorcycle taxi drivers	8562	10607	12001	10039	9066	10404	8705
Construction workers	15436	10938	12415	13030	12489	11873	10629
Total	7,686	6,781	7,372	7,345	7,079	7,166	6,814

* Up to May 2006. ** Waitresses' earnings do not include meals provided by shop owners. Source: CDR survey

Table A.7: Percentage Change of Real Earnings from Previous Year

	2001	2002	2003	2004	2005	2006*
Waitresses**	19	45	16	1	-3	3
Scavengers	-26	15	8	11	11	-4
Rice field workers	-3	10	-4	-11	-4	8
Small traders	-9	1	0	5	5	-13
Unskilled workers	-33	-3	3	-4	4	-7
Porters	-16	4	-4	2	-4	5
Cyclo drivers	-12	7	-4	-12	5	3
Garment workers	6	3	9	-4	-9	1
Motorcycle taxi drivers	24	13	-16	-10	15	-16
Construction workers	-29	14	5	-4	-5	-10
Total	-12	9	0	-4	1	-5

* Up to May 2006. ** Waitresses' earnings do not include meals provided by shop owners.

Source: CDRI survey

Table A.8: Agricultural Land of Vulnerable Workers (survey in 2005)

	no land	≤1 ha	>1 ha	Total	Total sample
Waitresses	3%	89%	8%	100%	161
Scavengers	72%	27%	2%	100%	158
Rice field worker	43%	54%	3%	100%	162
Small vegetable traders	48%	50%	2%	100%	151
Unskilled workers	9%	71%	20%	100%	163
Porters	10%	76%	15%	100%	157
Cyclo drivers	3%	77%	20%	100%	161
Garment workers	8%	78%	14%	100%	477
Motorcycle taxi drivers	21%	69%	11%	100%	156
Skilled construction workers	10%	72%	18%	100%	156
Total	20%	68%	12%	100%	1902

Source: CDRI surveys

Table A.9: Educational Level of Vulnerable Workers (survey in 2005)

	No school	Primary school	Lower secondary school	High school	Total	Total sample
Waitresses	1%	42%	52%	5%	100%	161
Scavengers	41%	52%	5%	2%	100%	161
Rice field worker	36%	54%	10%	-	100%	162
Small vegetable traders	28%	61%	11%	1%	100%	163
Unskilled workers	8%	56%	33%	3%	100%	163
Porters	11%	55%	30%	4%	100%	157
Cyclo drivers	1%	65%	32%	2%	100%	161
Garment workers	3%	52%	44%	1%	100%	477
Motorcycle taxi drivers	-	40%	55%	5%	100%	159
Skilled construction workers	1%	48%	49%	3%	100%	160
Total	12%	52%	34%	2%	100%	957

Source: CDRI surveys

Table A.10: Permanent Residence of Vulnerable Workers (survey in 2005)

	Prey Veng	Svay Rieng	Kandal	Kg Speu	Takeo	Phnom Penh	Kg Cham	Kg. Tom	other	Total	Total sample
Waitresses	16%	-	4%	1%	16%	1%	6%	25%	30%	100%	161
Scavengers	32%	9%	7%	6%	4%	27%	7%	6%	1%	100%	161
Small vegetable traders	4%	7%	26%	2%	17%	41%	1%	-	3%	100%	163
Unskilled workers	29%	66%	2%	1%	1%	-	1%	-	0%	100%	163
Porters	58%	27%	3%	2%	6%	-	1%	3%	1%	100%	157
Cyclo drivers	44%	16%	2%	7%	20%	1%	4%	-	5%	100%	161
Garment workers	18%	20%	10%	3%	7%	2%	16%	12%	12%	100%	477
Motorcycle taxi drivers	16%	26%	13%	4%	15%	14%	9%	-	4%	100%	159
Skilled construction	32%	11%	9%	4%	19%	6%	16%	-	4%	100%	160
Total	26%	20%	9%	3%	11%	9%	8%	6%	8%	100%	1762

Source: CDRI surveys

Foreign Direct Investment and Poverty Reduction in Cambodia

C H A P T E R (3)

By:

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Foreign Direct Investment and Poverty Reduction in Cambodia

C H A P T E R (3)

3.1. Introduction

In a context of rapid globalisation, FDI has been increasingly regarded by developing countries and economic transitional countries as a major source of capital, economic growth and development. These countries have liberalised their FDI regimes and pursued other policies to attract investment. Over the last two decades, there has been an increasing removal of restrictions on foreign investment, and an improvement in national economic policies, domestic regulations and investment climate towards producing conducive environments for trade and investment. There has also been an increasing tendency for investment to be included in global, regional and bilateral trade agreements. Consequently, global FDI has risen dramatically in amount and significance to national economies. For example, global FDI flows between 1980 and 2004 grew at an annual average rate of 14 percent, from USD55.1 billion in 1980 to USD1396 billion in 2000, but fell to USD648.1 billion in 2004. The structure of global FDI has shifted in favour of developing countries. It had been dominated by developed countries, which received 85 percent of total FDI flow in 1980 and 59 percent in 2004, while the share of FDI of developing countries has increased from 15 percent in 1980 to 36 percent in 2004. In terms of sheer value, cumulative global FDI increased from 5 percent of GDP in 1980 to 22 percent in 2004 (UNCTAD, 2005).

There is also increasing recognition that the overall benefits of FDI for developing countries are becoming more important in contributing to economic growth and development. Given appropriate host country policies and a basic level of development, FDI benefits host countries through technology transfer and technology spill-over, employment generation, skills and human capital formation, promoting exports and competitiveness and enhancing enterprise development and the business environment, all of which are key determinants of economic growth (OECD 2002). There is, however, a lack of empirical evidence about the extent to which and how FDI contributes to poverty reduction in host countries, if at all.

Cambodia has had a good track record in attracting FDI since the early 1990s. The country has gradually integrated itself into the regional and global economies by liberalising its trade and investment regime. It has also maintained macroeconomic stability, strengthened economic infrastructure and regulatory frameworks, and improved the business environment, all of which are conducive to the development of the private sector and to foreign investment. As a result, approved FDI during 1995–2005 was USD7.6 billion, thus contributing significantly to capital formation. FDI was also a key determinant of Cambodian economic growth over that decade. For instance, garments and tourism, which received the largest share of FDI during the period with respective total flows of USD938 million and USD2.4 billion, have become major sources of employment and foreign exchange. The rapid growth of garment manufacturing and tourism has also been a primary stimulus to Cambodia's economic growth (World Bank 2006).

There has not been a study of the relationship between FDI and poverty in Cambodia. This chapter explores such linkages by addressing the following key questions: (1) To what extent does

FDI contribute to poverty reduction in Cambodia? (2) What are the transmission mechanisms through which FDI benefits the poor? (3) What can be done to strengthen these linkages?

This chapter uses primarily a literature review and secondary data analysis to address the above questions. The key findings and arguments can be summarised as follows. First, FDI has been a major source of employment in Cambodia over the past decade. The labour-intensive garment and tourism sub-sectors¹ generate both direct and indirect jobs for a growing number of workers, including new entrants from agriculture sector. Second, FDI also plays an important role in economic growth in Cambodia. Garments and tourism, which receive the largest FDI, have been the major engines of growth over the past decade. Third, the poverty impact of FDI has been limited for several reasons: (1) employment generation from FDI has not been large enough to absorb the labour force growth; (2) most employment is concentrated in urban areas and requires levels of skills and education that the poor do not possess; (3) FDI is overwhelmingly in the industry and service sectors, while the majority of population and the poor work in agriculture.

It is therefore important to increase the contribution of FDI to poverty reduction. This can be done through several measures. One is to promote higher economic growth by attracting more FDI through providing sufficient regulatory framework, good governance, effective government institutions, and sufficient social and economic infrastructure. A second is to target FDI to areas and sectors that have greater potential impact on poverty reduction by taking into account Cambodia's comparative advantage compared to other countries in the region. FDI in labour-intensive activities such as garment and tourism need to be further encouraged along with diversifying FDI in other sub-sectors, such as agribusiness and in special economic zones.

This chapter is structured as follows. Section 2 looks at the international literature on FDI, economic growth and poverty reduction with a particular emphasis on channels through which FDI stimulates growth and reduces poverty. This section also develops a framework for analysing the relationship between FDI and poverty reduction in Cambodia. Section 3 provides an overview of the relationship between FDI and poverty reduction through growth channels, while section 4 discusses FDI and poverty reduction through employment channels. Section 5 then discusses the overall relationship between FDI and poverty reduction in Cambodia along with concluding observations.

3.2. Literature Review and Analytical Framework

3.2.1. Literature Review

While there are many empirical studies concerning the relationship between FDI and growth, the evidence with regard to the impact of FDI on poverty reduction in developing countries is limited. Several studies that have attempted to assess the poverty impacts of FDI are optimistic about its role in poverty reduction. Hossein and Weiss (2001) found that FDI in the ASEAN region is poverty-reducing, and that this effect is stronger than elsewhere. On average, 40 percent of the poverty reduction effect of FDI arose from economic growth and the other 60 percent from direct impacts, including labour training and direct employment for the poor. Klein *et al.* (2001) also suggested that FDI is central to achieving poverty reduction goals in developing countries because it is a key component for economic growth, which is the single most important factor for reducing poverty. Basing his views on a literature survey on the role of FDI in poverty alleviation, Tambunan (n.d.) argued that FDI may affect poverty reduction in three ways: (1) by causing

¹ In Cambodia, the terminology used to classify the sectoral component of economy are agriculture, industry and service. The term 'sub-sector' here refers to industry/component in each sector.

labour-intensive economic growth with export growth as the most important engine, (2) through technological innovation and knowledge spill-over and (3) by providing tax revenues that finance government poverty alleviation programmes.

FDI and Economic Growth

Although there is as yet no consensus on the precise relationship between FDI and growth, there is a growing view that FDI is positively correlated with growth. Some argue that one of the key benefits that FDI brings to a host country is the transfer of new technology and technology dissemination and spill-overs. The last refers to a situation in which foreign affiliates import a part of the parent enterprise's technology, and the use of this technology spreads to other firms, including linked economic agents and competitors (UNCTAD, 2005b). Foreign invested enterprises (FIEs) are the most important sources of corporate research and development, and they possess a higher level of technology than is usually available in developing countries. As a result, they have the potential to generate considerable technology spill-overs. In principle, the diffusion of new technology will increase efficiency and productivity, and hence stimulate growth. For instance, Graham (1995), who surveyed the theoretical and empirical literature on the economic consequences of FDI for host countries, concluded that the positive effects of FDI come about largely through the transfer of technology, knowledge and other intangible assets that lead to increased productivity and improvement in the efficiency of resource allocation. Borenzstein et al. (1998), who tested the impact of FDI on economic growth in 69 developing countries during 1970–89, also found that FDI is an important vehicle for the transfer of technology, contributing relatively more to economic growth than domestic investment. The degree of impact, however, depended on the capacity of people in the host country to absorb that technology.

In addition, FDI can contribute to economic growth by stimulating domestic investment. Empirical evidence on the impacts of FDI on domestic enterprises is provided in studies by Jenkins and Thomas (2002), Bosworth and Collins (1999) and Agosin and Mayer (2000). For example, Jenkins and Thomas (2002) argue that FDI can contribute to economic growth by not only providing foreign capital but also "crowding in" additional domestic investment, and so increasing the total growth effect of FDI. By analyzing panel data from 58 developing countries, Bosworth and Collin (1999) found that FDI appears to have highly beneficial effects on domestic investments: one dollar of FDI inflow translates into almost a one dollar increase in domestic investment.

FDI may also affect growth through other channels, such as employment generation and promotion of exports and competitiveness. Sun (1998) argued that FDI significantly promoted economic growth in China by contributing to domestic capital formation, increasing exports and creating new employment. A study by Bende-Nabende (1998) suggested that FDI stimulated economic growth in the ASEAN region during 1970–90 mainly through workforce training and skill upgrading, followed by technology transfer, international trade and learning by doing. Blomstrom and Kokko (1996), who reviewed empirical findings on host country effects of FDI, and Thomsen (1999), who reviewed the role of FDI in the economic development of Indonesia, Malaysia, the Philippines and Thailand, found that FDI plays an important role in export growth in host countries, but the nature of the impact varies between industries and countries. The host country's industry and the policy environment are important determinants of the net benefits. Other studies by Taylor (1998), Blomstrom (1990), Levine and Renelt (1992) and Wacziarg (2001) reached similar conclusions, suggesting that FDI plays a key role in linking trade liberalisation to economic growth.

While there is increasing agreement on the growth impact of FDI, the scope and scale of that impact vary, depending on factors such as host country policies, institutional development, type of FDI, human capacity, degree of openness and the business/investment climate. Mayne (1997) suggested that the growth impact of FDI depends on host country policies and institutions, the quality of investment, the nature of the regulatory framework and the flexibility of the labour market. Borenzstein et al (1998) found that FDI enhances growth only in economies with a sufficiently qualified labour force, while De Mello (1996), considered the level of existing technology of the host country to be an important determinant of FDI impacts, suggesting that the larger the technological gap between the host and the home country, the smaller the impact of FDI on economic growth. Moran (1998), on the other hand, argued that a liberal investment climate would tend to generate stronger spill-overs because it is more likely to attract more dynamic foreign investors.

Economic Growth and Poverty Reduction

There have been two opposing views on the relationship between economic growth and poverty reduction. Dollar and Kraay (2000) investigated the link between the income of the poor and overall income (per capita GDP) for 80 countries over 40 years. They found that as overall income increases, the average income of the poor increases at exactly the same rate. Similar evidence was provided by Ravallion and Chen (1997). By regressing the growth of average income for the poorest 20 percent and the poorest 40 percent of the population against the growth of GDP per capita, Roemer and Gugerty (1997) found that, on average, the poor do benefit from economic growth. An increase in the rate of per capita GDP growth translates into a one-for-one increase in the average income of the poorest 40 percent.

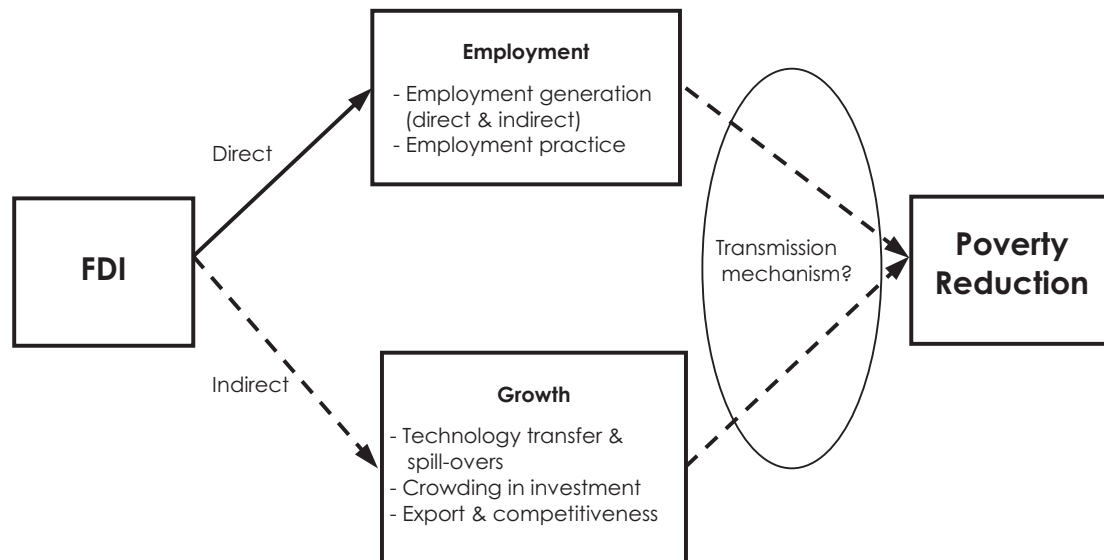
There is, however, another view that disputes the positive findings on the growth-poverty relationship. Timmer (1997) estimated the impact of average per capita income growth on each income quintile for 27 developing countries. He found that economic growth failed to benefit the poor, and the distribution of income worsened during the period of growth. He argued, however, that the apparent failure of growth to reach the poor should not be taken as a general indictment of economic growth, and that visible and pro-active measures that focus on the poor should be put in place to sustain growth-friendly reforms. The IMF (2000) suggested that progress in raising real incomes and alleviating poverty has been disappointingly slow in many developing countries. In Africa, the level of real per capita income is lower than it was 30 years ago and the proportion of very poor (those living on less than \$1 per day) has remained unchanged over the past decade (approximately 45 percent).

It appears that growth does not automatically translate into poverty reduction. There is no clear recipe for translating economic growth into poverty reduction. Different countries may require different approaches to ensure that growth leads to poverty reduction, and the extent of poverty reduction varies, depending on the nature and quality of growth, institutions and domestic policies and the degree of participation in the growth process by the poor, among other factors.

3.2.2. Analytical Framework

The framework used in this chapter to analyse the relationship between FDI and poverty reduction in Cambodia is derived from concepts that frequently appear in the literature on the poverty impacts of FDI. The framework is summarised in Figure 3.1.

Figure 3.1: FDI and Poverty Reduction



Employment Linkage (Direct Channel)

The impact of FDI on poverty reduction can be classified into direct and indirect impacts. The direct impacts operate by generating employment and improving employment practices in the host country. The employment impact of FDI refers not only to employment created within FIEs (direct employment), but also to that created in vertically or horizontally related entities (indirect employment), (UNCTAD, 1994).

FDI may create more jobs through direct employment effects when it is a green-field investment and when local businesses and markets grow as a result of FDI. Greenfield investment refers to new facilities, or the expansion of existing facilities, that create new production capacity and transfers technology and know-how.² In this way, FDI can generate employment in host countries. FDI may increase unemployment, however, when it takes the form of mergers or acquisitions, which usually include restructuring and lay-offs with the objective of improving efficiency.

FDI may raise employment indirectly in backward-linked entities when it purchases raw materials, spare parts and components, and in forward-linked entities when it buys services such as marketing and transportation services from domestic providers. FDI may, however, have no effect or even negative effects when it relies on imported inputs. FDI may also impact employment negatively when it competes with and outperforms domestic enterprises, which may result in the closure of local firms.

² Wikipedia Encyclopaedia (<http://en.wikipedia.org>)

Apart from employment generation, FDI can reduce poverty through improving employment practices. For example, FIEs usually provide better working conditions, skills training and promotion, and thus contribute to poverty reduction. If, however, FDI occurs in low-wage, low-skill industries without, or with only negligible, training opportunities, it may help reduce poverty in the short run, but not in the long run.

Growth Linkage (Indirect Channel)

FDI might have an indirect impact on poverty reduction by promoting economic growth. As discussed in the literature review section, given the appropriate host-country policies and a basic level of development, FDI can stimulate economic growth through technology transfer and spillovers, stimulating domestic investment, developing domestic enterprise, promoting human capital development, and enhancing export competitiveness. As growth is the single-most important factor affecting poverty, FDI is central to achieving the poverty reduction goal. Growth is therefore considered an indirect link between FDI and poverty.

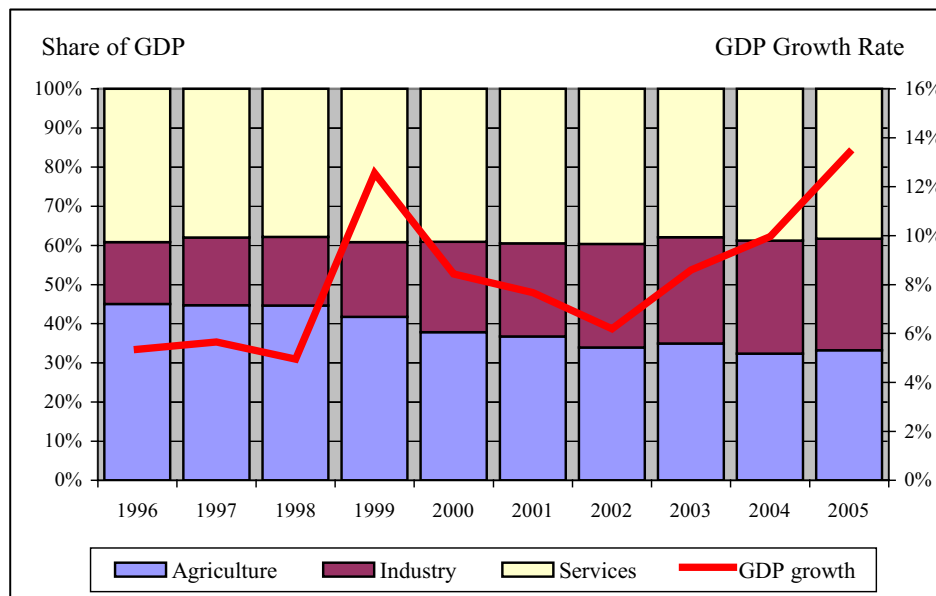
3.3. FDI and Poverty Reduction in Cambodia: Economic Growth

The analysis in this section is based on the framework of the FDI and poverty reduction shown in Figure 1 above, exploring the role of FDI in employment generation and economic growth in Cambodia. It then discusses whether, and to what extent, employment and growth contribute to poverty reduction.

3.3.1. FDI and Economic Growth in Cambodia

Despite the great destruction that occurred during the Khmer Rouge period and the prolonged civil war that followed in the 1980s, Cambodia's economic growth during 1993–2005 has been impressive, averaging 8.2 percent per year. This high growth is attributed to the so-called peace dividend, which has encouraged savings and investment, the stability of the macroeconomic environment and the stronger governmental institutions after the formation of a new government in 1993 (World Bank 2006). As discussed in the previous chapter, this growth, however, has been very narrowly based, mainly characterised by rapid expansion of the export-oriented garment sub-sector and the flourishing tourism sub-sector. As a consequence, the contribution of the industrial sector to GDP is gradually increasing, that of the service sector is stable, while the GDP share of agriculture is steadily declining. The share of agriculture to GDP declined from 43 percent in 1996 to 31 percent in 2005, while the share of industry to GDP increased from 15 percent to 27 percent (Figure 3.2).

Figure 3.2: Composition of GDP by Sectors and GDP Growth Rate in Cambodia, 1996–2005



Source: Data from NIS and CDRI

In order to begin to understand the causal relationship between FDI and growth, we observe the contribution of FDI in two sectors, industry and service, to growth. These sectors are selected because they are the most dynamic poles of growth. In addition, these sectors are the largest recipients of FDI with cumulative approved FDI of USD 3,488 million in industry and USD 3,532 in service during 1995-2005, compared to USD 403 million in agriculture for the same period. Two regression equations were constructed: the relationship between FDI and output of industry and service sector, and the relationship between FDI in service and industry and exports of goods and services.

We use a simple regression approach in this chapter, limiting ourselves to constructing four one-variable regression equations. Some issues need to be highlighted. First, cumulative FDI in a particular year is assumed to represent the value of FDI in that year. Thus, investment depreciation is assumed to be zero. In other words, we assume that investment life is long (equal to or over 10 years). Time lag, the time required before investment is translated into full operation, is another issue. While different industries have different time lags, we assume that on average it takes one year before FDI is in operation. This means that investment depreciation and time lags are not taken into account in this study. More robust conclusions about the relationship between FDI and other variables, such as employment, production or exports, could be achieved by more closely examining these issues.

Regression 1: Cumulative Approved FDI and Output of Industry and Service

FDI contributes to growth by accumulating capital, acquiring technology and knowledge which leads to production increases. This contribution of FDI to GDP can be demonstrated by studying the relationship between FDI and gross value added (GVA). The sum of cumulative FDI in industry and service is taken as the explanatory variable (X), while the total output of both sectors is the dependent variable (Y). Without data on active FDI by sector, we use cumulative approved FDI figures from the Council for Development of Cambodia as a proxy of FDI stock by sector. We assume that FDI approved this year will be implemented next year. For the dependent variable,

we use sum of GVA of industry and service sectors from NIS figures on GDP. Our regression period is 1996-2005. The regression analysis shows:

Table 3.1: Regression on Cumulative FDI (industry & service) vs. Total Output (industry & service)

<i>Independent</i>	<i>Dependent</i>	<i>Regression Coefficient</i>	<i>Number of observations</i>	<i>R²</i>
Total cumulative FDI in industry and service (USD million)	Total GVA of industry and service (USD million)	0.404	10	0.788
<i>t statistics</i>		5.44	-	-
<i>Significant level</i>		> 99%	-	-

Table 3.1 indicates that an extra increase in USD 1 million of total approved FDI in industry and service leads to a USD 0.404 million increase in the sum of GVA of industry and service in the next year at a more than 99 percent significant level. FDI has a positive effect on economic growth.

Regression 2: Cumulative FDI of Industry and Service and Export Value

As shown in the literature, FDI promotes exports and competitiveness, leading to higher economic growth. Foreign affiliates have several advantages in accessing and servicing foreign markets, including wider distribution networks, better links with buyers in importing countries and cost advantages in transportation and marketing (UNCTAD, 2005b). To demonstrate this statement for Cambodia, we regress for the period of 1996-2005, the cumulative approved FDI of both industry and service (explanatory variable) on the export values of goods and services (dependent variable). As stated above, we assume that approved FDI in one year will be implemented in the following year. This regression shows:

Table 3.2: Regression on Cumulative FDI (industry & service) vs. Export Value

<i>Independent</i>	<i>Dependent</i>	<i>Regression Coefficient</i>	<i>Number of observations</i>	<i>R²</i>
Total cumulative FDI in industry and service (USD million)	Total export of goods and services (USD million)	0.587	10	0.828
<i>t statistics</i>		6.21	-	-
<i>Significant level</i>		> 99%	-	-

The regression analysis suggests that an increase in USD 1 million of total approved FDI in industry and service in one year leads to a USD 0.587 million increase in the exports of good and services in the following year. As exports are revenue earning, we argue further that FDI is statistically a major determinant of economic growth by increasing export values.

From the above regression analysis, it appears that FDI has played a very important role in promoting the economic growth of Cambodia in the past decade.

3.3.2. Economic Growth and Poverty Reduction

Based on the poverty line constructed by an estimation of expenses, which is equivalent to the cost of a basket of food that would provide a subsistence-level dietary intake of 2100 calories per person per day, the poverty rate in Cambodia has declined from 45-50 percent in 1994 to

35 percent in 2004. This level of poverty reduction is supported by the improvement of other poverty indicators, such as the ownership of household durables, housing quality, use of modern sources of energy and overall supply of basic services. The fall in poverty has been driven by high economic growth made possible by the end of conflicts and the opening of the country to foreign investment and trade, macroeconomic stability, and improved access to services (World Bank, 2006).

Economic growth in Cambodia, however, does not translate automatically into poverty reduction and some argue that it is not sufficiently pro-poor. The annual growth of per capita GDP 4.1 percent has resulted in poverty reduction of 1 to 1.5 percent over the past decade, which is much lower than the global rate.³ From this she concluded that Cambodia's remarkable growth has not reduced poverty as much as it could have, and thus cannot be considered entirely 'pro-poor' (Hyun, 2006).

Moreover, from an examination of the characteristics of growth and the nature of poverty, it is difficult to say that growth always benefits the poor. Agriculture, which employs around 70 percent of the total labour force, especially the poor, grew at a sluggish pace, at an average of 3.3 percent per year, over the last decade. The economic growth, driven primarily by the garment and tourism in the past decade, remains urban focused with limited linkages to rural areas, while poverty in Cambodia is predominantly rural. The poor and the very poor are concentrated in remote rural areas, with limited access to roads, markets and basic services (World Bank, 2006). The poor are mostly uneducated and unskilled and work in agriculture with insecure land tenure and limited access to irrigation. Based on these descriptions, the poor have not been involved in growth. As a result, economic growth has so far brought few benefits to the poor.

Inequality has also increased significantly, from a Gini coefficient⁴ of 0.35 in 1994 to 0.40 in 2004, making Cambodia a country with one of the most unequal distributions in the region.⁵ In sum, though FDI has been a major source of economic growth in Cambodia over the last decade, its impact on poverty via growth has been very limited due to limited linkage between growth and poverty reduction.

3.4. FDI and Poverty Reduction in Cambodia: Employment

3.4.1. Employment Trends and Structure

Cambodia has experienced a rapid increase in the labour force over the course of a decade—average of annual growth rates of almost 5 percent during 1995–2005. Between 1995 and 2005, the total labour force increased from 4.9 million to 7.9 million (Table 1). This rapid growth was primarily due to an increase in the population in the economically active age groups—all persons of either sex who furnish the supply of labour force for the production of goods and services during a specified time-reference period (ILO & United Nations Statistics Division), as the large cohorts born in the 1980s reached working age. In addition, there was a sharp increase in the participation rate of economically active age groups, from 66.1 percent in 1999 to 74.6 percent in 2004 (Lundstrom and Ronnas, 2006).

³ According to the World Development Report 2005, a 1 percent increase in per capita GDP should on average translate into a 2.4 percent reduction in poverty, giving an average growth elasticity of poverty of 2.4.

⁴ The Gini coefficient is a commonly used measure of inequality, in which a value of zero indicates perfect equality in distribution of income or consumption and a value of one perfect inequality.

⁵ Gini coefficients: Indonesia 0.34, Vietnam 0.35, Laos 0.35, Thailand 0.4, Philippines 0.46 and Malaysia 0.49.

Agriculture's share of the labour force continued to decline over the decade, from 81 percent of total employment in 1995 to 59 percent in 2005. The decline was largely attributed to the fact that agricultural production grew at a sluggish pace of 3.3 percent during 1994–2004 (World Bank, 2006); the sector created little additional employment at a time when the labour force was growing rapidly.

By contrast, labour in the industrial and service sectors grew considerably, from 3 percent and 16 percent of total employment in 1995 to 13 percent and 27 percent in 2005, respectively. Labour in industry grew by 24 percent annually, reaching 1.06 million in 2005, primarily due to the growth in garment manufacturing. The garment sub-sector employed about 245,598 people in 2005⁶, 3 percent of total employment. During 1995–2005, the sector absorbed about 8 percent of the increase of the labour force.

Employment in the service sector grew at an average annual rate of 11 percent during 1995–2005, reaching 2.16 million. In the absence of employment creation in agriculture, the rapid expansion in manufacturing could not absorb all the growth of the labour force. The service sector, which grew steadily, absorbed increased amounts of labour, including some from agriculture. The increase was primarily in the trade sector, which provided 14 percent of total employment in 2005 (petty trade accounted for 51 percent of labour in the service sector). Employment in trade rose by 754,000 between 1995 and 2005, representing a quarter of the total labour increment (Table 3.3).

Table 3.3: Cambodia's Employment by Sector: 1995-2005

	Thousands			Increase
	1995	2000	2005	1995-2005
Total Employment	4,932	5,275	7,878	2,946
Agriculture	4,013	3,889	4,655	642
Agriculture and forestry	3,964	3,688	4,255	291
Fisheries	49	147	400	351
Industry	142	444	1,059	917
Manufacturing	108	367	789	681
Construction	27	70	234	207
Services	776	941	2,163	1,387
Trade	350	436	1,104	754
Hotels and restaurants	11	19	43	32
Transport and communications	64	120	206	142
	Percentage of total employment			% of total increase
Agriculture	81	74	59	22
Agriculture and forestry	80	70	54	10
Fisheries	1	3	5	12
Industry	3	8	13	31
Manufacturing	2	7	10	23
Construction	1	1	3	7
Services	16	18	27	47
Trade	7	8	14	26
Hotels and restaurants	0	0	1	1
Transport and communications	1	2	3	5

Source: International Monetary Fund, from data provided by NIS

⁶ It is estimated that the sub-sector currently employs about 320,000 people.

3.4.2. FDI and Employment

In principle, FDI, especially in the form of green-field investment, generates employment both directly and indirectly. In Cambodia, without data on employment in FIEs, we can observe the relationship between FDI and employment by conducting a regression analysis of cumulative FDI and employment during 1995-2005 both at an aggregate level and a sectoral level. The analysis below argues that FDI has contributed to the creation of employment in Cambodia over the past decade.

Regression 3: Cumulative FDI and Total Employment

At aggregate level, we take cumulative active FDI inflows, i.e. approved FDI that are implemented, as an explanatory variable (X) and total employment as a dependent variable (Y). We assume that FDI approved in one year will be in full operation in the following year. Since total employment in each year is partly generated by FDI stock in the same year, cumulative active FDI is used as a proxy of FDI stock. We also observe from the data during the same period that FDI that ceased operation has not been significant. So, we assume that employment loss from inactive FDI equals zero. From the above construction and assumptions, the hypothesis is that employment depends on FDI, the increase of which results in increases in employment. The regression result is as follow:

Table 3.4: Regression on Cumulative FDI vs. Total Employment

Independent	Dependent	Regression Coefficient	Number of observations	R2
Cumulative FDI (USD million)	Total employment (million)	0.003510	9	0.809
<i>t statistics</i>		5.44	-	-
<i>Significant level</i>		> 99%	-	-

This regression analysis suggests that employment depends on FDI and that an increase of USD 1 million in active FDI in a year leads to an increase of 3,654 in total employment in the following year.

Regression 4: Cumulative FDI and Employment Generation in the Garment Sub-sector

At a sectoral level, the garment sub-sector was chosen for an analysis of the casual relationship between FDI and employment in the sector for two reasons. First, the sector has developed very rapidly in recent times and has been the second largest FDI recipient, with a stock value of USD 938 million over the period of 1995–2005, 12 percent of total FDI stock. Second, the sub-sector has become a major source of employment, especially for women from rural areas (Ministry of Commerce 2004). Since there are no data on active FDI by sector, cumulative approved FDI in garment sub-sector is used as explanatory variable to employment in the sector. As it takes approximately one year for approved FDI to commence operation, we assume the approved FDI in one year will create employment a year later (one year time lag). From this construction and assumption, the hypothesis is the same as at the aggregate level: employment in the garment sub-sector depends on FDI in the sector. We also expect that FDI in this sub-sector will generate more jobs than does total FDI because the garment industry is labour intensive. The regression result is shown as follows:

Table 3.5: Regression on Cumulative FDI in Garment vs. Employment in Garment Sub-sector

Independent	Dependent	Regression Coefficient	Number of observations	R2
Cumulative FDI in garment (USD million)	Total employment in garment (million)	0.000370	10	0.829
<i>t statistics</i>		6.22	-	-
<i>Significant level</i>		> 99%	-	-

This regression analysis suggests that employment in the garment sub-sector is generated by FDI; an increase in 1 USD million in approved FDI in a year results in an increase in employment of 370 in the garment sub-sector in the following year. The employment increase due to an increase in FDI in garment sub-sector, however, is much smaller than the total employment increase due to total FDI (370 jobs vs 3,654 jobs). Two factors explain this difference. First, active FDI is used as an explanatory variable in regression at aggregate level, while sectoral regression uses approved FDI. The amount of approved FDI is normally larger than active FDI because some projects approved by CDC are not implemented. This leads to difference in the employment-generating effect of the two measures of FDI. Second, total employment in the first regression counts both employment generated by FDI and employment generated independently of FDI. Whereas, only employments in the garment sub-sector are counted in the later regression without including indirect employment. The employment effect of garment FDI would have been larger if we had taken into account indirect employment created by this industry, but such data are not available.

3.4.3. Employment and Poverty Reduction

Poverty in Cambodia is overwhelmingly a rural phenomenon, as about 91 percent of the poor live in rural areas. In terms of occupation, households with heads engaged in agriculture experience the highest incidence of poverty (48 percent of the total poor). Since jobs generated by FDI are mostly in industry and service sectors in urban areas, the employment opportunities it creates are not widely accessible to most of the poor. Investment in tourism and hotels, for example, is concentrated in urban Phnom Penh and in Siem Reap town; to obtain a job in this sector requires skills, education and a social network. Because the poor are typically uneducated, unskilled and concentrated in remote rural areas, these employment opportunities tend to benefit the non-poor, especially those with some education (Ballard, 2005). The preliminary findings of CDRI's Pro-Poor Tourism Study in Siem Reap (Tuot and Hing, forthcoming) also observes that while there has been a rapid growth of hotels and restaurants and other tourism services in Siem Reap due to tourism development, the poor do not benefit much from such growth because they lack education, capital and a social network.

There are two opposing views concerning the impacts of the employment generated by investment in garment manufacturing on poverty reduction. The World Bank (2006) is less optimistic about the link between employment in the garment sub-sector and poverty reduction. It indicates that only 13 percent of rural households receive remittances from family members working in cities and that the value of remittances averages less than 10 percent of total household consumption. It even concludes that while the growth of the garment sub-sector has benefited many rural households, these households have not necessarily been poor households and were very rarely the poorest, primarily because the poorest lack both education and the resources to pay informal recruitment fees.⁷

⁷ An unrelated ADB survey reported that only 16 percent of employees paid a bribe or commission to secure employment, it is believed that the real figure is higher.

A more optimistic view is that the increase in employment could contribute to poverty reduction. Tatsufumi Yamagata (2006) argues that employment generated by garment manufacturing in Cambodia has had substantial impacts on poverty reduction for three reasons: (1) entry workers receive wages far above the poverty line; (2) females hold the predominant share of jobs in the industry; and (3) educational and experience barriers to employment and their promotion to certain job categories are not high.

Lundstrom and Ronnas (2006) take a similar position, arguing that the role of the growing garment industry is important for income generation and poverty reduction. Not only did it create employment opportunities for young females,⁸ who, typically, would be among the most vulnerable and weakest in the labour market, but it also provided a source of additional cash income for many rural households, as the young women remitted part of their wages back home. About 90 percent of employees send remittances from USD10 to USD30 to support their families (ADB, 2004). Remittances have been considered as an additional source of income of many rural families necessary not only for daily consumption and expenditure, but also for education, health care and improving family's living standard (Harrison, 2004). Another estimation on significance of employment in garment sub-sector suggests that, on average, one garment worker supports 4 to 9 people with their earnings (Marston 2006 cited in Hyun 2006).

In sum, poverty impacts of FDI via employment generation vary from sector to sector according to the nature of employment generated by FDI and the degree of participation by the poor. FDI in the garment sub-sector, for example, not only draws a considerable number of workers from rural areas, but also improves the livelihoods of many rural families indirectly, while FDI in tourism has had limited direct impact on the poor.

3.5. FDI and Poverty Reduction in Cambodia—Concluding Observations

This section discusses two important issues concerning FDI and poverty reduction in Cambodia. First, to what extent does FDI contribute to poverty reduction? Second, what can be done to increase the contribution of FDI to poverty reduction?

The role of FDI in stimulating economic growth and in generating employment in Cambodia has been increasingly recognized. It has also been a major source of capital flow and capital formulation. Yet, the poverty impact of FDI through both growth and employment channels has been limited. This is largely because the poor have not been able to participate in the growth process. Through employment channels, the poverty impact of FDI is relatively large for those rural households that have their daughters or sons working in garment sub-sector. The rate of participation, however, in this kind of work is rather small. In general, employment generated by FDI has not been enough to absorb the labour force growth and movement of labour from agriculture. Therefore, poverty impact of FDI is still limited and not enough for rapid poverty reduction.

Since reducing and eliminating poverty has become the overarching goal in the socio-economic development plans of the government, the contribution of FDI to poverty reduction needs to be increased. The following policy recommendations should be considered.

⁸ According to a survey funded by the Asian Development Bank, 91 percent of garment employees are women and 92 percent are aged between 18 and 32 years.

First, the government needs to attract more FDI in order to boost economic growth. Since economic growth is a key component of poverty reduction, more FDI could make a greater contribution to poverty reduction. To promote FDI, it is necessary to have at least a sufficient regulatory framework, good governance, effective government institutions, and sufficient social and economic infrastructures. The government also needs to introduce measures to redistribute the benefits of growth to the poor. For example, an effective taxation policy could be a powerful tool for promoting greater equity along with growth.

Second, there should be better targeting of FDI to produce a greater impact on poverty reduction by taking into account of Cambodia's comparative advantage compared to other countries in the region. Investment in labour-intensive areas such as garment manufacturing and agro-processing could involve the poor more than other types of investment. For example, FDI in garments in Cambodia has generated almost half million of direct and indirect jobs for young women, especially women from rural areas, in addition to creating some business opportunities for the poor, such as petty trade around the factories. Work in this sector has minimal education and skill requirements, which allows workers, including the poor, to obtain a job relatively easily.

Since employment created in the garment sub-sector is not sufficient, the government needs to attract more FDI into this area. In doing so, the government needs to address major constraints on business and private sector, ranging from corruption, red tape and ineffective government institutions to poor infrastructure and trade facilitation (Ministry of Commerce 2004). Most observers recognised that the government has made remarkable progress toward making Cambodian garment exports internationally competitive in the post-MFA (Multi-Fibre Agreement) environment. But further efforts and reforms are needed, in particular implementing the Cambodian Garment Industry Strategic Action Plan⁹ in partnership with the Garment Manufacturers Association and donors.

Investment in agribusiness could also have a large poverty impact through employment and backward links for agricultural inputs. Although the government provides many incentives and concessions for this area, the amount of FDI has been very small. FDI in food processing during 1995–2005 was USD165 million, or 2 percent of total FDI, and in tobacco was USD56 million. This may be because Cambodia does not have a competitive advantage in food processing, or because of major institutional and production constraints on processing. In-depth analysis of international markets for agricultural products, potential exports and production and marketing constraints are urgently required in order to identify proper strategies to develop this sub-sector. For example, the need to promote agribusiness in the livestock sub-sector is discussed in Chapter 5 of this volume.

Although tourism growth benefits in Cambodia do not necessarily involve the poor, this sub-sector is commonly regarded as labour-intensive activity and has a high potential to bring more benefits for the poor. According to the WTO (2002), tourism can contribute to poverty reduction through employment generation, the diversification of livelihood opportunities, direct taxation, and the generation of taxable economic growth. Government planners expect that FDI in tourism will continue to increase; the concern is how to bring benefits from tourism to the poor. To enhance the distribution of tourism benefit to the poor, Ballard (2005) and Tuot & Hing (CDRI, forthcoming) recommend as follows: (1) direct tourism development and benefits towards the poor through diversifying tourism attraction destinations towards rural communities and creating new tourism activities that involve the poor in tourist expense (e.g. flea night market that allows the poor to sell their goods); (2) direct the poor towards tourism development participation by providing

⁹ This strategy was proposed in a report by the Ministry of Commerce (2004) to build the export competitiveness of the garment industry in response to the end of the quota system.

education and skills trainings, helping agriculture production to become more competitive and improve its linkage to tourist market, and strengthening access of the poor to tourism markets (e.g., physical infrastructure, access to employment information, access to credit).

Investment in special economic zones (SEZ) or export promotion zones is also important. This type of investment has several advantages, not only providing employment for people outside urban areas but also by stimulating the local economy through the participation of poor people in petty trade or business. Thirteen SEZs have been created or planned along the borders and in coastal areas in Cambodia, but only a few are operating so far. It appears that the SEZ policy and incentives have not been effective enough to attract investors to the zones. The government needs to revisit its SEZ policy in order to develop incentives, regulatory frameworks and other support packages that are more conducive to investors.

In conclusion, for countries like Cambodia that lack domestic savings and investment, FDI is necessary for economic growth and development. Though its poverty impact has been limited, FDI has contributed to promoting growth and the private sector, which are the key components in poverty reduction strategy. FDI in and of itself can not be the only tool for poverty reduction. It can, however, serve as a focal point for mobilizing resources in support of Cambodia's poverty reduction goals.

Statistical Appendix

Table A.1: Cambodia's Investment Approvals by Sector: 1995–2005

(Total fixed assets approved; in millions of US dollars)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	2240	762	744	853	456	270	235	255	318	340	1162
Agriculture	5	92	61	50	10	0	5	12	0	9	20
Industry	301	438	516	652	226	155	105	62	133	176	931
Cement	136	7	205	54	6	0	0	0	0	0	181
Energy	40	1	80	17	0	33	50	5	3	26	289
Food Processing	38	30	6	9	12	6	3	0	41	1	19
Garments	30	46	97	127	75	87	32	44	65	135	200
Petroleum	25	22	32	1	1	1	0	4	0	1	0
Tobacco	4	22	2	7	0	1	4	0	3	5	8
Wood Processing	5	207	47	179	14	0	1	3	2	1	1
Services	1934	232	167	151	220	115	125	181	185	155	211
Tourism and hotels	1510	119	42	112	25	79	80	47	148	113	107
Construction	197	28	1	3	18	0	8	0	12	0	30
Infrastructure	117	0	21	10	0	31	22	68	15	40	58
Telecommunications	6	33	53	0	19	0	0	64	10	0	13
	<i>Percentage of total</i>										
Agriculture	0	12	8	6	2	0	2	5	0	3	2
Industry	13	57	69	76	50	57	45	24	42	52	80
Cement	6	1	28	6	1	0	0	0	0	0	16
Energy	2	0	11	2	0	12	21	2	1	8	25
Food Processing	2	4	1	1	3	2	1	0	13	0	2
Garments	1	6	13	15	16	32	14	17	20	40	17
Petroleum	1	3	4	0	0	0	0	2	0	0	0
Tobacco	0	3	0	1	0	0	2	0	1	1	1
Wood Processing	0	27	6	21	3	0	0	1	1	0	0
Services	86	30	22	18	48	43	53	71	58	46	18
Tourism and hotels	67	16	6	13	5	29	34	18	47	33	9
Construction	9	4	0	0	4	0	3	0	4	0	3
Infrastructure	5	0	3	1	0	11	9	27	5	12	5
Telecommunications	0	4	7	0	4	0	0	25	3	0	1

Source: International Monetary Fund

Table A.2: Cambodia's Employment by Sector: 1995–2005

(In thousands)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total Employment	4,932	4,456	4,430	4,909	5,519	5,275	6,243	6,571	6,965	7,496	7,878
Agriculture	4,013	3,482	3,492	3,771	4,214	3,889	4,384	4,426	4,471	4,520	4,655
Agriculture and forestry	3,964	3,389	3,413	3,698	4,109	3,688	4,123	4,136	4,147	4,160	4,255
Fisheries	49	94	79	73	105	147	261	291	323	360	400
Industry	142	211	210	216	352	444	640	741	835	947	1,059
Mining and quarrying	6	1	8	6	5	3	4	15	16	17	19
Manufacturing	108	169	144	159	259	367	549	601	656	720	789
Utilities	1	3	4	3	5	4	4	6	10	16	17
Construction	27	38	54	48	83	70	84	120	153	195	234
Services	776	762	727	921	952	941	1,219	1,404	1,659	2,028	2,163
Trade	350	394	349	341	402	436	644	756	888	1,042	1,104
Hotels and restaurants	11	7	6	15	28	19	10	24	27	30	43
Transport and communications	64	66	81	118	121	120	167	178	187	196	206
Financial intermediation	5	4	11	1	5	8	6	9	12	16	23
Public administration	170	143	138	222	187	147	149	159	169	180	185
Education	86	61	56	81	88	87	88	94	100	106	113
Percentage of total											
Agriculture	81	78	79	77	76	74	70	67	64	60	59
Agriculture and forestry	80	76	77	75	74	70	66	63	60	55	54
Fisheries	1	2	2	1	2	3	4	4	5	5	5
Industry	3	5	5	4	6	8	10	11	12	13	13
Mining and quarrying	0	0	0	0	0	0	0	0	0	0	0
Manufacturing	2	4	3	3	5	7	9	9	9	10	10
Utilities	0	0	0	0	0	0	0	0	0	0	0
Construction	1	1	1	1	2	1	1	2	2	3	3
Services	16	17	16	19	17	18	20	21	24	27	27
Trade	7	9	8	7	7	8	10	12	13	14	14
Hotels and restaurants	0	0	0	0	1	0	0	0	0	0	1
Transport and communications	1	1	2	2	2	2	3	3	3	3	3
Financial intermediation	0	0	0	0	0	0	0	0	0	0	0
Public administration	3	3	3	5	3	3	2	2	2	2	2
Education	2	1	1	2	2	2	1	1	1	1	1

Source: International Monetary Fund

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Windfall Revenue from Oil and Gas in Cambodia: A Development Blessing or a Curse?

C H A P T E R (4)

By:

Sok Sina

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C H A P T E R (4)

4.1. Introduction

The recent discoveries of natural gas and oil in Cambodia's offshore block A,¹ and the plan for extraction in 2008–09 seem to be timely in the midst of high oil prices, as the government still relies on external resources to cover the annual budget deficit. Revenues from oil production, therefore, are expected to play an important role in reducing reliance on foreign borrowing and Overseas Development Assistance (ODA). There is, however, currently no reliable information concerning the revenues that the government is expected to receive from oil resources. According to a study by UNDP, annual government revenues from oil production could be as much as USD660 million.²

This article focuses on the economic effects of windfall revenues. Since capital is one of the important factors for production and thus for development, revenues from natural resources can contribute to development. There is, however, increasing evidence that natural resource-rich countries seem to grow at a slower rate than resource-poor countries. The economic growth in some resource-rich countries is even negative, although their governments receive large revenues from the export of natural resources. Hence, natural resources can be a curse instead of a blessing. From a long list of resource-rich countries, there are only a few that have utilised their natural resources constructively for economic development.

With regard to the Cambodian economy, oil revenues could cause price increases in non-tradable production (mostly services) and an appreciation of the riel that in turn may cause a price increase in tradable goods. Since labour-intensive products are relatively price elastic, a price increase may weaken the competitive position of domestic exporters. Cash crop production and the garment industry may suffer the most from such effects.

This article examines the question, “Why is there a resource curse in some resource-rich countries?”, and discusses strategies that have been used by some countries to avoid the curse. Section 4.2 highlights evidence of a resource curse. Section 4.3 explains why the curse occurs. Section 4.4 discusses possible effects on the Cambodian economy when oil revenues are phased in. Section 4.5 provides strategies to curb the resource curse. The conclusion follows in section 4.6.

4.2. Natural Resources and Economic Growth: The Evidence

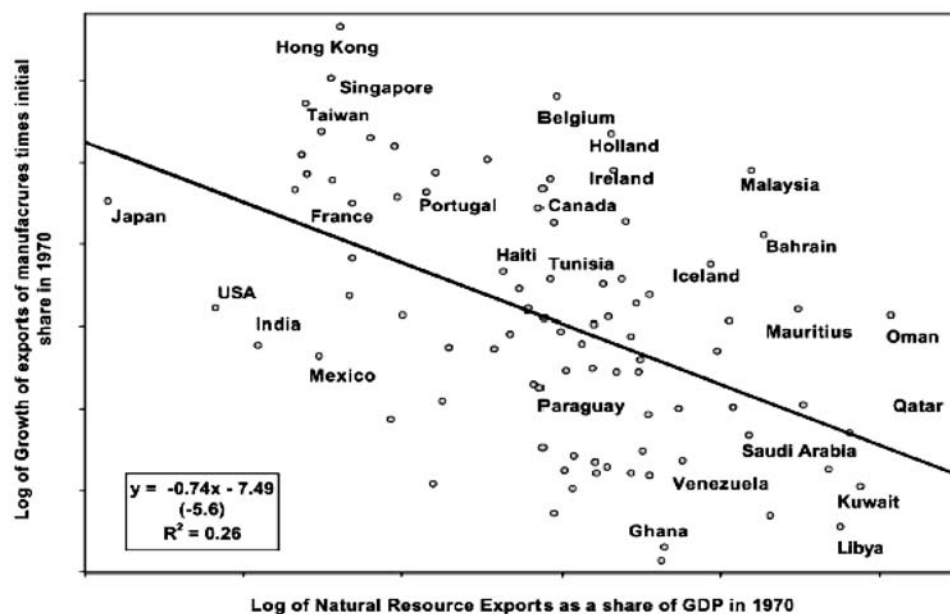
A series of studies, e.g. Sachs and Warner (1997, 2001) and Gylfason and Zoega (2001), have found a correlation between an abundance of natural resources and slow economic growth. Sachs

¹ According to the Cambodia National Petroleum Authority, there are a number of other potential offshore blocks (B, C, D, E and F), and the onshore Tonle Sap areas which are under exploration. Recent negotiations on sharing oil benefits in the OCA (Overlapping Concession Area) with Thailand failed.

² Revenues that the government will receive depend on world market prices and the PSC (Production Sharing Contract), which, in turn, depends partly on negotiating power. The PSC model is not static. It can be different from block to block, and depends on block potential and environment. Revenues are expected to be much higher if oil and gas can be extracted from other blocks, including the OCA.

and Warner (2001) confirm strong empirical support for the “curse of natural resources”. In their study, they defined “resource-rich” as a certain percentage of exports of natural resources to GDP, and then observed the rate of economic growth in resource-poor and resource-rich countries. Using data between 1970 and 1990 for 95 countries, the authors argue that resource-poor countries experienced higher economic growth than resource-rich countries. For instance, resource-rich countries like the oil states of Nigeria, Mexico and Venezuela have not experienced sustained rapid growth. To support their findings, the authors raise the question of why we do not see a positive correlation today between natural wealth and other kinds of economic wealth, if natural resources really do help development. While the findings seem to be robust, the authors fail to explain in detail which variables are responsible for the “curse”. Figure 4.1 below shows the findings of Sachs and Warner.

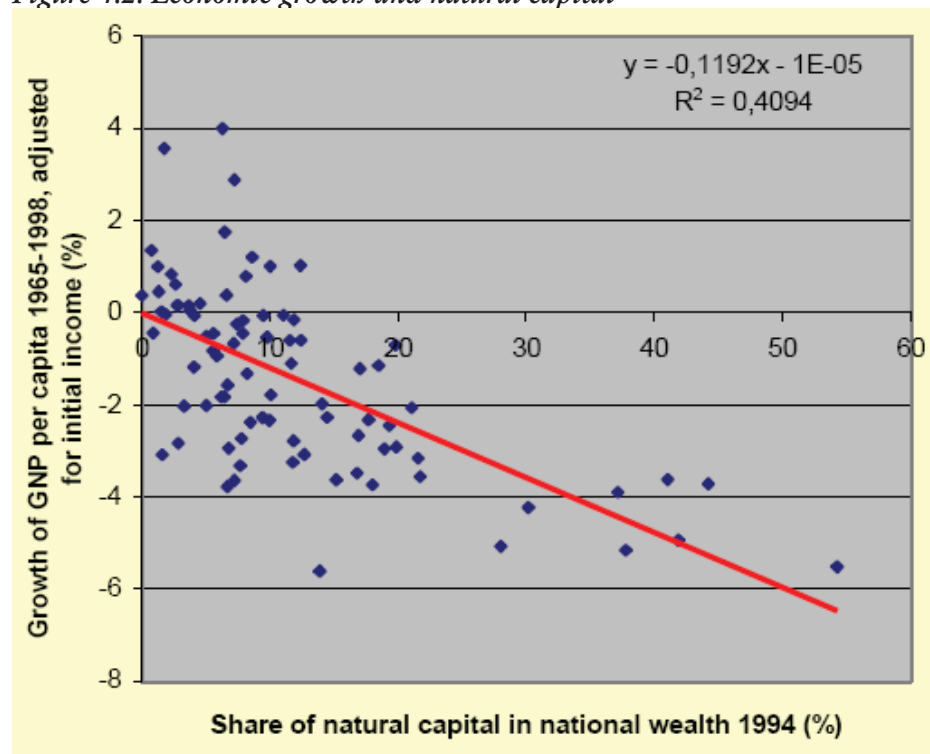
Figure 4.1: Natural Resource Intensive Economies have had Smaller Contributions from Exports of Manufactures to Overall GDP Growth



Source: Sachs and Warner, 2001, p. 836

Gylsafon and Zoega (2001) came to a similar conclusion: resource-rich countries are associated with low growth. Unlike Sachs and Warner, Gylfason and Zoega defined “resource-rich” as a percentage of natural capital in national wealth and measured the rate of economic growth by the annual growth of GNP per capita. The authors confirmed the robustness of their findings. There are, however, some doubts concerning the method of measuring “natural wealth” and “national wealth”. The use of the term “wealth” is not appropriate from an economic point of view. Wealth includes not only capital stock (monetary and physical), but also human capital and other valuable property. Wealth is a time series aggregate of value, which seems, in practice, impossible to calculate. While the authors used the terms natural wealth and national wealth, in practice they defined “resource-rich” as a share of natural resource exports in total exports or natural resource exports in GDP, as did Sachs and Warner. The result of their study is shown below in Figure 4.2.

Figure 4.2: Economic growth and natural capital



Source: Gylfason, 2001, p. 20

Without taking the terms they used into consideration, there is evidence that an abundance of natural resources can be harmful to the economy. The evidence tends to contradict the view that capital shortage is the biggest obstacle to economic development in the developing world, which was the view of many well-known development theorists of the 1940s to 1960s, such as Nurske (1953), Rosenstein-Rodan (1943) and Hirschman (1958). They all agreed that developing countries face capital shortages as the main obstacle to economic development. They had, however, different views on development strategy. While Rosenstein-Rodan and Nurske supported a strategy of a balanced growth “big push”, Hirschman emphasised unbalanced growth. Hirschman argued that development is a process of “imbalance”. The unbalanced growth theory considers the emergence of an untapped market as an incentive to investment rather than as a development failure.

Even if the problem of capital shortage is removed (e.g. by windfall revenues from oil and gas), there is no certainty that developing countries can move out of poverty. This paper explores this difficult question by searching for appropriate explanations concerning the problems associated with windfall revenue, which are discussed in the next section.

4.3. Why is There a Resource Curse? The Explanation

The SNEC/Kennedy School SWOT Analysis of the Cambodian economy provides useful insights regarding the factors and circumstances contributing to a resource curse. This current chapter expands upon the reasons for a resource curse and incorporates a theoretical approach of Dutch Disease.

The term “Dutch Disease” originated in the Netherlands in the 1960s, when that country discovered oil and gas and received huge amounts of foreign exchange from the export of the booming energy sector. Dutch Disease refers to the negative effects of windfall revenues generated by a booming minerals sector, such as gold, oil and gas, diamonds, and other valuable minerals. The term can be understood as a decline in manufacturing production affected by the boom sector. The model of Dutch Disease is shown in Figure 4.3 below.

Figure 4.3 shows the structure of production before and after the discovery of oil, as an example. The entire economy in Figure 4.3 consists of only two goods, tradables and non-tradables. Before oil discovery, the economy produces tradable and non-tradable goods, at Q_T^A and Q_N^A , respectively. Now consider that the country has discovered oil and produces Q_0 more units for the economy. The production possibility frontier shifts by Q_0 ; the new equilibrium is now at point B. At that point, the non-tradable goods increase from Q_N^A to Q_N^B . The production of tradable goods increases by Q_0 or from Q_T^A to $Q_T^B + Q_0$, but the production of non-oil tradable goods declines. As we can see in Figure 3, the non-oil-tradable goods shift from originally Q_T^A to Q_T^B .

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In short, the resource movement effect predicts a decline in the manufacturing sector in favour of the booming and non-tradable sector. The model that explains this effect is, however, based on an assumption of perfect resource mobility across all sectors. In other words, capital and labour are homogeneous and can be substituted across sectors. The assumption of homogeneous production factors holds if perfect information relating to goods exchange exists. According to North (1990), a harsh critic of the classical theories, the motives and thus the preferences of individuals are not stable and are quite different. Therefore, perfect information relating to goods exchange does not exist, nor does the assumption of perfect resource mobility. In the real world, there is no perfect capital or labour mobility since they are constrained by the specific production technologies among sectors. In the case of oil production, equipment and labour used in the production are highly technical and specific, so job vacancies in that sector cannot easily be filled by labour moving out of the service or agriculture sectors. A case study of Nigeria confirms this argument. Even at the height of the petroleum boom, less than one per cent of the total Nigerian labour force was employed in the oil and gas sector (De Silva 1994: 4).

The spending effect is very common in resource-rich developing and developed countries. The spending effect focuses on what happens when revenues are phased in and the income of the boom sector is spent on tradable and non-tradable goods. Price increases in both sectors are expected, since these goods are normal goods, whose income elasticity of demand is positive. High income increases demand and pushes up prices. If this effect takes place, the foreign exchange rate will appreciate, export products become more expensive and lose competitive position vis-a-vis foreign competitors. Manufacturing production begins to decline, and this has ramifications that cause growth to grind to a halt. The real exchange rate is:

$$e_{real} = e \cdot \frac{P_T}{P_N}$$

e_{real} is the real exchange rate

e is the nominal exchange rate

P_N is the price of non-tradable goods

P_T is the price of tradable goods

If the nominal exchange rate is constant, the real exchange rate is determined by changes in the prices of tradable and non-tradable goods. Since the price of tradable goods, as mentioned early, is relatively stable,³ the increase in price of non-tradable goods reduces the real exchange rate. This effect is called the “appreciation of domestic currency”. An excess demand in tradable goods can be eliminated only by an increase in imported goods.

In summary, the overall effects can be an appreciation of the domestic currency, a decline in traditional tradable goods, e.g. manufacturing production, a price increase in non-tradable goods, an increase in production of non-tradable goods and an increase in imports of foreign goods, due to high demand for tradable goods.

³ In the theory of international trade, prices of international tradable goods are assumed to obey what is known as the law of one price.

The Experience of Dutch Disease

Dutch Disease occurred in many resource-rich countries as the price of oil and gas increased in the 1970s and countries received high revenues. In the Netherlands, the guilder appreciated and services and construction experienced a boom due to high demand. There were plenty of jobs created in these sectors (Sachs and Larrain 1993: 670–671). The economic situation, however, was reversed as the price of oil collapsed in the mid-1980s and oil revenues subsequently declined. The demand in construction and other services also declined, and caused unemployment. People who usually worked in the service and construction sectors had to seek employment in agriculture.

Another example of Dutch Disease is Russia, which experienced an 80 per cent currency appreciation between 1998 and 2005 due to large oil and gas revenues (Sosunov and Zamulin 2006). According to a study by Kuralbayeva *et al.* (2001), oil-and-gas rich Kazakhstan is also vulnerable to Dutch Disease. A change in oil prices has influenced the exchange rate. In principle, resource-rich countries seem to be susceptible to Dutch Disease.

4.3.2. Rent-Seeking and Resource Curse

Dutch Disease is just one of many causes of the resource curse. Economists also blame the lack of transparency, accountability and the rule of law for development failures in developing countries. In other words, unproductive “rent-seeking” activities lead to a waste of resources. For example, Tollison (1982: 576) argued that “to the extent real resources are spent to capture monopoly rents in ways such as lobbying, these expenditures create no value from a social point of view ... these expenditures add nothing to social product (they are zero-sum at best), and their opportunity cost constitutes lost production to society”. In practice, corruption, which is defined as the misuse of entrusted power for private benefit, can be regarded as an extreme but effective way of rent-seeking. Shleifer and Vishny (1993) argued that corruption increases production costs and distorts the allocation of resources. The first causes a drop in GDP and the second reduces the effectiveness of production factors. Empirical evidence supports this argument. For example, Mauro (1995) found a negative correlation between corruption and GDP growth; corruption hampers economic growth by lowering investment. Similarly, corruption may reduce tax revenues while increasing public expenditure, but lowering its effectiveness. This effect has been confirmed by Tanzi and Davoodi (1997). Graf Lambsdorff (2003) found that corruption hinders capital inflow. This finding is very similar to the outcome of a study conducted by Wei (1997), who found that corruption reduces foreign direct investment and punishes the investor more than taxation. Gupta, Davoodi and Alonso-Terme (1998) found that corruption strengthens the inequality of income distribution and extends the cycle of poverty.

Generally, unproductive rent-seeking activities or corruption hamper economic growth in all countries. Can we draw the conclusion that increasing unproductive rent-seeking activity is the main obstacle to development in the developing world when corruption also exists in the developed world? Causes and consequences are quite different, but it is sometimes difficult to identify what are the causes and what are the consequences. Some things can be both. Corruption causes low income but can also be a result of low income. Therefore, to eliminate corruption, income should increase first. The argument is not wrong, but how can developing countries increase income when they are poor? Developing countries seem to be stuck in a vicious circle. Is there a way out?

Looking at the history of economic development in the United Kingdom, North (1990) contended that institutional reforms in parliament and in finance, which aimed at increasing transparency and

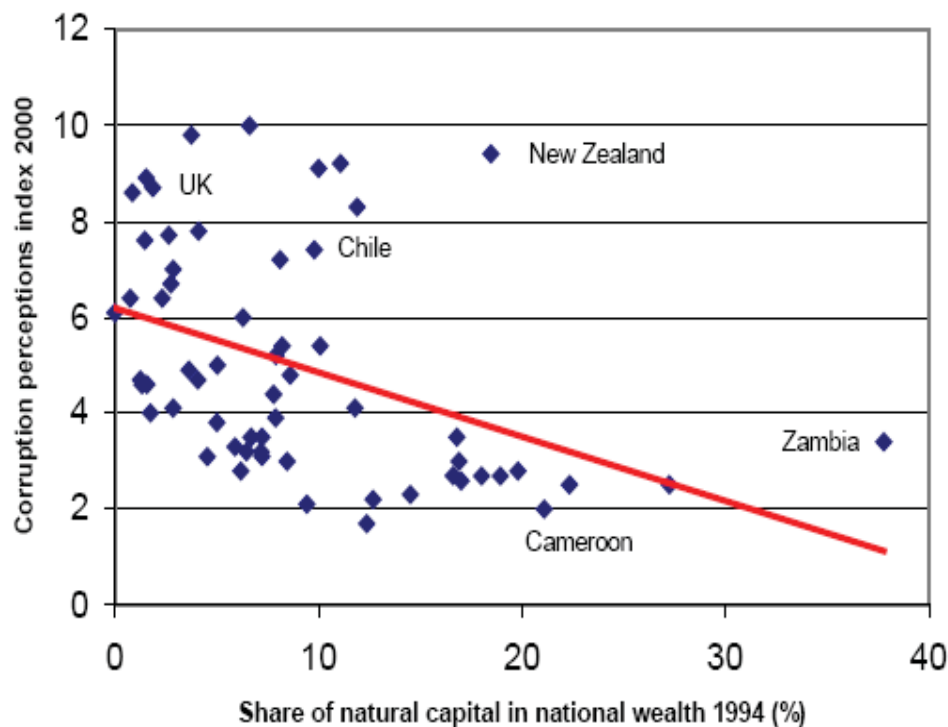
accountability, were the key to development success in that country. Concerning the developing world, North argued that transaction costs in those countries are extremely high compared to developed countries. Developing countries are usually unable to reduce high transaction costs, which are an obstacle to investment. High transaction costs are attributed to unproductive rent-seeking activities (corruption), thereby casting a cloud over development perspective.

According to the corruption index designed by Transparency International, the lowest scores are found among the developing countries.⁴ So it is reasonable to assume that developing countries are much more susceptible to corruption than developed countries. What does the susceptibility to corruption in resource-rich countries look like?

Corruption in resource-rich countries that have failed to develop is rampant. Nigeria is a classic example. Bardhan (1997) argued that, if a new source of revenue is discovered in the developing world, the elites in those countries consider this revenue as an incentive to rent-seeking, instead of seeking to manage it effectively. The discovery of new revenue sources leads, therefore, to more corruption. The findings of Gylfason and Zoega (2001) highlight this argument.

The graph below shows a sample of 60 countries. The percentage of natural resources is plotted along the horizontal axis and the Corruption Perceptions Index for the year 2000 along the vertical axis. The corruption perceptions index, taken from Transparency International, measures between 0 and 10 (the worst and the best). Gylfason and Zoega (2001) found that resource-rich countries are prone to be more corrupt. In the graph, the corruption situation in Cameroon and Zambia is obvious. As we can see in Figure 4.4, the increasing corruption index is associated with the growing percentage of natural resources.

Figure 4.4: Corruption and natural capital 1994-2000



Source: Gylfason, 2001:22

⁴ The index is available at <http://www.transparency.org>.

4.3.3. Natural Resources and Human Capital

Another way of explaining the resource curse is to look at the contribution of human capital to economic growth. According to endogenous growth theory, human capital is the engine of economic growth. The World Development Report (1999) provides interesting empirical evidence that knowledge contributes up to 70 per cent of economic growth. Knowledge can be gained by “learning by doing” or by attending school or university. The discovery of new technology is the result of promoting education rather than of any external effect (coincidence), as the classical growth theory postulated. Secondary and post-secondary education are believed to be the driving force of growth. The most obvious examples are the four newly industrialised countries South Korea, Singapore, Hong Kong and Taiwan. Before they advanced to developed country status, the percentage of students attending schools in these countries was reported to be much higher than in most developing countries. According to the World Bank (2003), post-secondary completion in South Korea was 60 percent in 2000, the highest in Asia.

It is also important to consider the relationship between natural resources and human capital. If resource-rich countries tend to spend less on education, a resource curse takes the form of low growth in GDP. Many authors argue that revenues from oil and gas are easy money that may turn a country away from promoting education. In other words, “easy money makes the people lazy”. This sounds ironic or exaggerated, but the argument is fair if considering a country which depends on a single sector, say oil and gas. In order to extract oil, equipment made abroad needs to be imported. The oil industry does not offer much opportunity to diversify production structure, and the knowledge gained is less useful for other sectors. That is why the governments in resource-rich countries may underestimate the long-term effects of education.⁵

The empirical evidence to support that argument can be found in Gylfason, Herbertsson and Zoega (1999). The authors argued that, across countries, school enrolment at all levels is inversely related to natural resource abundance or intensity, as measured by the percentage of the labour force engaged in primary production. There is also evidence that public expenditures on education relative to national income, expected years of schooling and total school enrolment are inversely related to natural resource abundance. All things considered, natural resource abundance seems to crowd out the development of human capital.

4.3.4. Natural Resources and Capital Stock

Since investment is the engine of growth and a decline in investment leads to a drop in GDP, the resource curse may occur if natural resource abundance is associated with low investment. This hypothesis has been confirmed by Gylfason (2001), who found that an increase in the natural capital share by 25 percentage points goes along with a decline in the investment ratio by five percentage points. This finding is consistent with the view that resource-rich countries are susceptible to rent-seeking activities that cause a waste of resources, as discussed above. But there is no evidence as to whether an abundance in natural resources crowds out private investment. In countries where there is lack of good governance, transparency and accountability, a drop in investment may happen in both public and private sectors. The funds for public investment may shrink because of corruption and small profit margins. Rational private investors may postpone or stop their investment because they face high transaction costs. Thus, resource-rich countries that have experienced low GDP growth for an extended period may fail to accumulate capital.

⁵ It is not generally true that resource-rich countries spend less on education. Resource-rich Botswana is reported to have spent the greatest share of public investment on education. Botswana will be discussed in part 4.5.

4.3.5. Natural Resources and Anti-Democratisation

Some authors argue that governments in resource-rich countries may use oil revenues to lower taxes in order to reduce the pressure for democratisation (e.g. Rosser 2006: 20). Lam and Wantchekon (2003) argue that the benefits from oil are usually shared only among political elites, which in turn enables them to consolidate political power. According to this argument, the internal and external security apparatus may be strengthened as the revenues are phased in, which is consistent with the view that security measures have to increase with large amounts of wealth. Therefore, a change in government is unlikely to happen because anti-government elements can be controlled. Governments in resource-rich countries, therefore, appear to be more authoritarian than democratic.

The proposition that connects abundance in natural resources to authoritarian regimes is linked to the hypothesis that authoritarian regimes appear to have lower growth rates than democratic ones. There is, however, no unambiguous empirical evidence supporting this hypothesis. The debate on this issue is still ongoing and lively. An authoritarian regime that is committed to transparency, accountability and responsibility is also able to create economic growth (Bardhan 1996). He referred to Indonesia under Suharto, which experienced remarkably high growth along with authoritarian rule.

History shows, however, that corruption scandals happen in absolute authoritarian regimes (e.g. the Philippines under Marcos, Zaire under Mobuto). Both leaders are reported to have shipped billions of dollars out of their countries. Rulers in authoritarian regimes tend to plunder resources on an extreme scale because all political power lies in the hands of one man or one group. These examples, however, do not mean that democratic rulers are not corrupt. Some democratic rulers are also corrupt, but there are mechanisms to restrain corruption. Corrupt rulers can be forced to step down peacefully by democratic elections. In a democratic society, the possibility of finding a credible leader is much higher than in an authoritarian regime. An absolute ruler controls the country until his death or is overthrown by a military putsch, which sometimes creates further political instability. To remain in office, rulers in democratic societies must conform to some of the crucial elements of democracy, such as the rule of law, accountability, transparency and responsibility.

Although there is no unambiguous evidence that growth and democracy are positively correlated, elements (e.g. accountability, transparency and responsibility) that promote growth are more likely to exist in a democratic regime. If those elements are in place, economic growth is more likely.

4.3.6. Natural Resources and Civil War

Some resource-rich countries have been involved in civil wars and suffered years of economic stagnation. Linking abundance in natural resources to civil war is, however, very controversial. Many authors, e.g. Deacon and Mueller (2004), argue that natural resource wealth sometimes causes conflicts due to the unequal distribution of benefits. That argument is based on rational behaviour and presumes that grievances stemming from inequalities of wealth distribution induce disadvantaged groups to establish opposition parties or guerrilla groups. The greater the inequality and exploitation, the greater the grievance and the more likely the onset of war, so goes the argument.

Rosser (2006) argues that war does not always stem from grievances, but also from greed or the desire of leaders to enrich themselves and their followers, or from limited political rights or ethnic and religious divisions. Once the guerrilla group is established, the primary goal is not necessarily

to put pressure on government to distribute resources fairly or use the resources effectively; rather, it may be to capture the wealth for itself. The strength of each group depends on the military balance and amount of resources (human and physical) it has. The last, in turn, depends on natural resource wealth and the opportunity to gain access to it. If the country is rich in natural resources, the motives to set up a guerrilla group and claim these benefits are high. In short, natural resource wealth can be conducive to political turmoil, which in turn causes stagnation in the economy. Examples from the Democratic Republic of Congo and Angola fit this argument. The Democratic Republic of Congo is rich in diamonds, timber, natural gas and oil. The country suffers from a long civil war, which is partly attributed to the richness in natural resources. The exploitation of natural resources remains one of the main sources of funding for the groups involved in the war. Generals are reported to have been directly involved in exploiting natural resources to enrich themselves and their superiors (Global Witness 2004). Angola provides a similar story with regard to the link between natural resources and civil war. A large share of oil revenues (approximately USD400-500 million of USD900 million in oil revenue) was transferred to the presidency, bypassing the national treasury. The majority of this money is spent for weapons. Some observers believe that oil companies are often associated with arms dealing (Global Witness 1999).

An abundance in natural resources, however, is just one of many causes of civil war (Rosser 2006: 18). If war reflects two or more causes operating at the same time, it is hard or sometimes impossible to link resource wealth to the onset of war. Some authors blame “foreign intervention” for civil war (Ross 2003). That explanation is not valid if the foreign intervention is not the root cause, but a side effect of internal violent conflict, which in turn is caused by grievances or the looting of natural wealth. As Auty (2004) mentioned, the onset of war is likely as the economy collapses due to the abuse of resources. For example, the civil war in Colombia in the 1990s is believed to reflect poor economic governance and the exclusiveness of the state.

While this analysis seems understandable, the empirical evidence is ambiguous. Basedau and Lacher (2006) argued that there is no “paradox of plenty” with regard to the likelihood of instability and violence in petroleum states. Oil states with very high levels of oil revenue are remarkably stable, the authors say. They acknowledge, however, that low-income oil states are more likely to suffer from political instability. In those states, oil revenues are distributed through patronage networks, which appear to increase unproductive rent-seeking activities and, consequently, the likelihood of conflict. On the contrary, states controlling huge amounts of oil revenues strengthen the regime’s stability by spending large scale revenues on security apparatus. This finding is consistent with the discussion above. Indonesia is an appropriate example, connecting the strong state apparatus to the ability to avoid a resource curse (see part 4.5).

4.4. Possible Effects on the Cambodian Economy

Making accurate economic projections over a longer period of time is difficult. This is especially true when forecasting possible effects on an economy when oil revenues are phased in over the coming years. This analysis is based on the theoretical approach discussed above and takes the country specific context into account.

The resource movement effect may not occur in the Cambodian economy, as in many resource-rich developing countries, since existing resources may not have been used to their full capacity. In developing countries, there are usually plenty of unemployed or underemployed unskilled workers. If these people can find jobs in the boom sector, the resource movement effect will make a significant contribution to the economy. Since oil production is a high-tech industry, there are limited chances for unskilled people to find employment in the sector. If the labour movement effect occurs, it will be in the skilled and semi-skilled manufacturing sector and some other sectors

using skilled labour. This transfer of skilled or semi-skilled labour may be unlikely as oil companies may prefer skilled foreign workers with long experience in this sector. Cambodian skilled labour forces may, therefore, not be needed. Additionally, all extracted crude oil will be exported to be refined offshore, so not many new jobs will be created by the oil sector within Cambodia.

The capital movement effect is unlikely to take place because almost all of the capital used in the oil industry is imported. Oil companies are foreign owned, so the capital used in the production is likely to be imported from other financial markets. As a result, the small domestic capital market will not likely be utilised. In short, the resource movement effect seems not to be a major concern.

Any possible effect seems to derive from the spending effect, and commodities will be affected differently. To be precise, we can divide agricultural products into two categories, cash crops (tradables) and food crops (non-tradables). If some income generated from oil is spent on agricultural products, two effects may occur. The export of cash crops will drop because of the price increase, but the production of food crops will increase. The producers of food crops are highly motivated to produce more because of the high prices and potential higher profits. The production of food crops increases to the detriment of cash crops. These effects will happen when the first oil income is spent. Then overall agricultural production will drop because consumers will substitute foreign products for expensive domestic products. This will occur when domestic production loses its competitiveness due to increasing production costs.

If the garment sector is hit by the spending effect, there will be two impacts: an appreciation of the domestic currency and a higher cost of production due to price increases of non-tradable goods. Producers would, therefore, be forced to increase the price in order to recover costs. Since labour-intensive products (e.g. textile products) are relatively price elastic, a price increase may reduce the sales volume.

But the appreciation of the domestic currency may not happen at the time the first oil incomes are generated because the exchange market will take time to adjust. The situation can, however, change and will depend on what oil revenues are used for. If huge amounts of oil revenue are used to buy foreign products (imports) and for debt repayment, it is not likely that appreciation will happen in the short term. If huge amounts of revenues are mainly spent on domestic products, then an overall price increase may occur, while appreciation prevails. That may hamper the economy in two ways: the export sector (except oil exports) may shrink while Cambodia becomes a more expensive country in which to live. If the cost of living increases, the living conditions of the poor may deteriorate. In this regard, the economy has to extend the production basis, diversify the production structure and increase productivity in order to meet the excess demand. In addition, the country has to keep demand increases incremental. This may help slow price increases.

Activities and prices in the non-tradable sectors like construction and services are likely to increase because of high demand and strong purchasing power of the boom sector. Some money from oil exports may be spent on housing, buildings and real estate, thereby pushing prices up and making the country less attractive for investors in non-boom related sectors.

4.5. Strategies to Curb Dutch Disease

As discussed above, Dutch Disease has the potential to inhibit growth and make a country poorer in the midst of resource abundance. Theoretically, it is possible to combat Dutch Disease since we know how and why it takes place. The strategies for controlling the effects, however, may be different in different countries. Accordingly, the experiences of some resource-rich countries (e.g., Norway, Canada, Australia, the Netherlands and Botswana), that have utilised their natural resources to promote economic development may help other countries adopt appropriate strategies

for controlling Dutch Disease. Regarding Cambodia, it is important to be aware of what has happened in other resource-rich developing countries in order to understand why those countries have experienced a resource curse, and also to learn from countries overcoming a resource curse.

Avoiding appreciation of domestic currency. Some scholars (e.g. Stiglitz 2004) have suggested that oil revenues should be kept out of the country, and then allowed to flow in incrementally. By doing this, appreciation can be easily avoided. The suggestion sounds plausible but is not well thought out. Why do we extract oil if we are so afraid of its effects that we keep the revenue outside the country? If the money is kept outside the country, it will bring benefits to other countries rather than to the home country. The proper response to the question is that the government can best utilise it, but only under the conditions of transparency, accountability and responsibility. To achieve this, a reform in Public Finance Management (PFM) is a precondition. If these conditions are met, the revenues from oil reduce the reliance on foreign money and can make a significant contribution to growth.

Spending on infrastructure (e.g., health, education and roads). Oil revenues can finance capital expenditures and reduce dependence on external capital. In the initial phase, oil revenues will not affect price levels and the exchange rate very much and will substitute for foreign capital. Since roads, public buildings, health and education have proved to be the most important determinants for long-term growth and have long been financed by external capital, oil revenues are a golden opportunity for the government to reach its development goals as outlined in the National Strategic Development Plan (NSDP). Additionally, oil funds can also be used to promote the development of a stronger banking and financial system, as well as to provide social safety nets for local communities. It is important, however, to manage the investment plan properly to avoid an excess in investment demand, which can cause drastic price increases. To prevent that, the government should increase the import of investment goods or use oil revenues to protect import-competing emerging industries. The last suggestion may be a high-risk approach resulting in waste if the intervention fails.

Economists (mostly monetarists), however, are concerned that the increasing activities of the government can “crowd out” the private sector. This concern is based on a standard crowding-out theory, which is, in turn, based on the assumption that all production factors are fully utilised, and that is possible only if full employment is reached. Developing countries may not have been fully utilising their available resources. Therefore, increasing government investment might not be a big concern with regard to crowding-out effects. Public investment in roads or electricity may increase the productivity of the private sector since it reduces production and marketing costs. Public investment in infrastructure is likely to have a crowding-in rather than a crowding-out effect.

There is, however, reason to be concerned about inflation when large amounts of oil revenue are used (e.g., to increase public sector salaries). Given that low public sector salaries are regarded as one of the main causes of corruption, it is reasonable that a part of oil revenues should be spent to increase salaries. Economists, however, warn about the inflationary effect of a drastic increase in public sector salaries. An incremental increase can, therefore, help mitigate the risk of inflation. This policy has to be considered in oil production as well. Since few local workers are expected to work in oil production, the effects relating to an increase in wages will not be an important issue.

Establish a petroleum fund. The strategies discussed above should be accompanied by the establishment of an appropriate petroleum fund, which exists in almost all oil-exporting countries.. The model of the petroleum committee can be different within various countries but has, in principle, the same objectives in increasing transparency, avoiding corruption, foreseeing and offsetting the possible negative effects. Oil producing countries, especially resource rich countries

that have weak governance, are encouraged to join the Extractive Industry Transparency Initiative (EITI) which provides criteria and principles to increase transparency and accountability. The main objective of EITI is to help resource-rich countries overcome the possibility of suffering from a resource curse. All these strategies, however, require a political stability which is the precondition for successful development.

The Experience in Selected Countries

Economists argue that Dutch Disease is an optimal reaction of the market to the change in wealth. This argument is based on the classical theory that believes in market power, the so-called “invisible hand”, which means that the result of the market adjustment is still optimal. If disequilibrium appears, it will be of short duration. In the long run, equilibrium will be re-established by the invisible hand. Although Dutch Disease is just one of many mechanisms blamed for the curse, the success of many resource-rich countries is proof of a well thought-out macroeconomic policy rather than a result of an invisible hand. The experience gained in countries like Indonesia, Malaysia, Botswana and Norway will highlight this argument. The cases of Indonesia, Botswana and Malaysia can be a model for other developing countries. These countries have utilised their natural resources for economic growth. From regional, cultural and economic development points of view, Cambodia should look closely to the policies that have been implemented in Malaysia and Indonesia.⁶

There are many plausible explanations that can be looked at from different points of view. Many economists accentuate the important role of sound macroeconomic policy in explaining the situation, while many political scientists consider political stability as the key to economic success. Both arguments can be right, and they should be regarded, not as competing, but rather as complementary.

Indonesia

Indonesia experienced Dutch Disease during periods of the oil boom in the 1970s. The negative effects, however, were not obvious because the symptoms of the disease were detected and appropriate measures were put in place in time. The first measure used by the Indonesian government to combat Dutch Disease was the devaluation of the rupiah in 1978. The aim of this policy was to keep non-oil tradable exports competitive in the world market because the government realised that the economy could not depend solely on oil and gas exports. Price advantage plays a crucial role in a competing world. This view has been confirmed by many economists (e.g. Krueger 1978) as they found that the successful countries were those that kept the relative price ratios among domestically produced tradable goods close to international relative price ratios (Woo, Glassburner and Nasution 1994: 139–140). In a competitive world, the similarity of relative prices is due to free trade, but in practice it came about through intervention by the government in the form of subsidies or market protection. These strategies were put into practice in Indonesia during the 1970s and 1980s and helped its labour-intensive industries to grow at a remarkable rate. It has been reported that the unskilled labour force was used more intensively in production in 1988 than in 1977. The unskilled labour force accounted for 23 per cent of the inputs used in production of 1988 exports, compared with 2 per cent in 1977 exports (ibid.: 142). The high demand for unskilled labour increased wages, and might have pulled some out of poverty.

⁶ Because of space constraint, the case of Malaysia has not been explored in detail, although it warrants careful consideration by policy makers concerned with using natural resources effectively.

The devaluation policy was accompanied by a conservative fiscal policy that went back to the New Order government that seized power in 1966. This government was committed to controlling inflation and reducing reliance on external capital. Petroleum revenues were mainly spent to repay debt, as well as to improve irrigation systems, roads, schools and other small-scale infrastructure in rural areas. As an example, from 1974 to 1978, agriculture and fisheries in Indonesia received 12.8 percent of public investment, compared to 7.4 percent in Venezuela, 7.2 percent in Nigeria and 5.5 percent in Algeria during the periods 1976–1980, 1975–1980 and 1974–1977, respectively (ibid.: 134). The incentive for production in the traditional export sector was enhanced, so that one of the effects of Dutch Disease, a reduction of traditional tradables in favour of non-tradable production, was curbed.

Beyond these successful exchange rate and fiscal policies, monetary policy in that period did not bring inflation seriously under control. In the first half of the 1970s, the money supply increased more than 40 per cent per year, leading to high inflation. During the 1970s, Indonesia experienced an annual inflation rate of 21 per cent. This increased production costs and hurt export production. A tight monetary policy that brings inflation under control might increase export performance and improve the current account balance, but theoretically there is a trade-off between costs associated with inflation and output. A loose monetary policy may increase the credit volume available for investment, which yields a higher GDP. In short, Indonesia overcame the resource curse although Dutch Disease was detected and monetary policy in the 1970s was not regarded as very successful.

Nigeria⁷

Unlike Indonesia, Nigeria was reported to have had an extreme case of Dutch Disease. The percentage of agriculture to GDP declined from 68 per cent in 1965 to 35 per cent in 1981, due mainly to a sharp decline in cash crops. The relative price of non-tradable to tradable products increased. These effects of Dutch Disease slowed the growth of the economy for decades. Sala-I-Martin and Subramanian (2003) argue that Dutch Disease is just one factor that has destroyed the Nigerian economy. Their study revealed that most of the oil revenues have been appropriated by Nigerian elites. They regarded the oil revenues as “manna from heaven”. Their main interests lay in building a strong state security apparatus to protect the revenues, instead of using the revenues for economic growth. Nigeria has become a classic example of squandering natural resources.

Botswana

An example of a successful African country is Botswana. At an average annual rate of more than 13 per cent, Botswana experienced the fastest economic growth of all countries in the 20th century. At the time it became independent from Britain in 1966, Botswana was one of the 25 poorest countries in the world. By the end of the 1990s, it was considered an upper-middle income economy. The main contributor to economic growth was the discovery of diamonds. The revenues from diamond exports accounted for more than 50 per cent of state revenues and more than 70 per cent of overall exports. Although this country depended heavily on diamond exports, the economy overcame Dutch Disease. Some scholars (e.g., Sarraf and Jiwaji 2001) argue that the government adopted a sound macroeconomic policy, stabilised economic growth and the exchange rate, avoided external debt and encouraged diversification of the production structure. These policies were accompanied by a sensible budget policy that avoided excessive expenditures during the boom periods. To do this, the government accumulated budget surpluses to stabilise

⁷ The case of Nigeria has been discussed in more detail in the SNEC/Kennedy School SWOT Analysis of the Cambodian economy.

spending in leaner periods. This policy had two goals, the first to maintain expenditure when the export of diamonds declined, and the second to intervene in the foreign exchange market. The latter aimed at stabilising the exchange rate and domestic prices, which were crucial to maintaining the competitiveness of the tradable sector. These measures were reasonable but could not prevent agriculture from declining. In the period 1990–96, agriculture experienced a decline of 1.2 percent. Sarraf and Jiwanji (2001: 15) attribute this, not to Dutch Disease, but to severe and prolonged periods of drought and the over-utilisation of natural resources. As in many other high-growth economies, however, the inequality of income distribution remains a significant concern.

Norway

Although it is true that developing countries should learn from each other, the case of Norway should not be overlooked and can be recommended to other resource-rich countries searching for ways to avoid the resource curse. Norway provides a good example of the view that natural resources can be crucial to economic development. In that country, the petroleum fund is reported to have been well managed and effectively used. According to the Petroleum Act, all petroleum revenues are vested in the state, which acts in the interests of the Norwegian people (Gjedrem 2005; Gylfason 2001; Larsen 2004). Most authors argue that rent-seeking and other corrupt activities to access petroleum revenues for private use are controlled by the state and the society, which has a long tradition of a well-functioning legal system, surrounded by intense media scrutiny. The fund is strictly out of bounds to special interests, (Gjedrem 2005: 2).

During the period of oil production, which has spanned more than 30 years, Norway experienced Dutch Disease in the 1970s and 1980s, but the effects were mitigated by a fixed exchange rate policy so that high inflation did not last for very long. According to Gjedrem, the Norwegian economy has been doing well and experienced no significant contamination. This situation is due to the Norwegian government adopting sound macroeconomic and fiscal policies supported by reforms in the tax system and financial markets and deregulation of trade and the services market.

It is reported that most of the petroleum fund is deposited in the Norges Bank, and only a small amount of petroleum funds is financing the deficit in the non-oil budget (Gjedrem 2005). The annual expenditure of petroleum revenue does not rely on revenues generated by the petroleum industry, but on the decision of the parliament. The state accumulates the petroleum fund for this and future generations as well. The people of Norway have an equal chance to benefit from their natural resources. This can be explained by the fact that the Norwegian government has enlarged the public sector (local and municipal public services), which is close to the people, so that the people have easier access to public services. According to Gjedrem (2005), the local and municipal sector employs three quarters of the overall public sector. Only one quarter of public servants are employed by the central government. This number is relatively small compared to other Nordic states. The enlargement of public services led to a significant improvement in education in Norway. The share of students attending colleges and universities rose from 26 per cent in 1980 to 62 per cent in 1997 (Gylfason, 2001: 18).

The remainder of the annual petroleum revenue is secured in the petroleum fund, which is to be used to ease the future economic burden of the large pensioner cohort expected from about 2015. At the end of 2006, the fund is expected to be worth USD220 billion, which is approximately USD43,000 per Norwegian, up from USD1500 per Norwegian in 1996.⁸ The petroleum fund, however,

⁸ <http://www.norway.org/business/businessnews/ethicoil.htm> (date 28.03.2006)

is not earmarked for pensions, and a large share of pension payments is still financed by regular tax revenues (Gjedrem 2005).

In the midst of these significant positive effects, however, a slight structural shift has been taking place in the Norwegian economy. The service sector has experienced high growth as the country becomes wealthier, thus pushing up aggregate demand. Prices in the service sector have increased since these services cannot be imported. This structural change might entail a cost to the economy as capital remains idle and labour has been used less effectively than in the initial periods. In other words, to respond to the structural change, the economy may take time to adjust optimally. In summary, the Norwegian economy has overcome the contamination posed by Dutch Disease by making sound political decisions. The revenues of petroleum serve, therefore, as extra income, which have enriched the country instead of impoverishing it.

4.6. Conclusion

While poor countries yearn for windfall revenues, economists warn of serious consequences caused by these revenues. Revenues from natural resource wealth can destroy the entire economy if governments are not aware of the effects of Dutch Disease or otherwise fail to manage and use natural resources properly. The empirical evidence to validate this hypothesis is rich. It is paradoxical but true that most resource-rich countries are poor, but many resource-poor countries are rich. This article identified many answers to the question, “Why is there a resource curse in resource-rich countries?” One of them is that Dutch Disease might lead to a decline in the non-oil exporting sector in resource-rich countries. Some countries have overcome a resource curse by the timely adoption of appropriate macroeconomic policies and by properly managing oil revenues. Other reasons for a resource curse are an increase in unproductive rent-seeking activities, a decline in human capital and investment and the potential for civil war.

Countries suffering from the resource curse are mainly poor countries, where the state is weak in protecting property rights and in fighting corruption and does not set sound macroeconomic policies. Sometimes resource-rich countries are prone to civil war because of grievances caused by inequalities of wealth and by the opportunity for powerful elites to plunder resources.

Concerning Cambodia, which will be an oil-producing country in the near future, this article has drawn attention to the view that the spending effects may cause some structural changes. Due to price increases and a possible appreciation of the domestic currency, exports in the agriculture and garment sectors may suffer. That, in turn, might cause a reduction in overall employment. A sound fiscal and exchange rate policy, however, may help mitigate such potential negative effects. An independent petroleum fund is required to control, manage and use petroleum revenues effectively. Models used in many countries can help design an appropriate structure for such a petroleum fund. Success in controlling and using oil funds, however, will depend on the motivation and ability of the individual or group in charge, rather than the model. A curse or a blessing will therefore depend primarily on the ways in which natural resource wealth is used.

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Livestock Production and Veterinary Services in Cambodia

C H A P T E R (5)

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Livestock Production and Veterinary Services in Cambodia¹

C H A P T E R (5)

5.1. Introduction

Livestock have traditionally played an important role in Cambodia's subsistence agricultural sector by serving as a source of protein, income, and savings for rural households. Large animals, are also a source of transport, draught power, and green manure that support the production of rice and other crops by farming households. Small-scale farms produce as much as 85 percent of total livestock and meat in Cambodia. Estimates show that small-scale farms account for 75 percent of the pig population, 85 percent of poultry, and nearly all cattle and buffalo. Given that small farming households make up so much of the rural poor, livestock production represents a potentially important component of the country's poverty reduction strategy.

The national real value added of livestock and poultry grew by 4.5 percent in 2004 and 5.8 percent in 2005, which represents 15 percent of total agricultural output. Cattle and buffalo, pigs, and poultry and eggs are the main components of this sub-sector and grew by 7.3 percent, 4.2 percent, and 5.4 percent, respectively. Some observers calculate that livestock provides as much as 17 percent of national household income.

The distribution of ownership, however, suggests that the benefits from livestock production are uneven. Livestock ownership is one of the key indicators of household well-being in the Tonle Sap region. Poor and destitute households consistently have fewer animals than do medium level and rich households. The poor are often unable to obtain effective veterinary services for the few animals they may own and must rely on low cost traditional treatments (CDRI, forthcoming-a).

Productivity in livestock and poultry is constrained by infectious diseases, such as outbreaks of foot and mouth disease among cattle and avian influenza among poultry, and the continued reliance on traditional methods of animal husbandry and veterinary treatment in the absence of extension services and modern veterinary technology. Given the important role that livestock and poultry play in the livelihood strategies of rural households and the potential to contribute to poverty reduction objectives in the rural sector, it is critical to improve productivity in this sector and strengthen related marketing systems.

Despite the important role that livestock plays, and the future growth potential for domestic and regional trade, the livestock and veterinary service sub-sectors do not always feature prominently in policy discussions concerning agricultural growth and poverty reduction in the rural sector. This chapter aims to raise the profile of the livestock sub-sector and veterinary services in order to support poverty reduction efforts in rural areas and promote growth in livestock trade. This chapter is divided into three parts. Section 5.2 provides an overview of the livestock sub-sector, looking specifically at the livestock markets, production factors, and the potential for increased domestic and regional trade. Section 5.3 analyzes a case in northwest Cambodia concerning

¹ The authors would like to acknowledge their appreciation of CDRI researchers Ms. Phann Dalis and Ms. Chhay Pidor for their help with calculations and referencing, as well as Mr. Sok Chamroeun for his field interview and data collation work and Dr. Keith Carpenter for his careful review of the text.

privatized veterinary services provided by community-based animal health workers. Section 5.4 summarizes the key points and makes recommendations for increasing livestock production and improving veterinary services in Cambodia.

5.2. Overview of the Livestock Sub-sector in Cambodia

This section discusses the supply of and demand for livestock products and identifies factors that account for recent growth in production. The discussion then turns to marketing and cross border trade, observing that increased incomes and better transportation infrastructure in Cambodia and throughout the region provide an opportunity for Cambodia to promote commercial livestock production as a means of poverty reduction in the rural sector.

5.2.1. Livestock Production

5.2.1.1. The Supply of Livestock Products

The main goal of animal production in the Ministry of Agriculture, Fisheries, and Forestry's (MAFF) current long-term planning outlook is to ensure the sufficiency of draught cattle use, as well as good quality meat supply for domestic consumption and export.² Although many farmers still depend on cattle, and to a lesser extent buffaloes, for draught power and transport, cattle raising for beef production is an emerging trend in recent years.

According to the FAO (2003), the forces that have contributed to the recent rapid growth of meat production could weaken in the future owing to lower population growth and the deceleration of growth that follows the attainment of a fairly high level of consumption. This may not be the case in Cambodia, however, as long as the country's economic growth and poverty reduction trends continue to improve. Population growth is also still relatively high, while the level of meat consumption per capita remains low in comparison with other countries. MAFF continues to encourage domestic production as a substitute for imported livestock, especially pigs and poultry. The prospects of growing domestic and regional demand for livestock products are also strong due to increasing urbanisation and rising per capita income levels.

Almost all of the livestock meats in Cambodian markets are fresh, and only a small percent of bovine meat is processed into traditional products, such as *ngeatkoo* (beef jerky). There are 177 registered slaughterhouses in 24 provinces, including four municipalities. Slaughtering of large animals (pigs and cattle) for meat markets is done at the slaughterhouses, as only a small proportion of large animals are slaughtered at home. Poultry, however, is slaughtered both at home and in market stalls.

In rural Cambodia, especially in the lower Mekong and Tonle Sap Lake areas, people obtain more animal protein from fish and less from livestock. MAFF reported that in 2005 Cambodia caught 60,000 tonnes of sea fish and 324,000 tonnes of freshwater fish. Live and processed fish for export to neighboring countries was 52,000 tonnes making fish availability per person equal to about 25 kg per year. At the same time, Cambodia produced 225,850 tonnes of livestock meat, up from 197,400 tonnes in 2000, equaling an annual growth rate of 2.8 percent, higher than the population growth rate of 1.9 percent.

² Agriculture Development Plan: Long, Medium and Short Term 1999-2010.

Table 5.1: Livestock Meat Production

Year	Bovine meat		Pigmeat		Poultry meat	
	Volume (t)	Share (%)	Volume (t)	Share (%)	Volume (t)	Share (%)
2005	73,600	32.6	127,500	56.5	24,750	11.0
2004	66,800	31.3	122,500	57.4	24,250	11.4
2003	63,120	30.1	120,000	57.2	26,500	12.6
2002	62,200	31.3	110,000	55.4	26,508	13.3
2001	67,000	33.2	107,750	53.4	27,200	13.5
2000	66,300	33.6	105,000	53.2	26,100	13.2

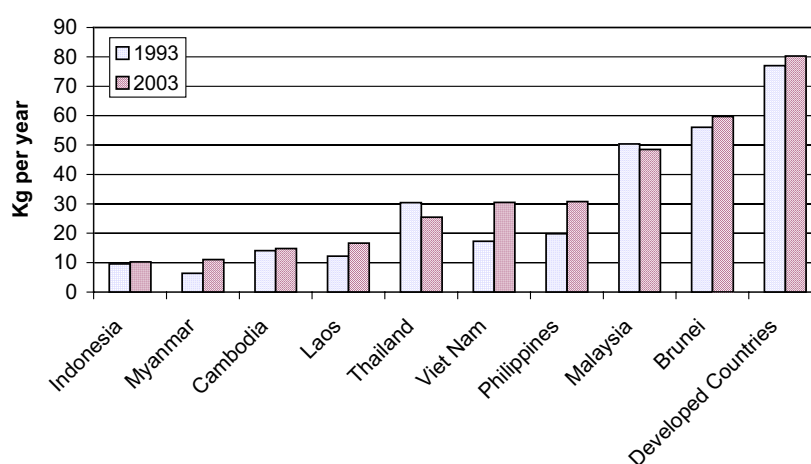
Source: FAOSTA, 2006

The share of pig meat in total domestic livestock meat in 2005 was about 56.5 percent, followed by 32.6 percent for bovine meat and 11.0 percent for poultry meat (see Table 5.1). The share of each type of livestock meat has been steady over the past several years. In 2000, the share was 53.2 percent for pig meat, 33.6 percent for bovine meat, and 13.2 percent for poultry. There are several reasons for this pattern, including the fact that agricultural mechanisation has been limited by high gasoline prices while the area under cultivation has increased, resulting in an increased demand for draught animals. The export opportunities for cattle are also encouraging more investment in cattle production. Meanwhile, the demand for pig and poultry meat is increasing and domestic production has increased as a substitute for imported pig and poultry meat products.

5.2.1.2. The Demand for Livestock Products

A calculation based on data from FAOSTAT (2006) shows that in developing countries, the per-capita demand for meat increased by 3.3 percent per annum between 1993 and 2003, while the demand for meat in developed countries increased by 0.4 percent per annum. Despite the faster rate of growth in developing countries, meat consumption in countries in Southeast Asia is still only a small fraction of that in developed countries (Figure 5.1).

Figure 5.1: Per Capita Meat Consumption



Source: Compiled from FAOSTAT, 2006

The demand for livestock meat in developing countries is forecast to increase in the foreseeable future. For example, Delgado et al. (1999) estimated that the demand for meat in Southeast Asia and China (PRC) would rise by 3.0 percent per annum between 1993 and 2020, while demand from developed countries would rise by 0.6 percent. The demand for meat products in developing countries, including Southeast Asia, is driven by increasing urbanisation, increased population and the positive relationship between meat consumption and income growth.

In Cambodia recently, the domestic supply of livestock meat products has been unable to meet domestic demand and, as a result, four tonnes were imported in 2004. Domestic demand for livestock meat is concentrated in and around urban centers, particularly Phnom Penh and Siem Reap Town, due to a concentration of tourists and high-income populations. Subsistence livestock farmers raise animals to supply meat products to urban consumers, but they themselves consume only a relatively small amount of livestock products, often of low quality.

Livestock are an important part of the farm household economy in Cambodia, but are still managed using traditional methods. The transition to commercial farming has been more successful for crops than for livestock. The recent rapid economic growth in Cambodia and other countries in the region, such as Malaysia, Thailand and Vietnam, have meant an increase in the demand for meat and other animal products. Moreover, the ASEAN-China FTA provides Cambodia export access for a variety of agricultural products to the dynamic Chinese markets through its Early Harvest Programme (EHP) component (Hing and Nou 2006). The recent growth of tourism, characterised by a rapid increase in international and domestic tourists accompanied by an expanding service sector, is another significant source of demand for high quality meat products. These recent developments represent an important window of opportunity for farmers to expand their livestock production by developing traditional systems of backyard husbandry into more intensive and specialised production that will increase output and provide higher incomes. Cambodia needs to, therefore, identify livestock products that may have some comparative advantage and market them both domestically and regionally.

In addition to the need to shift from subsistence to commercial production, there is also a need to strengthen the current marketing system. Cambodia needs to develop technologies that would enable producers to process and package meats into value-added products. This would help reduce both the export of live animals and import of higher quality processed livestock products. Foreign investors can provide technical expertise to help address issues that might arise in the development of specialty livestock products for export markets. The potential benefits from technology transfers that can arise from foreign direct investments (FDI) are referred to in Chapter 3 of this volume.

5.2.1.3. Growth in the Livestock Sector

Any increase in the livestock population is difficult to project as there is no accurate livestock census to serve as a baseline. In practice, the Department of Animal Health and production (DAHP) estimates the numbers of livestock through its network of district and provincial offices. It is likely that the numbers of livestock reported is not accurate for a variety of reasons, including a lack of financial resources, the absence of a good recording system, and low pay for government staff to perform such tasks well. As a result, there is an initiative to work with existing Village Livestock Agents (VLAs), trained by NGOs and the Department of Animal Health and Production (DAHP) to provide veterinary services, to also collect livestock census data.

The great majority of livestock are raised as an integral part of a variety of different farming systems, most of which have rice production as the predominant activity. However, some specialized intensive poultry and pig production, and to a small extent cattle, has begun to develop over the last decade in areas where land is relatively cheap and there is good access to major population centers, such as Phnom Penh and Kandal province.

Livestock production statistics from 1990 to 2005 are presented in Table 5.2. The table shows that the number of buffaloes peaked in early the 1990s, and since then the number has decreased, mainly due to lack of suitable land for raising buffaloes. Much of the land that once supported buffaloes is now being used for more intensive agriculture production, as well as for new settlements and factories. Unlike buffalo production, the production of cattle, pigs and poultry has been increasing.

Table 5.2. Livestock Production and Its Growth Rate

Year	Cattle		Buffaloes		Pigs		Poultry (1,000)	
	Stocks (Head)	Growth rate (%)	Stocks (Head)	Growth rate (%)	Stocks (Head)	Growth rate (%)	Stocks (Head)	Growth rate (%)
2005	3,100,000	1.98	650,000	-0.09	2,500,000	2.94	22,000	4.81
2004	3,039,945	1.83	650,572	-1.50	2,428,566	5.40	20,991	-8.79
2003	2,985,416	2.08	660,493	5.52	2,304,248	9.44	23,014	0.16
2002	2,924,457	1.94	625,912	-0.02	2,105,435	-0.43	22,978	8.14
2001	2,868,727	-4.14	626,016	-9.75	2,114,524	9.34	21,248	2.40
2000	2,992,640	7.43	693,631	-9.29	1,933,930	-5.38	20,749	47.50
1995	2,785,700	27.73	764,708	3.90	2,043,900	34.91	14,067	22.72
1990	2,181,000		736,000		1,515,000		11,463	

Source: Compiled from FAOSTAT, 2006

Cattle production has been growing strongly since 1990 while experiencing only three years of negative growth in 1996, 1998 and 2001. The reason for the growth in cattle production is that it is easier to find more suitable land for raising cattle than it is for buffaloes. Cattle and buffalo production, however, has experienced slow and negative growth in recent years. This may be partly caused by agricultural modernisation through the use of hand tractors in some areas (e.g., Banteay Meanchey), as well as drought and flooding in other areas.

Pig production grew very strongly in early the 1980s and since the mid 1980s it is still on the increasing trend but faced several periods of negative growth. However, there has been positive growth for three consecutive years since 2003. There are two main reasons for such growth. First, pig production in Cambodia relies on the amount of rice bran available for feed. As rice production has increased 3.8 millions MT in 2003 to 6.0 million MT in 2005, the amount of rice bran available for pig food has correspondingly increased. Second, the price of pigs has increased, resulting in more investment from local producers, domestic enterprises, and regional companies. For example, the CP Group of Thailand originally entered the Cambodian market in the early 1990s and invested heavily in poultry. More recently, the CP group has begun to also invest in pig production in Cambodia.

There has been some overall increase in the number of poultry since 1995, but since the deadly H5N1 bird flu began spreading across Asia in 2003 poultry production (both chicken and duck) has experienced both nil and negative growth rates. From 2003 to 2005, duck production was constant and chicken production fell by 9.6 percent, while large-animal production increased sharply; pig meat by 6.3 percent, beef and veal by 12 percent, and buffalo meat at 42 percent. The

fear of H5N1 seems to have diminished recently, and poultry production increased by 4.8 percent in 2005, after eight percent negative growth the previous year. So far, the impact of bird flu on poultry production has been much less in Cambodia than in neighboring Thailand and Vietnam. Although small family farms raise most of the poultry in Cambodia, there are an increasing number of larger poultry farms run by individual families and private companies. Large poultry farms are specialized farms that focus mainly on egg production or meat production. In 2005, there were 53 large egg farms and 109 chicken meat farms, raising around 3,000 birds per farm. There are 386 large duck farms with over 381,000 ducks, thus averaging about 1000 ducks per farm.

These enterprises, however, are difficult, and many farmers have not been successful as they have faced a variety of problems, including poor technology and marketing, as well as theft. Many livestock development projects have not led to substantial increases in animal productivity or in farmers' welfare, due to lack of understanding of livestock production systems. In order to help small-scale livestock farmers develop their enterprises into viable larger scale operations, it is necessary to identify the main problems associated with production and marketing. The multipurpose functions of livestock and the complex relationships between the biological, technical and social components require an integrated systems approach in which improved animal health and nutrition, management and breeding technologies are employed in ways that optimise resource use.

Smallholder mixed farms must aim to intensify the total production system. Although external inputs are needed, the emphasis needs to be on achieving the optimum balance between inputs and outputs by reducing resource losses due to poor management. In this sense, resource-poor farming systems must improve the management of the various livestock species in backyards and very small farms, and complimentary inputs for cattle, buffaloes, pigs and poultry production needs to be developed. The government needs to target its support for a comprehensive systems approach at smallhold farmers, who represent the largest labour force in Cambodia. According to this approach, pastoral systems must also focus on effective management of grazing pressure on rangelands. Communal rangeland management involves the development and application of supporting technologies (e.g., feedlots, vaccination campaigns) along with effective land tenure policies.

Specialised commercial livestock farming systems can only be sustainable with good marketing and adequate inputs, such as a reliable supply of quality feed marketing, proper management and extension services, and the availability of affordable credit and veterinary services. These complementary packages of approaches and inputs are important components of a comprehensive strategy to increase the productivity of smallholder production in ways that contribute to the reduction of rural poverty (Knips, 2004).

Marketing And Cross-border Trade

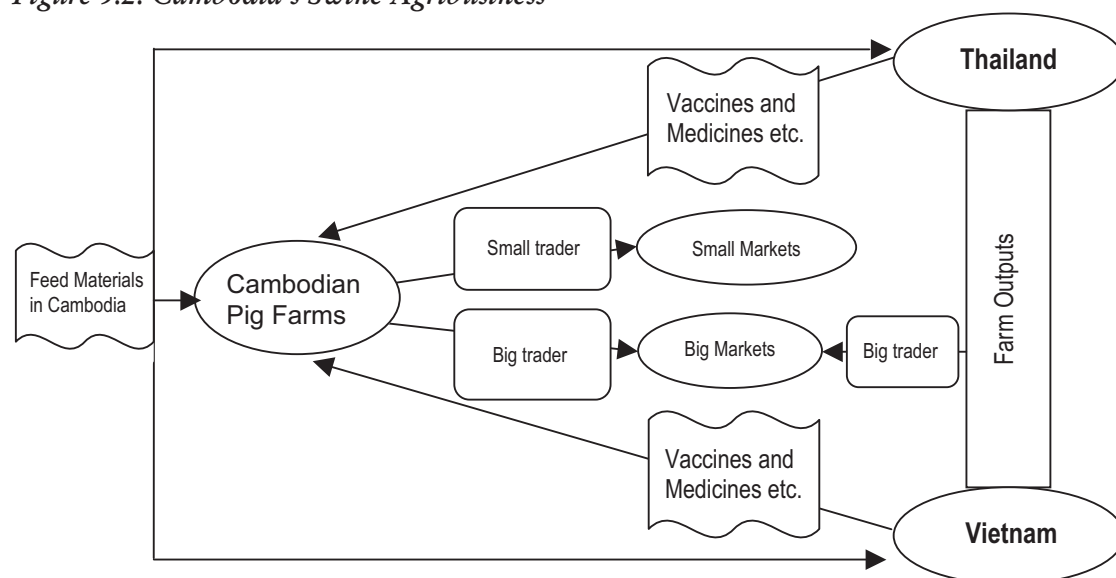
5.2.1.4. Marketing and Market Information

There is a well-organized marketing system for livestock in Cambodia. Small traders at the village, commune, and district levels buy animals and transport them to the nearest loading point. Large traders, usually stationed in major towns, then organise collection by truck and transport the animals to urban markets. This pattern of domestic trade is also very similar to the export trade of cattle and buffaloes from Cambodia.

Such trade is the response of farmers and traders to prices of livestock and livestock products in wholesale and retail markets. Before 2003, there were imports of pigs and poultry into Cambodia from Thailand and Vietnam, especially when livestock prices in Cambodian markets went up. At the same time, there was also significant smuggling of animals across international borders, even though cross-provincial border and international traders are required to obtain a license to operate their trading business.

Currently, a large amount of raw feed materials are exported from Cambodia, while large quantities of pigs and commercial feed concentrates are being imported. In theory, it is more efficient to convert the feed materials to pig meat in Cambodia. Thun has mapped out the dynamics of Cambodia's swine agribusiness (see Figure 5.2).

Figure 5.2: Cambodia's Swine Agribusiness



Source: THUN Vathana, 2005

Because of strict measures against illegal movements of animals by MAFF over the past few years, the smuggling of animals has declined at the present time. Provincial officials in Battambang, for example, estimate that the illegal trade of livestock in the province is perhaps five percent of the legal trade, which is much lower than several years ago. The illegal trade in high value animals that still continues is often carried out with the support or protection of powerful people in government.

A statistical system for recording data on price differentials for live animals at the farm gate has yet to be developed. Generally, farm gate prices for live animals in areas close to major markets are likely to be considerably higher than prices in remote areas for a comparable animal. This means the prices of livestock products within Cambodia tend to be higher in major population areas. For example, in 2004 the retail price of pork was highest in Phnom Penh, Siem Reap and Kandal, almost 20 percent higher than that in Svay Rieng. The price of beef was about 13,000 riels per kg in Phnom Penh, Kandal, Kampong Speu, Siem Reap, Prey Veng and Kampong Cham, i.e. almost 25 percent higher than the price in Ratanakiri.

Transport costs for livestock in Cambodia are generally high for several reasons, including poor infrastructure, inefficient transport means and high gasoline prices. The collection of informal fees by police and soldiers along the road also contribute to high transport costs. A pig trader

in Banteay Meanchey province observed that it costs 40,000 riels to obtain a license from the provincial DAHP to transport 10 pigs from Battambang or Odor Meanchey to Banteay Meanchey, but it costs as much as 100,000 riels for fees demanded by soldiers and police at various checkpoints along the way.

In Cambodia, the role of traders or middlemen in marketing is debatable in terms of extracting profits from producers. Perceptions about who controls output prices are mixed, largely according to the markets faced by each producer (Acharya et al., 2003). While some observers argue that producers may not be able to obtain adequate returns for their products because of the traders' control of the markets, others argue that the services provided by traders to farmers are important for marketing their farm products. In fact, some argue that without traders, production would decline and there would be less supply to urban markets.

Although there have been various efforts initiated by the government and international organisations to improve the marketing system for Cambodia's agricultural products, many farmers, especially in upland areas, still do not have access to up-to-date market information. The lack of market information puts most of them in a disadvantageous position when negotiating sale prices for their products. Promoting market transparency through regular collection and publication of nationwide wholesale and retail prices and other information about domestic and international markets would benefit farmers, as well as traders and consumers. The media could play an important role in disseminating such information.

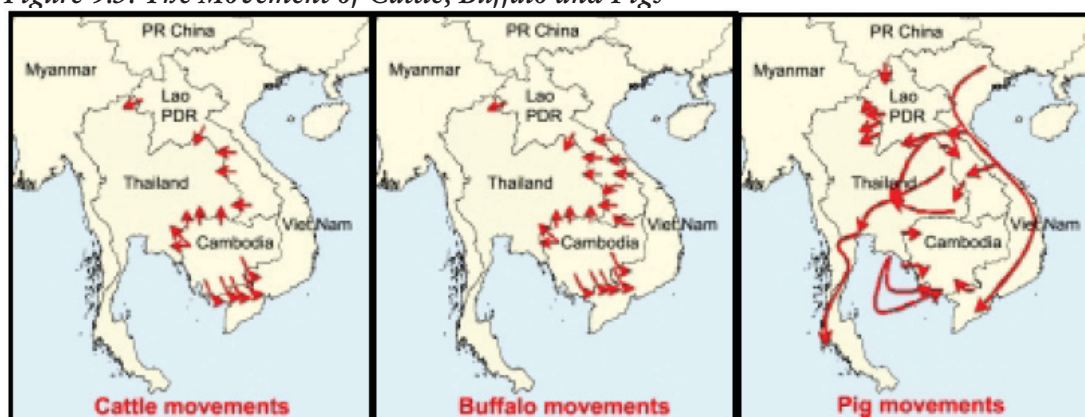
5.2.1.5. Cross-border Livestock Trade

The benefits of cross-border trade of livestock include more stable market prices and expanded markets. At the same time, cross-border trade can also lead to disease transmission. In a world of globalisation, there is a need to have mechanisms in place to prevent the spread of animal diseases, including Pathogenic Avian Influenza and Bovine Spongiform Encephalopathy (better known as mad cow disease). Otherwise, trade will not only cause outbreaks of animal diseases, but also lead to serious public health problems among humans.

The emergence of new diseases, and the re-emergence of some which were thought to have been under control, has been observed over the last decade. These problems are the combined result of increased globalisation, population growth of both humans and animals, and environmental changes. The lack of good quality veterinary services, as well as a lack of effective screening and quarantine services at border crossings are also factors that enable animal diseases to spread. The widespread smuggling of livestock and livestock products throughout the region exacerbates the spread of contagious animal diseases.

Screening facilities for diagnosing diseases are sometimes not available to quarantine services at ports of entry. To reduce the possibilities of cross-border transmission of diseases, it is also important to improve quarantine procedures and facilities. There is, therefore, a need for stricter control of the movement of animals, especially between countries that share a long border. Risk assessment strategies need to be developed, and effective surveillance and monitoring systems need to be put in place. Emergency response measures, such as those concerning avian influenza, also must be well-organized in order to be effective. There needs to be effective collaboration among different institutions in each country and close international cooperation to maintain an efficient network for gathering information.

Figure 5.3: The Movement of Cattle, Buffalo and Pigs



Source: Taken from Werner Stiir et al.

Improved animal feed and breeding methods have been identified as additional priority areas of interest, although it is still not clear what policies the government intends to adopt to foster these objectives (Sen S., 2002). For years, Cambodia has exported live cattle and buffaloes, and imported pigs and poultry, but it still has no clear policy to monitor and record the cross-border trade of livestock. Cambodia has traditionally exported live animals to its more populous neighboring countries, a trade flow that has been characterised by large fluctuations in the numbers of animals exported and changes in destinations (Maclean, 1998).

The scope and scale of livestock movements is not easy to determine as there is no monitoring system in place and many animals are smuggled across borders rather than transported across official border crossings (Ramsmay and Maclean, 1998). As a result, the volume of exports and imports are believed to be higher due to unrecorded and unregulated cross-border trade. This kind of border trade will benefit importing countries because prices are lower, resulting in less hard currency required for imports of livestock. The overall movement of beef cattle and buffaloes is towards Thailand, Vietnam and Malaysia. Breeding stocks are imported to Cambodia for breeding and for export to Vietnam. In 2005, Cambodia recorded 16,950 cattle and buffaloes exported and 11,000 cattle imported from Thailand (MAFF, 2006). Official records are often understated due to two main reasons: first, a lack of resources to establish a better mechanism to bring the informal livestock sector into the counted economy; and second, corruption. McNaughton (2004) estimates that the export of live cattle from Cambodia to Vietnam, Thailand and Malaysia in 2002 was in the range from 80,000 to 150,000 head. Meanwhile the FAOSTAT reports Cambodia exporting only 10,642 head.

According to a recent CDRI study (CDRI, forthcoming-b), Thai breeding cows passed through 15 check points, taking two days and costing 70 dollars per animal, including both official and unofficial fees at all check points, before reaching farmers in Kampong Cham province, where they can be sold for USD1200 to 1500 per head. Small traders along the Cambodia-Vietnam border transport 2-6 head of cattle each time from Cambodia to Vietnam, paying 10,000 riels per animal to cross commune boundaries and 35,000 riels at the border. Large traders can transport 30-35 head of cattle by truck, paying 500,000 riels per truck to cross the border. They trade throughout the year, except during heavy rain when they cannot transport animals. The cattle that are exported to Vietnam originate from Battambang, Kampong Thom, Preah Vihear, Pursat, Banteay Meanchey and Thailand.

Over the past several years, pigs have been imported into Cambodia for use as breeding stock, especially from Thailand. At the same time, pigs are transported from Vietnam to Phnom Penh for slaughter. In theory, Vietnam should be able to produce pigs cheaper than in Cambodia in order to market its pigs in Cambodia. Cambodian pig producers often complain about cheap Vietnamese pigs in the markets. For example, the San Miguel pig farm in Vietnam, the largest farm located in one spot, sells 80 percent of live fatteners at 15-20 percent below production cost. This issue requires a comparative study on livestock production costs in the region, market structure of trade, formal regulations and actual practice in trade and other issues related to production and marketing.

The role of the private sector in agribusiness is also essential in terms of expanding livestock production to meet increasing demand. Private firms are motivated to introduce technological changes to reduce costs and be more competitive. The public sector also has an important role to play in supporting agribusiness in order to promote growth in smallholder livestock production, which can help reduce poverty in the country. The benefits of increased foreign direct investment (FDI) in agribusiness are also discussed in Chapter 3 of this volume.

5.3. Community-based Animal Health Services in Northwest Cambodia³

Poor performance outcomes by public sector veterinary service providers in developing countries have prompted a wide range of reform initiatives designed to improve the quality, quantity, and distribution of services. The most common approach advocated by researchers and international donors has been to shift service delivery to the private sector while re-orienting governments toward a more active regulatory role. In Cambodia, however, as in other countries where rural markets for veterinary services do not attract qualified technicians from outside, local people have been trained as village level service providers. Such community-based approaches to privatising veterinary service delivery involve externally initiated projects that train and equip an entirely new class of service provider.

Such projects have entailed a significant investment of resources by donors, governments, and non-governmental organizations (NGOs) in Cambodia where some 4,200 community-based Village Livestock Agents (VLAs) have been trained over the past decade. At least 30 NGOs and other institutions at one time or another have been involved in training VLAs at costs that range from \$100 to \$250 per individual. How sustainable are the services provided by these VLAs? After all, the track record in Cambodia and many other countries is replete with examples of VLAs who stop working after project sponsors complete their project cycles and withdraw support. Such efforts often fail for many of the same reasons that public-sector service reform has stalled, including a lack of financial and human resources, as well as incentive arrangements that leave VLAs unresponsive to the needs of clients.

In this section, the potential sustainability of a community-based approach to the privatisation of veterinary services in Cambodia is analysed by examining how 172 VLAs in the northwest part of the country have fared on their own for almost eight years after being trained and equipped by an international NGO and the DAHP. In 2003, 29 VLAs (17 percent) were found to be “very active” while another 45 VLAs (26 percent) were “active”. Of the remaining 98 VLAs, 36 (21 percent) were “less active” and 62 (36 percent) had stopped providing services for various reasons. In mid-2006, a total of 42 VLAs, including many of those included in the 2003 survey, were interviewed to reassess VLA activity levels after a three-year interval. Contrary to expectations, there was a

³ Much of this section is taken from Ballard 2005.

surprisingly low rate of attrition among VLAs between 2003 and 2006, as many remaining VLAs continued to perform at activity levels consistent with those found in 2003. The following sections consider some of the factors and circumstances that enable some VLAs to continue providing services on their own for so long, while preventing others from doing so.

5.3.1. Methodology

Recent research in the field of veterinary service delivery has tended to focus on the dynamics of contractual exchange between private service providers interacting individually with their farmer clients (Leonard, 1993, 2000). The standard approach to private contracting assumes that (1) service providers are primarily motivated by cash or material incentives, and (2) the sustainability of private services depends on the profitability to the service provider. For example, Umali et al (1993) have argued that the profitability or sustainability of any private practice depends on the “break-even point” where a service provider’s revenue from all sources meets the costs associated with providing those service in a given area. The concept of a break-even point is useful as it focuses attention on efficiency and productive factors, including the average costs of services per animal, the density of animals in a given area, location, and infrastructure.

In order to explore the sustainability of privatised community-based animal health (CBAH) services in Cambodia, Ballard (2005) selected areas in Battambang and Banteay Meanchey where VLAs trained according to CBAH practices were working under active market conditions involving homogenous farming systems. This group of VLAs had received training from Church World Service (CWS), an American-based NGO with considerable experience in Cambodia’s animal health sector. From 1995-1998, CWS trained and equipped 198 VLAs and supported the formation of 14 VLA associations in Battambang and Banteay Meanchey. During 1998-2000, CWS delegated the project to DAHP, while continuing to help facilitate monthly and annual meetings, as well as provide occasional training. Since 2000, the VLAs have been more or less working on their own. In this sense, the research represented an *ex-poste* experiment to analyse how VLAs trained according to basic CBAH principles perform in a rapidly changing social and economic market context.

The first round of research covered 172 (87 percent) of the 198 VLAs who were trained and equipped by CWS in 12 of the 14 communes in the two project areas. Based on 33 in-depth interviews with association leaders and other VLAs, the VLAs were each scored according to his or her level of activity at the time. The A category (6 points) included “very active” VLAs who served clients from other villages as well as their own village. A significant share of their household income came from VLA work. The B category (4 points) included “active” VLAs who provided services primarily in their own village. The income from their VLA work complemented other sources of household income. The C category (2 points) included “less active” VLAs who only provided occasional services for their own animals, or those of friends and relatives. The D category (0 points) included “inactive” VLAs who had stopped providing services.

During a second round of research in mid-2006, CDRI researchers revisited many of the same association chiefs and VLAs who were originally interviewed in 2003. The research assumed that more VLAs would have stopped working during the three-year period. This assumption was based on observations of data showing sluggish performance in the agricultural sector as well as other research suggesting that an increasing number of individuals in the region were moving out of agriculture in favour of either internal or cross-border migration. A scoring system similar to the one used in the first round was employed in the second round of interviews. Two CDRI team members were involved in both rounds of interviews so there was an important degree of consistency in terms of applying the scoring criteria.

The following section reviews the 2003 survey data and discusses several factors that help explain the current level of activity then found in the survey group. Section 3 then looks at the survey data from 2006 and discusses several possible reasons accounting for observed changes in VLA activity levels. Section 4 briefly examines the brief history of the VLA associations and the role they have played in providing institutional support for the VLAs.

5.3.2. Survey Population

Of the total survey population of 172 VLAs, 33 are female and 139 are male (Table 5.3 below). The population is fairly evenly spread across the two provinces, with 90 in Banteay Meanchey and 82 in Battambang. The average activity level score of all VLAs in 2003 was 1.17. The average activity level score among female VLAs was 1.45, which was lower than the average of 2.39 for male VLAs. In this sense, the attrition rate among female VLAs has been significant. Eighteen of the 33 (54.5 percent) had stopped providing services, while another five were only providing occasional services to family members or friends. The attrition rate among female VLAs was particularly high in Banteay Meanchey province where 11 of 15 (73 percent) had become inactive. Of all the female VLAs, 3 were very active and 7 others were working at an active level, making 30.3 percent who were still actively working as VLAs.

Table 5.3: VLA Activity Scores by Gender and Province (average activity score - 2003)

Activity Level	Battambang		Banteay Mean Chey		Total		
	Male	Female	Male	Female	M	F	All
Very Active	10	1	15	2	25	3	28
Active	19	5	13	2	32	7	39
Less Active	17	4	18	1	35	5	40
Inactive	18	8	29	10	47	18	65
M and F	64 (1.32)	18 (0.94)	75 (1.19)	15 (0.73)	139 (1.25)	33 (0.85)	172
Province	82 (1.24)		90 (1.11)		172 (1.17)		

Source: Author's Survey (June, August-October 2003)

The picture is different among the male VLAs, of whom 63 (45 percent) were working at a very active or active level. In Battambang, 29 (47 percent) of the male VLAs there were working at a very active or active level, while in Banteay Meanchey, 33 (44 percent) were working at similar levels. At the same time, 49 of all the male VLAs (35 percent), had stopped providing services. As with the female VLAs, the provincial attrition rate among male VLAs was higher in Banteay Meanchey, where 30 (40 percent) had stopped providing services, than in Battambang where 19 (30 percent) had stopped working.

One clue about the variation in activity levels among female and male VLAs concerns their average age at the time of training. The average age of the very-active women at the time of their training was 33.5 years. For the active women the average age then decreased to 28.2, which was then followed by the less-active women whose average age is 24.2. The average age of those women with an A or A/B score was 40, while the average age of women with a D rating was 23.72. This pattern is consistent in both provinces, and suggests that age may be an important indicator concerning the eventual activity level of female VLAs.

The reasons for this pattern are both social and economic in nature. Ten of the least-active women reduced or stopped their VLA work following marriage (8) and/or the birth of a child (2). As in many traditional rural societies, women in Cambodia tend to marry at a relatively young age and are expected to care for the household and raise children once married. There is at the same time

considerable social space open to older women, especially those with independent sources of income. This may help explain why the most active female VLAs were also the oldest. Of the nine other women who had stopped providing services by 2003, five women were working as labourers or had started up their own business, including three young women who were single and had left their village for employment elsewhere. Four other women had lacked sufficient resources with which to purchase medicines.

Woods (2000) has identified social distance as a particular type of transaction cost to help analyze problems that female veterinary technicians faced in rural Zimbabwe. Even though they were generally as effective as their male counterparts, the demand for their services was biased according to gender, as male farmers were less likely to request the services of female technicians. Although some degree of such gender bias is almost certainly a factor in determining the activity level of female VLAs, it is perhaps too easy to attribute the high attrition rates among the female VLAs in Cambodia solely to “gender” roles governed by social expectations. In reality, such problems are at root closely associated with the social and economic dynamics of poverty that also affect men, though perhaps manifested differently.

For example, the pattern linking age and activity level in 2003 was similar among male and female VLAs in Battambang. In Banteay Meanchey, however, the most-active male VLAs were only slightly older than less-active male VLAs. One reason for this concerns the higher attrition rate among male VLAs due to economic factors that prompted them to migrate to nearby Thailand or to the border area to sell labor (11), take up other employment in or near their village (7), or devote more attention to their own farming (2). It seems that men and women of all ages were subject to similar pressures to provide for their families, and as they get older, there is even more pressure for them to seek better incomes by abandoning agriculture and/or selling labour. In this sense, the economic factors that prompt many young women to stop working as VLAs are similar to those that affect many male VLAs at all ages.

The survey data concerning location also suggest that the mode of agricultural production played a significant role in terms of the demand for VLA services in certain areas. For example, in Mongkol Borei district in Banteay Meanchey, where three associations with high VLA attrition rates are located, rice production had undergone a rapid transition characterised by the increasing use of hand tractors imported from nearby Thailand, irrigation, and the use of wage labour. People financed the purchase of hand tractors by selling large animals once used for draught power. In some villages, the cattle population had virtually disappeared. In 2003, such changes did not appear to have been accompanied by a corresponding increase in the demand for services for small animals (i.e., pigs and poultry). In other areas, agriculture had remained at a subsistence level, in part because of several years of drought. As observed above, several VLAs, along with many of their neighbors, had switched out of farming in favor of selling labor elsewhere.⁴

At first glance then, economic factors seem especially relevant for poor VLAs from households characterized by low levels of rice production and few alternative income sources. On one hand, many had to abandon veterinary work because they were not able to generate sufficient cash flow to support their families, sustain the slow, and sometimes low, rate of credit payments by clients, *and* provide discounts as sometimes expected by relatives and neighbours. Others tried to continue providing services by borrowing money from friends and relatives to purchase medicines and other supplies from pharmacies that would only sell to them on a cash basis. The inability to maintain a ready supply of medicines and equipment on hand was particularly problematic for

⁴ VLAs who migrate elsewhere may or may not continue providing services. There is some anecdotal evidence to suggest that at least some do, thereby contributing to the cost-effectiveness of the training over time.

the poor VLAs as people often lack confidence in those who cannot maintain an inventory of medicines.

On the other hand, very-active and active VLAs had sufficient resources with which to finance ongoing expenditures for medicines and supplies, despite the amount of outstanding client credit they may be carrying. The higher volume of demand for services from the very-active VLAs, whose major share of household income came from VLA work, provided sufficient cash flow with which to maintain an inventory of medicines with corresponding effects on people's perceptions of service quality. In the case of many active VLAs, the household had multiple sources of income with which to sustain a dynamic cash-flow cycle. In all these cases, the VLAs could afford to wait until clients had money with which to pay them.

This argument so far suggests that the amount of financial resources available to VLAs affected their capacity to provide services and focuses attention on the economic components of contractual exchange. However, informal exchange at the local level in traditional societies such as Cambodia also entails a significant social dimension. In this sense, the ways that VLAs manage informal service contracts must also be considered in the context of the complex web of reciprocity and mutual exchange that characterize both social and economic transactions at the village level. Elsewhere, Ballard (2005) asserts that some of the most successful VLAs were village elites who could efficiently manage informal service contracts because they were better endowed with social or political capital, in addition to their financial resources. The less-active VLAs, on the other hand, were less endowed than the others with such resources and, as a result, were less able to effectively manage the various facets of the informal process, including credit and discounts for clients.

5.3.3. Problems Associated with Informal Service Contracts

The negotiation, implementation, and enforcement of informal service contracts entail economic and social transaction costs that can reduce the supply of services and distort their distribution (Landa, 1994). Any analysis of informal service contracts, therefore, cannot assume informal institutions always work efficiently. Such inefficiencies are exacerbated by imbalances in information about product or service quality between buyers and sellers (Leonard, 2000). (Ly, 2000) has described how such imbalances can reduce the prices that veterinarians in Senegal can charge for their services. Farmers either pay the lowest available price regardless of quality, or forego service altogether, in the absence of sufficient guarantees of quality and accountability for service, or because they do not believe such services help.

The transaction costs associated with providing veterinary services on credit and discount provides a good starting point for discussing how the social and economic dimensions of poverty and mistrust can affect the way both male and female VLAs provide services. Credit and discount requests are certainly not new to veterinary services. In Senegal for example, Ly (2000) observed that taking services on credit represents an informal solution to insurance problems when clients require more time to observe treatment outcomes before paying. Over time, a client's refusal to pay for ineffective services provides incentives for VLAs to deliver better-quality services to the client. Under certain circumstances, then, services on credit can play a constructive role in correcting distortions associated with information imbalances.

In northwest Cambodia, as elsewhere in the country, credit also plays a vital role in helping rural households manage seasonal and life-time cash-flow cycles, and it is quite normal for farmers to take a variety of goods on credit and then pay back when they can. For example, farmers may obtain fertilizer on credit and then pay it back, with interest, when they sell some of the harvest.

In terms of discounts, traditional notions of fairness may sometimes entail expectations that the poorest members of society should receive at least some discount for services. Cash-flow problems associated with providing services on credit and discount are factors that have caused some VLAs to stop providing services or curtail their services to a small network of family and friends.

5.3.4. Revisiting the VLAs in 2006

Because of the high rate of attrition among VLAs and the difficulties that others were having with providing services on credit and for discount, CDRI researchers expected to find a similar rate of attrition and a substantially reduced overall level of activity when they revisited the same group of VLAs in 2006. Although there was some decline in the overall average activity level score among the VLAs, it was not as much as expected. The analysis of the 2006 survey data (Table 5.4 below) reveals several interesting trends suggesting that the demand for VLA services is increasingly sensitive to changes in demand for livestock and livestock products. This in turn suggests that the market for veterinary services is beginning to function more normally according to the expected influence of demand. If this were the case, this would represent an encouraging development in ongoing efforts to institutionalise a privatised veterinary service delivery system using community-based animal health workers as a foundation.

Table 5.4: VLA Activity Scores by Gender and Province (average activity scores - 2006)

Activity Level	Battambang		Banteay Meanchey		Total		
	Male	Female	Male	Female	Male	Female	All
Very Active	14	2	13	1	27	3	30
Active	16	3	13	0	29	3	39
Less Active	13	9	20	4	33	13	40
Inactive	21	4	29	10	50	14	64
Total	64 (2.51)	18 (2.11)	75 (2.07)	15 (0.87)	139 (2.27)	33 (1.54)	172
Province	82 (2.43)		90 (1.87)		172 (2.13)		

Source: CDRI Survey (May-June, 2006)

The data show that the average activity level score for the entire VLA survey group declined from 2.21 in 2003 to 2.13 in 2006. The differences between the two provinces, as well as the differences between the male and female VLAs are of particular interest. In Battambang, the average activity level score actually increased slightly from 2.39 to 2.43, which suggests that VLAs maintained virtually the same level of activity since the 2003 survey. Somewhat surprisingly, the number of very active VLAs increased by three. The number of active VLAs declined by five, while the number of less active VLAs increased by three. The number of inactive VLAs remained virtually the same, declining by one. The interesting trend in this regard is the tendency for VLAs who were once active to become very active, while the remaining active VLAs continued at a similar level of activity. In general, this suggests that the demand for VLA services has increased somewhat in at least certain areas of Battambang, while remaining more or less constant in others.

In Banteay Meanchey, however, the average activity level score declined from 2.05 to 1.87. This decline is largely attributed to the fact that several active VLAs became either less active or inactive. While the number of very active VLAs remained the same (14), the number of active VLA declined from 22 to 13, and the number of less active VLAs increased from 13 to 24. The number of inactive VLAs increased by two. The general trend in the case of Banteay Meanchey is for the active VLAs to become less active. This means that many VLAs shifted from serving clients

primarily in their village to serving only relatives and friends. As an important component of the household income is derived from services for active VLAs, the shift to less active status implies that income from VLAs declined sharply. This in turn suggests that these VLAs either became poorer, or that they shifted to other forms of employment to maintain a similar level of income, or increase their income. It appears that income from VLA work has been on the decline, which suggests less demand for VLA services in general. The fact that two additional VLAs become inactive reinforces this impression.

The data concerning male and female VLAs also reveals an interesting trend. Overall, the average activity score for males declined from 2.39 to 2.27, while the average activity level score for female VLAs increased from 1.45 to 1.54. The number of very active male VLAs increased by three, while the number of very active female VLAs remained stable at three. The number of active male and female VLAs both declined by 10 and 4, respectively, while the number of less active increased by six and eight, respectively. Of particular interest is the fact that the number of inactive male VLAs increased by one, while the number of inactive female VLAs actually declined by four. The fact that one more male VLA became inactive is not a surprise, although one would have expected more given the rate of attrition during the first survey period. The decline in the number of inactive female VLAs is, however, surprising given the rather dramatic attrition rate, among female VLAs observed during the first survey period. As a result, the general trend seems to be that more male and female VLAs shifted from active to less active, while several female VLAs began to at least practice for themselves, or provide services for family and friends.

What accounts for these shifts in activity level during the two years between the first survey in 2003 and the second survey in 2006? One important clue comes from the livestock production data from Battambang and Banteay Meanchey provinces. Table 5.5 below shows that production declined for poultry, swine and cattle between 2004 and 2005 in Banteay Meanchey, while increasing in Battambang. As observed in Part 1, increased production has been generally in response to increasing demand for livestock and meat products. In areas where farmers had once adopted hand tractors for ploughing and transport, the demand for cattle had tended to fall, but with rising costs of fuel, the demand for cattle seems to be on the upswing. This explanation, however, does not adequately explain the divergent pattern of production growth in Battambang and Banteay Meanchey, both provinces where farmers have been using hand tractors. The more likely explanation may concern the rising demand for meat products in general as population and incomes increases, particularly in urban areas as discussed in Part 1. This would account for the divergent patterns of growth patterns, as Battambang has a larger urban population than Banteay Meanchey. Location and transport may also play a role in terms of demand as many of the VLA associations in Battambang are located along good roads fairly close to the capital city, while those in Banteay Meanchey are, on average, located somewhat further away on roads of variable quality.

This argument assumes that the demand for veterinary services increases along with increased demand for livestock and meat products, as producers are more willing to invest in either preventive or curative treatments in order to protect their livestock assets. This argument also assumes that producers who invest more in veterinary services tend to have more faith in the efficacy of veterinary interventions. This suggests that during the first survey period, many farmers may have been doubtful about the viability of VLAs services, which reduced overall demand and contributed to the high rate of attrition among the VLA survey group. However, over time farmers may have observed that the services provided by VLAs were indeed effective, and such learning was manifested during the second survey period, at least in Battambang.

Table 5.5: Livestock Production in Battambang and Banteay Meanchey ('000 head)

Province	2001	2002	2003	2004	2005	2004/2005	2001/2005
BMC							
Poultry	335	451	352	461	341	-26.03	1.8
Swine	90	74	91	163	111	-31.90	23.3
Cattle	106	102	107	126	101	-19.8	-4.72
BTTM							
Poultry	806	717	804	738	760	3.0	-5.7
Swine	67	78	89	108	135	25.0	101.5
Cattle	158	148	165	171	183	7.0	15.8

Source: NIS and MAFF

The production data also provides a good clue for explaining the shift in activity level scores for male and female VLAs. In Battambang, the overall activity level score for female VLAs increased from 1.77 to 2.11, while in Banteay Meanchey it decreased from 1.06 to 0.87. As women generally manage poultry and swine at the household level, the increase in female VLA activity in Battambang may be related to the increased production for both poultry and swine between 2004 and 2005. This may also help explain why three of the four women who left the inactive category and became more active at some level are from Battambang. The increased demand for poultry and pig meat may have prompted these women to at least treat their own animals as well as those of relatives and friends. Likewise, the modest increase in cattle production may help explain why the male VLA activity score does not vary much during the two surveys. In Banteay Meanchey, poultry, swine, and cattle production all fell during the first part of the second survey period, which may have decreased demand for services from both male and female VLAs, as reflected in Table 5.6.

The above argument concerning the demand for services takes the discussion back to the concept of the break-even point referred to earlier by Umali et al (1993), and raises questions about the most efficient coverage area for VLAs. As noted earlier, the break-even point concerns the density of the livestock population in a particular area and the average service costs per animal. In all 14 communes, one VLA per village was originally trained and equipped. Over time the very active VLAs eventually began providing services to clients outside their own village. In some cases, the very active VLAs stepped in to fill a void in service supply when other VLAs became less active or inactive. In other cases, the very active VLAs served villages outside the commune where VLAs had not been trained. Only in a few locations did very active VLAs provide service in villages where another VLA was active, usually to extended family members.

Another explanation for the high rate of attrition during the first survey period and the lower rate of attrition during the second survey period, therefore, is that the market for veterinary services was saturated in terms of supply of services when every village had their own VLA. With a low level of demand in some villages, VLA could not break even in meeting the costs of providing services and eventually stopped providing services. It appears that in villages with a lower density of livestock and/or further away from markets, one VLA may be able to sustainably provide services to two or even three villages over the medium to longer term. In other villages with a higher density of livestock and/or closer to markets, one VLA per village may be required.

The DAHP and donor partners need to consider these factors to achieve more efficient targeting of scarce resources when community-based animal health workers are introduced in a particular area. For example, in some locations the coverage area can be expanded by a more rigorous

assessment of the break-even factors that would affect the demand for services and VLA income over time. In others locations where there are already VLAs working, it may be counterproductive to train new VLAs, as sometimes happens. A more appropriate use of scarce resource in such cases would be to provide additional training to the existing VLAs in order to upgrade their knowledge and skills.

5.4. Conclusions and Recommendations

There are strong opportunities for increasing livestock production in Cambodia because of growing domestic and regional demand for livestock products due to rapid urbanisation and rising per capita income levels. Cambodian farmers, however, are not yet able to take advantage of these opportunities. Cambodia needs to shift from subsistence to commercial livestock production, strengthen the current marketing system, and promote development of high value-added livestock products through improved processing and packaging.

The private sector in agribusiness has an important role to play in expanding livestock production to meet increasing domestic and regional demand. Large-scale specialised farms are also able to introduce rapid technological changes in animal production methods, including improved feed management and veterinary services. The government also needs to implement and enforce policies that will enable the private sector to function more efficiently in order to help stimulate increased smallholder livestock production.

There is a fairly well-organised domestic marketing system for livestock, but transport costs are high due to poor infrastructure, inefficient transport means, high gasoline prices and the unofficial collection of informal fees along trade routes by police and soldiers. As with other agricultural products, the government needs to take action to reduce the high costs of livestock trade and marketing in order to stimulate agricultural production.

Information also plays an important role in the marketing of livestock products. There are still many farmers who lack adequate access to up-to-date market information about demand and prices. The lack of such information puts many of them in a disadvantageous position when negotiating sale prices for their produce. Promoting market transparency through the regular collection and publication of nation-wide wholesale and retail prices and information about domestic and regional livestock markets would help farmers, traders and consumers.

Cross-border trade can help stabilise market prices and find broader markets for livestock. Such trade can, however, also enable the rapid spread of certain animal diseases. Unregulated trade through smuggling significantly increases the risks associated with the spread of animal diseases throughout the region. There is a need to improve screening and quarantine procedures and facilities in order to ensure stricter control of the movement of animals across borders. To be effective, emergency response measures regarding the sudden outbreak of diseases also must be well-organized. There is a need for effective collaboration among relevant institutions within the country, as well as close regional cooperation aimed at providing an efficient network for gathering information.

To assist small-scale farmers with increasing their livestock production, ensure better quality livestock products, and effectively monitor the outbreak of animal diseases, the government and its development partners also need to build upon and strengthen the existing network of community-based animal health workers. Although such networks are currently very fragile, they represent the only institutional mechanism in place for reaching small-scale farmers with improved veterinary and extension services, including production and marketing information.

There are some indications that suggest the markets for veterinary services are beginning to function more effectively in responding to demand. This represents an encouraging development in ongoing efforts to institutionalise a privatised service delivery system using community-based animal health workers. Some VLAs have devised innovative strategies to manage the economic and social transaction costs associated with negotiating, implementing, and enforcing informal service contracts, although others have had to discontinue providing services for various reasons.

Gender, age, social standing, and household income are key indicators predicting the potential capacity for individual VLAs to continue providing services over time. These indicators suggest that VLAs who are poor and/or otherwise lack social standing are most likely to stop providing services after a period of time. The high attrition rate among these VLAs, in turn, has weakened the foundation of the VLA associations that were designed to support them. These observations may be troubling for government planners and donors who are working to establish sustainable animal health services, while at the same time providing employment opportunities for the poor, especially women. These observations also entail serious implications for the type, scale, and duration of support that are required from government agencies, donors, civil society organisations, and private investors.

The financial and organisational sustainability of community-based animal health worker networks requires strong institutional support for individual VLAs and their associations. One of the most significant problems that all VLAs face are requests from farmer clients for services on credit and discounts. One feasible intervention is to make low cost credit available to the VLAs through their associations. The government can provide the associations with a legal status that would enable them to acquire low cost loans from formal sector sources, such as the Rural Development Bank, so they can provide low cost credit services for members. NGOs and donors could provide the VLA associations with management training and financial support for creating and maintaining small-scale savings and loan services for members.

The sustainability of the CBAH models, therefore, depends on an active three-way collaboration between the professional associations, supporting NGOs and donors, and government. The DAHP has already been working with NGOs to standardise training curriculums and issue official licenses for VLAs. The legitimisation of the individual VLAs and their professional organisations can be further enhanced by standardising the practice of using VLAs to implement periodic vaccination campaigns, gather census data about livestock populations, and to serve as the frontline surveillance of infectious animal diseases.

With the right amount of resources, the VLA associations can also directly contract with government technicians to provide ongoing training opportunities. This type of cooperation is already evident in some areas where NGOs contract with government technicians to provide ongoing training for the VLAs they have supported. NGOs should also be prepared to provide ongoing technical and organisational support for the VLA associations for extended periods of time.

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Rural Poverty and the Use of Natural Resources

C H A P T E R (6)

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Rural Poverty and the Use of Natural Resources¹

C H A P T E R (6)

6.1. Introduction

This chapter examines data from a number of recent comprehensive surveys in order to develop a current state of the art view of linkages between poverty and the use of common property resources (CPR) in Cambodia.

Rural poverty in Cambodia has been described recently in a number of studies. At the national level, the World Bank (WB) poverty assessment (PA) analysed trends in urban and rural poverty between 1993/94 and 2004. The study was based on data from the Cambodian Socio-Economic Surveys (CSES) conducted by National Institute of Statistics (NIS) in these years, supplemented by data from the Moving Out of Poverty Study (MOPS) conducted by CDRI in 2004/05 as well as other studies. The PA was mainly quantitative and based its analyses on national poverty lines. Currently more qualitative data is being published in a Participatory Poverty Assessment of the Tonle Sap (PPA) conducted by CDRI in collaboration with the NIS and the Asian Development Bank. The PPA describes poverty from a local perspective and supplements the other more quantitative surveys by illustrating some of the constraints currently faced by poor people, thus adding a human face to the discussion. The analysis has been supplemented with data from CDRI's Natural Resources and Environment (NRE) Unit's ongoing research on the valuation of forest products. These analyses show that poverty is linked to the extraction of products from CPR in many ways. Nationally, higher poverty rates are observed for rural households mainly engaged in forestry or fishing activities, indicating the importance of access to CPR for rural people. Within villages, poor households are more dependent on CPR products to maintain their livelihoods, but they tend to benefit less than better off households in absolute income derived from these resources. Poor households face various obstacles to improving their livelihoods from extractive activities, and some of the underlying causes are described, based on the PPA.

6.2. Methodology

6.2.1. Description of Studies/Surveys

This chapter is based on analysis of data from recent quantitative and qualitative surveys related to poverty and natural resources in Cambodia conducted by CDRI and the NIS. The quantitative data are derived from studies of different scales to cover both overall and in-depth issues. It should be noted that the reliability of the data analysis depends on the methodology used in the survey, and the validity of scaling up results depends on the sample frame. National surveys have been used to outline overall national trends, whereas studies of smaller scale have been used to illustrate local links between poverty and CPR. The qualitative data have been used to provide context and texture to the quantitative findings by exemplifying some of the problems local people face in everyday life.

¹ The authors wish to thank Mr Khlok Bottra for his assistance in statistical analysis of micro data from the Cambodia Socio-Economic Survey (CSES) and Moving Out of Poverty Study (MOPS).

6.2.1.1. Cambodia Socio-Economic Survey (CSES) 2003/04 Database

Overall quantifiable linkages have been analysed based on data collected in the national 2003/04 CSES conducted by the NIS. The CSES covered around 15,000 households over the entire country and is geographically the most comprehensive survey discussed in this chapter. The scale and purpose of the study, however, provide limited scope for specific analysis of links between CPR and poverty, and these kinds of CSES data should be interpreted with caution. CSES data have, therefore, mainly been used to present national averages of rural poverty and to examine simple overall links between poverty and CPR use. Data from both 2003 and 2004 have been used in the analyses in this chapter. Results will, therefore, be slightly different from the findings presented in the 2006 WB PA, which used only 2004 data. Poverty analyses in this chapter using data from the CSES are based on a national poverty line for rural areas of 1753 riels per capita per day.

6.2.1.2. Moving Out of Poverty Study by CDRI

The MOPS, conducted by CDRI in collaboration with the WB in 2004/2005, was designed to supplement data from the 2003/04 CSES in the 2005 WB PA. The survey included data from 1005 households in nine villages in seven provinces covering the four main agro-ecological regions in Cambodia. The survey focused on changes in rural livelihoods and included specific data on CPR. MOPS data have therefore been used to verify and triangulate national trends found in the CSES data analysis, as well as to analyse more specific linkages between poverty and CPR. To be able to compare data, the poverty analysis of MOPS data was based on the same national rural poverty line used in the CSES analysis.

6.2.1.3. Participatory Poverty Assessment by CDRI

The PPA conducted by CDRI was a qualitative study based on Focus Group Discussions (FGDs) and household interviews in 24 villages around the Tonle Sap Lake. It focused on the livelihoods of rural households and covered many aspects of poverty from a rural perspective. The survey included specific data on fisheries and forestry. It has been used to supplement quantitative data in other studies and to illustrate some of the problems currently faced by poor people. The study has been used to analyse some of the underlying causes of rural poverty and the linkages between poverty and CPR. The poverty analysis was based on local indicators of wealth, separating households into well-off, medium, poor and destitute households. To distinguish between poor and non-poor households, well-off and medium households were assumed to be non-poor.

6.2.1.4. Ongoing Research at the NRE Programme of CDRI

The ongoing research in CDRI's NRE Programme is focused on 16 communities located adjacent to forest resources in four provinces (Pursat, Kompong Thom, Kratie and Mondolkiri). The quantitative data collected from a total of 502 households were specifically focused on assessing total livelihood value obtained from forests and other activities. The data, however, are not valid nationwide due to the limited sample frame and provide specific insight into linkages between forest CPR and poverty only in areas adjacent to forests. The study has therefore mainly been used to examine the importance of forest resources to forest-dependent communities. The poverty analysis was based on local indicators of wealth, separating households into medium and poor households. To distinguish between poor and non-poor households, medium households were assumed to be non-poor.

6.2.1.5. WB Poverty Assessment 2006

The WB PA drew on 2004 data from the CSES, MOPS, and other studies. The study covered the entire country, including both urban and rural areas. The main results were used to analyse overall poverty trends in Cambodia and the linkages between rural poverty and common property resources. The poverty analysis in the study was based on a national poverty line for daily consumption.

6.2.1.6. Poverty Definitions in Studies

When analysing linkages between poverty and natural resources, it is important to note that the studies used in this review employ different definitions of poverty, as shown in Table 6.1. The large surveys such as the CSES and MOPS have been analysed based on a national poverty line, whereas the PPA and the ongoing research in the NRE Unit of CDRI use participatory assessments based on locally defined indicators of wealth. Poor households are not directly comparable between studies, but it is still possible to analyse links between natural resources and different socio-economic groups in a given study.

Poor households in this chapter are defined as the poorest segment(s) of the population in a given sample frame. Depending on poverty definitions in the study, data have been analysed separately for poor and non-poor households.

Table 6.1: Summary of Methodology and Poverty Definitions in the Studies Included in the Analysis

Study	Data type	Methodology	Sampling frame	Poverty definitions
WB Poverty Assessment	Qualitative and quantitative	Based on data from CSES 1993/94 and 2004 by NIS, as well as data from MOPS and PPA.	See other studies for details. Trend based on national surveys in 1993/94 and 2004.	Poverty lines based on daily consumption per capita: Phnom Penh: 2351 riels; Other Urban: 1952 riels; Rural Areas: 1753 riels
Moving Out of Poverty Study by CDRI/WB	Quantitative and qualitative	Mainly based on questionnaire survey and focus group interviews. To analyse the trend in poverty, socio-economic data was collected from the same households in 2001 and 2004.	7 provinces 9 villages 1005 households 39% sample intensity	Poverty defined by well-being rankings based on locally defined indicators of wealth. Five groups: rich, better off, medium, poor and destitute.
Participatory Poverty Assessment by CDRI/NIS/Asian Development Bank	Qualitative	Focus group discussions. Individual household interviews. Comprehensive in-depth qualitative data on rural livelihoods.	6 provinces 24 villages	Poverty defined by well-being rankings based on local indicators of wealth. Four groups: well-off, medium, poor and destitute.

CSES database 2003/04 by NIS	Quantitative and socio-economic indicators	Based on one-year recall data collected over 15 months. Focused on socio-economic indicators including little information on rural livelihoods	National survey 867 villages 15,000 households	Poverty based on poverty lines for daily consumption. Defined as 1753 riels/capita for rural areas.
CDRI-NRE study	Quantitative and qualitative	Questionnaire survey, participatory economic valuation, price surveys and focus group interviews	4 provinces 16 villages 502 households	Poverty based on participatory assessment by village focus groups. Two groups: medium and poor.

6.3. National Trends in Poverty Linkages with Rural Income Sources

6.3.1. Poverty Trends in WB Poverty Assessment

The World Bank analysed the 2004 CSES data in its 2006 Poverty Assessment. The 2004 CSES showed that 35 percent of Cambodians lived below the national poverty line; i.e. their daily consumption was less than 2351 riels in Phnom Penh, less than 1952 riels in other urban areas and less than 1753 riels in rural areas. The assessment also showed that in 2004, 91 percent of poor Cambodians lived in rural areas and that the highest poverty rates were in remote rural areas with limited access to roads, markets and basic services. When analysing the trend, the PA found that poverty had been reduced by 1.1 percent annually between 1993/94 and 2004. The per annum rate of poverty reduction, however, was modest compared to other countries recovering from conflicts during the 1990s.

An important observation from the PA was that while poverty has decreased overall, inequality has increased simultaneously. The Gini coefficient in 2004 was 0.42, making Cambodia one of the more unequal countries in the region. Poverty reduction has been most effective in urban areas, while the gap between rural and urban poverty has increased. Poverty in Cambodia is becoming a rural problem, which has been reflected in the new National Strategic Development Plan 2006–2010 (RGC 2006).

Further, the PA concluded that at the current rate of reduction, Cambodia will not achieve its Millennium Development Goals (MDGs) of halving poverty by 2015. The PA suggested that more pro-poor rural development strategies are needed to increase the poverty reduction rate. One of the main elements for achieving Cambodia's goals in poverty reduction was identified as pro-poor agricultural development, along with equitable access to CPR, which is of special importance to vulnerable groups in rural areas. The following section of this chapter attempts to strengthen the current understanding of linkages between CPR and rural poverty, as well to outline the importance of improving the management of CPR to enhance the contribution of natural resources to rural poverty reduction strategies.

6.3.2. Linkages between Poverty and Rural Income Sources in the CSES

This section examines the linkages between income activities and rural poverty in the CSES data. The main poverty indicators have been analysed according to households' main income sources in Table 6.2.

Table 6.2: Distribution of Rural Poverty in Cambodia by Main Source of Income

Main income source	Poverty rate (%)	Gini coefficient (%)
Rice and crops	40.5	34.0
Livestock	37.5	33.9
Fish	44.7	32.4
Forest resources	45.8	33.5
TOTAL	39.2	33.9

Source: analysis of 2003/04 CSES data from NIS (2004)

The analysis shows that the poverty rate for households whose main income source is forest resources is 45.8 percent, while the poverty rate for fishery households is 44.7 percent. This should be compared to an average rural poverty rate of 39.2 percent in the survey. This shows that households that rely primarily on forest resources or fishing as their main income source are generally poorer than households that rely mainly on animal husbandry or farming.

The Gini coefficient has also been calculated for each income group to reveal differences within main income source groups in the CSES. The higher the Gini coefficient, the more inequality. Households primarily engaged in extraction of products from CPR are not significantly different from other income groups in terms of inequality.

6.3.3. Linkages between Poverty and Rural Income Sources in MOPS

To verify the trends found in the CSES data, similar analyses have been conducted for the MOPS data. The links between poverty and main income sources have been analysed in Table 6.3.

Table 6.3: Poverty Indicators by Main Income Source in MOPS

Main income source	Population share in sample (%)	Poverty rate (%)
Crops and animals	27.0	40.4
Self-employment	17.9	31.5
Wages	27.4	53.4
CPR	22.7	55.2
Others	5.0	26.0
TOTAL	100.0	45.0

Source: analysis of 2004/05 MOPS data from CDRI (forthcoming-a)

The income source categories used in the MOPS are slightly different from the CSES categories because forests and fisheries are both represented in the CPR category. The analysis shows that the highest poverty rates were found for households relying on CPR or wages as their main income source. The poverty rate of the CPR group was around 55 percent, compared to an average of 45 percent for all households in the study.

It should also be noted that the poverty rate for CPR in MOPS was higher than in the CSES analysis (55 vs. 44 and 46 percent). This may be due to differences in methodology and a more pro-poor sample frame used in the MOPS. Nevertheless, there is consistency between the two surveys since both analyses show that extraction of products from CPR is a livelihood strategy especially important for poor households.

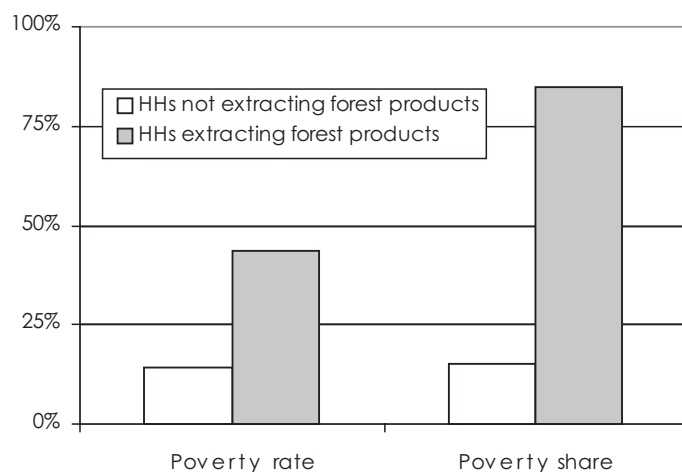
To sum up, analyses of CSES and MOPS data show that the poverty rates among households relying on forest and fishery CPR are higher than for rural households relying on other income sources. These results point to the importance of forests and fisheries for poor households nationwide. The next sections will take a closer look at more specific linkages between poverty, forests and fisheries from both quantitative and qualitative studies.

6.4. Forests, Poverty and Rural Livelihoods

6.4.1. Extraction of Forest Products and Linkages to Poverty in CSES

In Figure 6.1, the linkages between poverty and forest extraction have been analysed based on CSES data. The analysis shows that there is a much higher poverty rate (referred to as poverty headcount) among households extracting forest products (44 percent vs. 14 percent for rural households not extracting forest products).

Figure 6.1: Links between Poverty and Forest Product Extraction



Source: 2003/04 CSES data from NIS (2004).

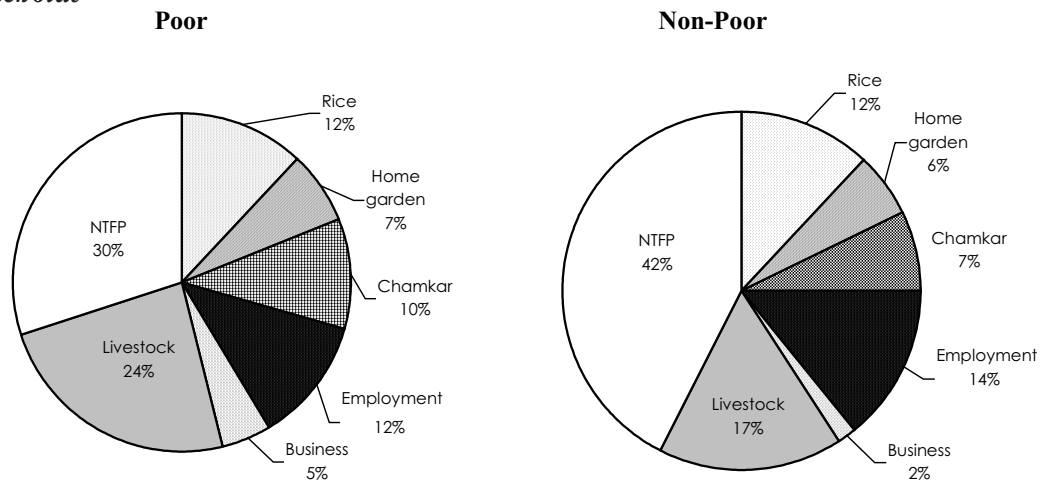
The analysis shows that around 85 percent of rural poor are forest product extractors, and this supports the general statement that forests are an important safety net for the poorest people in rural areas. On the other hand, it does not reveal much about how they are linked or the trends in poverty and availability of forest products. Some of these links are examined in more depth in the following sections.

6.4.2. Total Livelihood Value of NTFP Collection in NRE Study

This section draws on the findings of CDRI's research on total economic valuation of forest resources. As noted earlier, the sample frame was communities in four provinces living adjacent to forest resources, and the results are therefore mainly relevant to similar forest-dependent communities. Data from the questionnaire survey have been analysed separately for different socio-economic groups in order to identify links between poverty and natural resources. The study separated households into medium and low income, referred to as poor and non-poor in this chapter.

The relative value of livelihood activities is shown in Figure 6.2. The findings show that poor households generate 42 percent of their total income (cash and non-cash) from forest resources, whereas non-poor households generate 30 percent from forest resources.

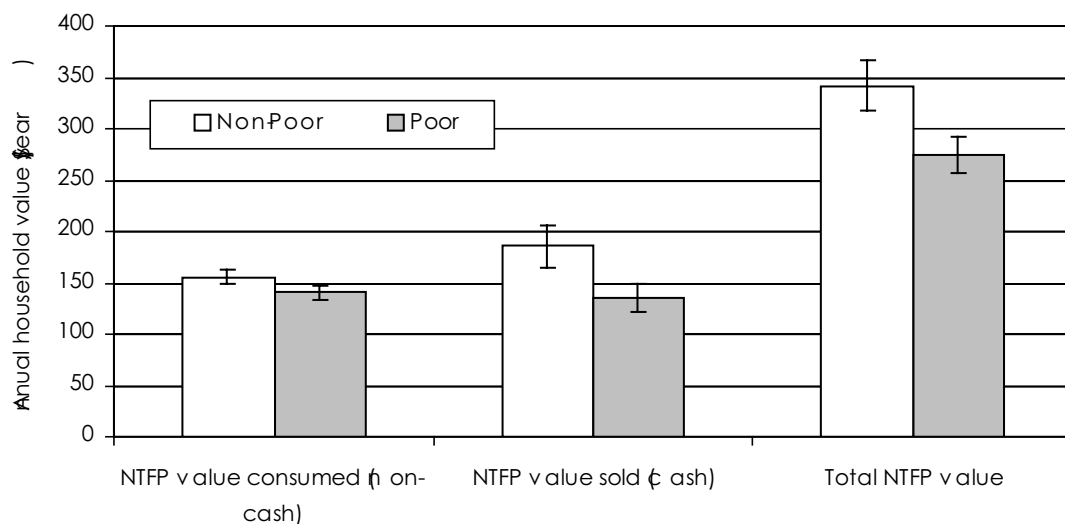
Figure 6.2: Total Livelihood Value of Different Activities for Poor and Non-Poor Households



Source: 2005 NRE data from CDRI (forthcoming-b).

The average absolute cash and non-cash livelihood value of poor and non-poor households is presented in Figure 6.3.

Figure 6.3: Cash and Non-Cash Value of NTFP Collection for Poor and Non-Poor Household

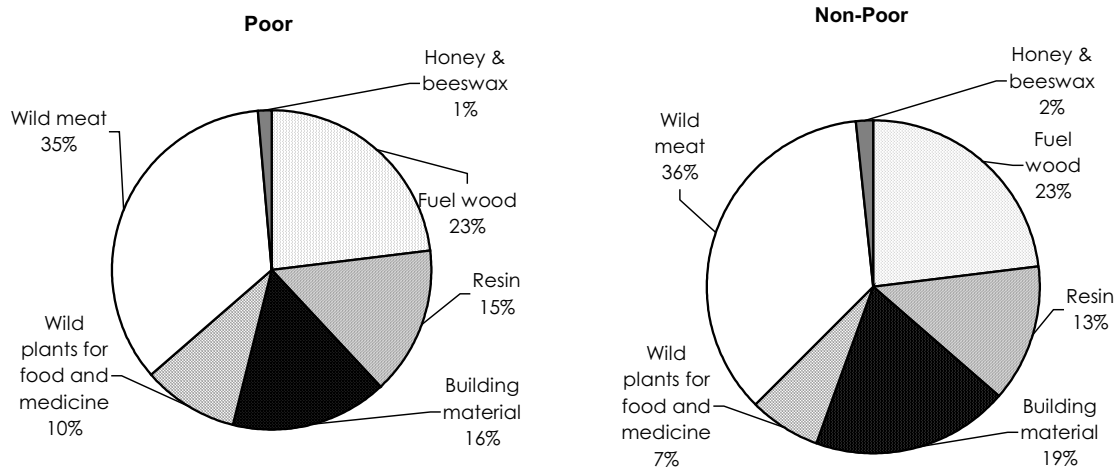


Source: 2005 NRE data from CDRI (forthcoming-b)

The analysis shows that non-poor households consume and sell more NTFP than poor households. The total absolute livelihood value of NTFP collection is larger for non-poor household (USD345 vs. USD280 annually), but this amount is relatively less significant for non-poor households' livelihoods (30 percent vs. 42 percent).

The main product categories collected from common property forest areas are shown in Figure 6.4.

Figure 6.4: Relative Value of Forest Products (Cash and Non-Cash) for Poor and Non-Poor Households



Source: 2005 NRE data from CDRI (forthcoming-b)

The analysis shows that the relative value of forest product collection is similar for poor and non-poor households. Main products collected by households were categorised into wild meat, honey and beeswax, fuel wood, building materials, resins and wild plants for food and medicine. Figure 6.4 shows that forest foods (wild meat and plants) and medicinal plants are especially important for maintaining health, and that forest building materials represent important physical capital. A general trend not revealed in the figure was that medium households on average gained most income from all categories except wild plants for food and medicine. This is consistent with the findings in the PPA (see below) showing that medicinal plants are especially important for poor households, which often cannot afford to buy pharmaceuticals.

To sum up the NRE results, the total livelihood value of NTFP is significant for both poor and non-poor households in rural areas. Poor households obtain less livelihood income from NTFP collection in absolute terms, but relatively this amount is more significant to them. It is also notable that forest resources are linked to rural poverty not only as a safety net for the poor, but also as a significant income source, providing an average annual cash income of USD137 and USD188 for poor and non-poor households, respectively. These results show that NTFP add diversification and resilience to poor and non-poor livelihoods, but as a whole they are most important for the less diversified and more vulnerable poor households.

6.4.3. Forests and Rural Livelihoods in the PPA

To support the quantitative findings presented above, the importance of forest resources has been analysed in the PPA study. The findings of the PPA draw on focus group discussions (FGD) and individual household interviews from 24 villages in six provinces around the Tonle Sap Lake. Forest and poverty issues were examined in data from four villages adjacent to forests, and the most relevant information is presented as citations or case study boxes in the following sections. This section builds on the NRE team's contribution to the PPA, and some of the content may therefore be similar to sections in the PPA/CDRI (forthcoming).

One of the main findings in the PPA was that all four forest villages perceived natural resources to be increasingly degraded. Despite consistent reports of a decline in and degradation of forest resources, they nevertheless continue to play a crucial role in supporting rural livelihoods. The importance of forests is, for example, illustrated in the following statement by villagers from Siem Reap:

“Forests are very important in supporting our lives. We build our houses using them and make a living by selling them. Now there are no more left and we hardly have enough wood for making our shelters because of the destruction of our forests. Since our forests have been destroyed, rainfall has been lacking, creating drought, or there are floods. We do not have enough water for our rice fields, or even for drinking, during the dry season; we have to go very far from the village to collect water.” Source: FGD of males in Kambor village, Siem Reap.

Not only do forests play an important role as a safety net for rural populations in cases of calamities such as floods, droughts or a death in the family, but they also supply a large part of the rural population with important products and daily services. In the following paragraphs, the most important categories of forest products are described briefly based on the PPA findings.

Fuel Wood

Firewood collection and charcoal production are the two most important wood energy activities in the PPA forest villages. In general, all villagers in the PPA forest villages collect firewood for their own use, while some of the better off households have turned to buying firewood from poorer people who earn a supplemental income by collecting wood in the forest.

The importance of firewood for sale can be illustrated by villagers in Pursat who reported that firewood collection for cash sales became important only after the droughts experienced since 2000. A general trend is that the poor or destitute earn less than better off households from firewood collection because they must carry the wood on their heads since they do not own oxcarts. Poor villagers therefore earn only between 1000 and 2000 riels per day collecting firewood, as opposed to 3000 to 5000 riels per day for better off households:

“We collect firewood by borrowing an oxcart or bicycle from other villagers in the better-off category, but we have to share around 50 percent of the total profit with the oxcart or bicycle owner; otherwise, sometimes we bring them things or pay by labour in transplanting or harvesting for them.” Source: Wood cutting FGD, Khla Kropeu village, Pursat.

Firewood collection and sales seem to take place within the villages, and only to a limited extent do people carry firewood longer distances to sell at markets because prices are relatively low and transportation costs time and energy.

In some villages, charcoal production was identified as an important source of income. An interesting example of the importance of charcoal production comes from a village in Pursat. Villagers reported that charcoal kilns are constructed in the forest close to where the trees are cut down. The kilns are usually 5 metres in diameter and 2.5 metres high. The cost of making a kiln totals 170,000 riels (50,000 riels for soil work, 70,000 riels for wood cutting and 50,000 riels for transporting the wood). This kiln size can hold up to 15 oxcarts of wood and produce six oxcarts of charcoal, equal to 3 tonnes. The kiln owners are usually in the better off or medium income categories and normally hire workers from poor or destitute households to do the earth work, cut firewood, load firewood into the kiln and bring the charcoal out of the kiln. The charcoal

kiln workers are paid 2,500 riels a day. The situation of poor households engaged in charcoal production is illustrated in this citation:

“We have no money for making a charcoal kiln; we just sell labour for the medium households in charcoal processing, including making the kiln and cutting wood.” Source: Wood cutting FGD, Khla Kropen village, Pursat.

The quotation illustrates that poor households often are constrained by a lack of financial and physical assets to invest in production and/or to transport products to markets. The poor households’ income from forest products therefore often depends on better off households, who tend to obtain most of the benefits.

Logging

Another important income source for all forest villages in the PPA is logging. An important factor in the ability of villagers to earn income from logging is their equipment, such as oxcarts, chainsaws and axes.

Generally, only the medium or rich households own chainsaws, while the poor and destitute use axes, adzes or even knives to cut trees. Further, some destitute households do not have enough food to allow them to leave the village for long enough periods to cut down trees, which takes several days. This means that the potential for poor and destitute households to earn a living from logging is severely restricted and often depends on working as day labourers for other, wealthier villagers or outside businessmen. This is, for example, expressed by villagers in Siem Reap:

“I have seen that the poor and destitute receive very little income from their work of forest cutting, but traders or powerful men, who work less, earn much more from this resource. The poor and destitute can only sell their labour to cut wood or move wood out of the forest. They have no money to buy material, and those who can afford to buy axes still have no money for transport and official fees on the way. They just cut wood to sell on the spot very cheaply.” Source: Commune workshop in Kambor village, Siem Reap.

Another constraint on poor and destitute households is a lack of means of transport. The poor and destitute often fell and process timber in the forest and then sell it directly to better off villagers, who subsequently transport the logs either to sawmills or to other markets for resale.

Outsiders also play an important role in the logging activities reported in the PPA survey. Generally, an increasing numbers of outsiders have been logging in the forests, as explained here:

“Many people have arrived here since 2001. Outside people with chainsaws and sawmills started to come into this village for the timber business. Big trucks transported logs non-stop all year round in 2002. Hundreds of oxcarts were sent from various areas of the upstream villages to move logs from here to Dam Daek, Siem Reap. Now as you see, it is quiet because there is no more good wood for their furniture.” Source: FGD of poor men in Kambor village, Siem Reap.

Wild Plants, Animals, Resins and Other Non-Timber Forest Products

Different kinds of NTFP are used and marketed by most villagers in the PPA forest villages. For example, in Khla Kropen village in Pursat, around 70 percent of all households collect vines for use as rope or string. When vines are sold in the market, villagers can earn 2000–3000 riels per day. Collection of other forest products, such as bamboo shoots, fruits and vegetables, and catching turtles, snakes and lizards are mostly carried out by poor and destitute households:

“After the droughts damaged rice cultivation, we started to collect wild vegetables, wildlife and firewood for daily consumption. NTFP can earn small amounts of income for our livelihoods.” Source: Poor women FGD, Khla Kropen village, Pursat.

In areas where there are more valuable products, such as Kambor village in Siem Reap, where edible spiders are found, the better off households are also involved in this form of NTFP collection. Similarly, in Santreae village in Pursat, only the destitute collect wild vegetables in the forest, while medium households collect resin and the valuable agarwood (from *Aquilaria* species). Both of these resources, however, are reported to have become increasingly scarce due to logging and over-exploitation. The number of villagers who still collect resin has declined drastically, as resources have become scarce. Resin is sold in the local market, and villagers can earn an average daily income of around 3,000 riels.

Another forest product that has a special importance for the very poor and destitute is medicinal plants. Whereas better off households can afford to visit the local health centre or a doctor when they are sick, destitute households often rely on traditional herbal medicines found in the forest. These medicines are collected from different plant parts and used for a huge variety of ailments. These findings are in line with the NRE study, and it seems that medicinal plants still play an important role in maintaining poor people's health.

6.4.3.1. Trade in Forest Products

Villagers in the PPA often market forest products, but at the same time they often report that they have disputes with local authorities when transporting their products. For example, the authorities seem to systematically extract informal fees from villagers when they transport wood from the forest to the market.

Although such problems of petty corruption are frequently reported, many villagers still transport wood and NTFP to local markets for cash income. The medium or better off households are better equipped with transportation and people to take their goods and products to market and to negotiate a higher price.

The better off households often invest the money earned from forest resources in livestock or buy rice for consumption. The poor and destitute generally earn a much smaller profit due to lack of transport and a weak bargaining position, and in most cases can only earn enough to buy rice or other food for immediate consumption. The poor and destitute rarely earn enough to invest in livestock, transport or farm implements that could enable them to increase their production.

“The price of logs in the forest is much lower than at the market. We sold the wood on the spot where we cut the tree down for 30,000 riels. If we could have taken that log to Kompong Kdei market, then we could have sold it for 140,000 riels. Because we don't have a cow and cart, we have no possibility of getting a better price.” Source: FGD of wood cutters in Kambor village, Siem Reap.

The above discussion suggests that infrastructure development (i.e. roads) is now playing both positive and negative roles in linking rural and urban markets, as well as providing entrepreneurs and migrants with improved information and mobility. For example, the renovation of National Road 6 between Kompong Cham, Phnom Penh and Siem Reap and associated rural tertiary roads is stimulating increased rural trade between villages and urban markets. As a result, rural traders are able more easily and more efficiently to meet the increasing demands of urban consumers for forest products.

6.4.3.2. Changes in Forest Resources: Effects and Adaptation

As is evident from the many discussions and testimonies from villagers, there have been significant changes in the natural resource base of all the villagers mentioned in this section. In general, forest resources have been severely degraded during the last two decades, and this degradation has affected the livelihood strategies of the villagers in a number of ways.

Khla Kropeu village represents an interesting example of how changes in forest resources have affected the villagers' lives.

Case Study: Deforestation in Khla Kropeu in Pursat

After the end of the Pol Pot regime, in the early 1980s, the village of Khla Kropeu still had plentiful natural resources, such as thick forests containing wild animals and high quality trees. The ponds and lakes were rich in plants and aquatic animals, such as fish, crocodiles, crabs, frogs, spiders, bamboo shoots and edible plants. People never lacked food.

From 1980 to 1990, Vietnamese soldiers entered Khla Kropeu village and made a camp in the forest on Tapang Mountain. They cut all the high quality timber in the mountain areas and transported it to Vietnam. The logging and transporting by Vietnamese soldiers lasted for 10 years (1980-1990). Consequently, the mountain was deforested and the large wild animals were killed or migrated to safer habitats.

Because of this deforestation, the villagers lost large amounts of quality wood and wild animals. The remaining forests, those not cut down by Vietnamese soldiers, were still being cut by outsiders as well as by the villagers themselves. The remaining wild animals in the forest were also hunted by them for food and for sale.

In the past, Prey Phnom (Forest Mountain) also had thick forest like Tapang Mountain. Nevertheless, starting from 1997, villagers, outsiders and high-ranking people from far away deforested this mountain as well. When the logging started, there was no authority controlling the forest or preventing illegal activities. Consequently, Prey Phnom was severely deforested and only a fraction of the forest was left by 2000.

Between 2000 and 2005, people in the village earned little from rice cultivation because of severe droughts. As a result, many villagers and outsiders entered the forest to cut trees and find firewood for sale. This significant increase in the number of woodcutters put too much pressure on the forest, and the remaining trees were completely cleared.

Consequently, Khla Kropeu villagers are facing a lack of trees and wildlife. The ponds and lakes, which previously contained plenty of water, plants and aquatic animals, have become dry, and the animals have died.

Source: PPA Village report, Khla Kropeu Village, Pursat.

This illustrates how important forest resources are in times of hardship as well as the lack of mechanisms to exclude outsiders from harvesting the resources. The case also illustrates how most of the economic benefits have gone to powerful outsiders, whereas the local villagers now bear the costs in terms of degraded forests and lack of alternatives when agricultural production fails. These are important issues to address if the management of forest resources is to contribute more to the government's MDGs for poverty reduction.

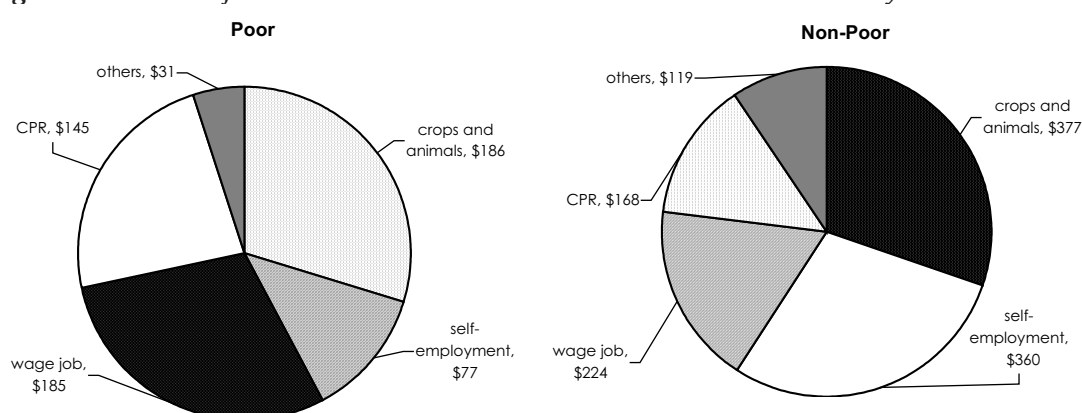
6.5. Fisheries, Poverty and Rural Livelihoods

6.5.1. Income and Fisheries in MOPS

This section takes a closer look at the link between natural resources and livelihoods, based on data from the MOPS. Income categories include crops and animals, self-employment, wages, CPR and others. Crops and animals include income from livestock, poultry, rice and other crops harvested from cultivated land (farm, chamkar and home gardens). Self-employment includes palm juice collection and petty trade. Wages are income from the hiring out of labour. CPR include fishing, hunting, collection of forest foods and other NTFP. The others category refers to land rental, remittances and interest.

The income from different activities by poverty groups is given in Figure 6.5.

Figure 6.5: Income for Poor and Non-Poor Households in the MOPS Study



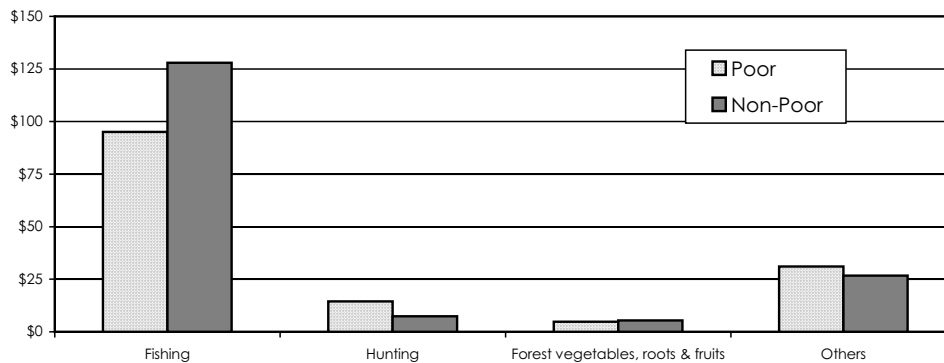
Source: 2004/05 MOPS data from CDRI (forthcoming-a)

As shown in Figure 6.5, most income is derived from crops and animals, which contribute about 30 percent of total income for both poor and non-poor households. The share of CPR income is 25 percent for poor households, compared to 15 percent for non-poor households. This underlines the relative importance of CPR to poor households.

If the absolute livelihood value of CPR income is compared between poor and non-poor households, it is notable that non-poor households derive USD168/year on average, whereas poor households average USD145/year. This is consistent with the findings of the NRE study, in which the same patterns were found for NTFP income, and it suggests a general link between poverty and CPR.

The findings in the MOPS differ from the NRE study in that fishing was the main source of CPR income in the MOPS. The absolute value of income from different CPR is presented in Figure 6.6. The analysis shows that the average income from fisheries equals USD95 and USD128 for poor and non-poor households, respectively.

Figure 6.6: Livelihood Income (Cash and Non-Cash) from Common Property Resources for Poor and Non-Poor Households



Source: 2004/5 MOPS data from CDRI (forthcoming-a)

The findings on income from fishing are consistent with the findings for forest products collection. It therefore seems to be a general trend that CPR are relatively more important for poor households, but non-poor households earn more in absolute terms. The next section examines some of the main marketing constraints faced by poor households depending on fishing as their main income activity.

6.5.2. Fisheries and Rural Livelihoods in PPA

To analyse the current situation for fishing communities, data were compiled from five fishing villages around the Tonle Sap in the PPA. The PPA found that for a large number of people in these villages, fishing is a main livelihood activity, supplying most of daily needs for food and providing a source of cash income, either through labour, direct fishing or other fishery-related activities. The present section focuses on those villages whose inhabitants are primarily dependent on fishing. Similar to the PPA section on forestry, this section is based on the NRE Unit's contribution to the PPA study, and the text follows the findings presented in PPA/CDRI (forthcoming).

The livelihoods of the PPA villagers around the Tonle Sap Lake are very diverse and include a number of activities that are not directly related to fisheries, although the main occupation is fishing. In the following, the results of discussion with villagers on their use of resources and the relation between this use and the dynamics of poverty will be presented. The importance of fishing in these villages is described in the following citation:

"Most of our villagers make a living by fishing. Only a few rich households do not fish, but they do business by trading fish and providing credit to the poor. The size of the fishing gear used differs according to living standards and what each household can afford to buy." Source: FGD of men in Treay village, Siem Reap.

Fishing in the Tonle Sap Lake and surrounding lakes and streams is a natural source of food and cash income to the surrounding villages. Although poor and non-poor households both rely on fishing, there are significant differences in the way these households use and manage resources. The structure is very clear and is found in all the fishing villages included in the PPA study:

"We faced serious problems during low water between March and May because the area for fishing became very small and we do not have modern gear to catch fish. Then the fish yield was not enough to meet our daily need. We had to borrow money from business people or fish traders in the village for food and pay them

back when we have fish by giving them the fish at a cheaper price. We have problems when our children get sick and we have no money to pay for the treatment.” Source: FGD of poor and destitute women in Treay village, Siem Reap.

Fishing yields depend to a large degree on the equipment and methods used, and on where and how large an area in which one is able and allowed to fish. Because fishing tools and equipment, such as boats, nets and traps, are relatively expensive, an important distinction between the different income categories concerns their ability to purchase equipment by paying cash or taking loans, or by borrowing equipment in return for selling their catch to the lender at a reduced price (see section below on credit in fisheries).

“You cannot compare the equipment of the rich and the poor; it is totally different. Just by looking at our boats you can see the difference. We have only small rowing boats, they have boats with powerful engines. We borrow money from fish traders or shops to buy small traditional fishing gear, such as fish hooks, nets or materials to make bamboo traps. The rich can afford to buy big modern fishing gear with their own money.” Source: FGD of fishers in Treay village, Siem Reap.

The poor and destitute generally have fewer and smaller fishing implements than the medium and rich households, although in some villages the rich are predominantly involved in activities other than fishing, including retail shops, money lending or other trade.

Ownership of boats and engines is another very important difference between the destitute, poor, medium and rich households. The destitute villagers generally do not have boats, or if they have, they are only poor quality rowing boats. They also use the simplest and least productive equipment, such as gill nets and hooks. The poor also usually do not have motorboats, but tend to have more and better equipment such as cylinder traps and bush bundle traps:

“In my family, my husband fishes by using hooks and my two daughters fish by using bamboo cylinder traps and a net. We earn about 5000 to 10,000 riels per day in January to May and in June to December only 1000 to 2000 riels per day.” Source: Individual interview with poor household in Treay village, Siem Reap.

Apart from carrying out small-scale, and predominantly subsistence fishing, many destitute take jobs in fishing for the better off households, earning 2000 to 4000 riels per day. The situation is similar to that with forest products in that poor households often are dependent on better off households to earn income from CPR.

6.5.2.1. Trade in Fish

Access to markets and the trading of fish play a determining role in the distribution of fishing profits. The trade seems to function according to a complicated network of traders within the village and with other traders, as well as relying heavily on fixed prices for repayment of loans and credit. The widespread practice of selling fish to a creditor at a fixed lower price seems to be a key to the low earnings obtained by many of the poor and destitute households, who are forced to rent fishing equipment.

As mentioned above, a small informal credit market often functions within the village. These transactions usually involve food or small amounts of cash, which poor or destitute households borrow from better off neighbours in order to cover their most basic needs. These small loans are paid back, usually at a very high interest rate, either by working for the creditor or with cash.

A family that borrows 10,000 riels one day may be asked to pay back 11,000 the next day, and subsequently 1000 riels per day is added to the debt. Although these may seem like small amounts, they are quite significant for households living below the poverty line.

A much more significant and widespread form of credit is related to a system of “fish clients” or traders. Because most villagers, but particularly the destitute, are often unable to obtain loans from other sources, they are forced to borrow money or fishing equipment from the “fish clients”. These are usually fish traders within or outside the village. The transaction with poor and destitute households can be made either in cash or in borrowed fishing gear. Most often the repayment is made by selling the catch to the creditor at a fixed price, set by the creditor significantly lower than the market price. Depending on the kind of fish, the amount and how long the debt has been outstanding, the deficit compared to the market price may vary from 100 to 700 riels per kilogram. In some cases, traders or “clients” promote illegal fishing techniques, such as the use of electro-fishing gear and pumps for drying out small lakes, supplying poor or destitute households with these instruments for free in return for buying the catch at a lower-than-average price. This is a very destructive practice, capitalising on poor people’s need for subsistence and their legally protected right to access CPR.

“When we have fish, we have to sell to our creditors at 100–200 riels lower than the normal price, because we got money from them to buy fishing gear and food. Even when we go fishing far away in the lake and stay there for months, the creditors follow us in order to buy our fish. If we sell to others, they will sue us to pay back the loan or take back our fishing gear.” Source: FGD of fishers in Treay village, Siem Reap.

In the informal credit market, there are significant differences in the possibility of obtaining credit between the different income categories. The better off households often have no problem obtaining relatively large sums of money (up to 2 million riels), while the poor and the destitute report many more difficulties. Some may not be able to borrow money if they are considered too poor and therefore not able to repay.

Interest rates on private loans vary greatly and are difficult to calculate in the case of repayment by selling catch to the creditor at a fixed lower price. Interest rates on cash loans have been reported to be as high as 2 percent per day. These astronomic rates are applied only to small very short-term loans, but they still give an indication of the cost of local credit. For longer term loans, a lower, but still exorbitant, interest rate of 6 to 10 percent per month is applied, corresponding to a simple interest rate of 72 to 120 percent per year.

6.5.2.2. Changes in Fishery Resources: Effects and Adaptation

The PPA reports of declines in fishing resources were common and consistent in all fishing villages. All discussions revealed great concern about the rapid decline in the quantity of fish and the dwindling number of species found in the lake.

Households in the PPA reported decreases in the catch, or a need to increase their fishing intensity dramatically in order to sustain previous catch rates. The decline in fish resources is commonly attributed to a drastic increase in the number of fishers, as well as intensification of techniques and rampant use of illegal and destructive methods, such as electro-fishing, use of poison to “herd” fish into traps and use of very large nets with very small mesh.

In Treay village, for example, it was reported that the area of flooded forest has been severely degraded and diminished by an influx of outsiders cutting wood and hunting during recent years.

Furthermore, the illegal practice of creating brush parks² from tree branches has put severe pressure on forests, as well as blocking waterways. Later bans on cutting tree branches for brush parks caused people to use water convolvulus instead, which has been found to block waterways even more and reduce water quality over large areas.

Case Study: Decline in Fish and Flooded Forest Resources in Treay Village

The natural resources of Treay village include flooded forest, grassland, large and small lakes, rivers and canals with fish and many kinds of animals. These natural resources, however, have declined dramatically during the last five years because the fishing community has no ability to enforce its rules. It does not have enough financial resources and lacks a motorboat for patrolling and for locating offenders. Because the fishing community has poor administration, some of its members have tried to take advantage of offenders by asking for bribes instead of trying to stop them.

In the past, fish output was very high but now it has decreased. The main causes of the decline in fish productivity are increased numbers of fishers, the practice of pumping water out of lakes to catch fish, the use of electro-fishing gear and the use of several kinds of modern fishing gear, such as push engine nets, nets made of mosquito netting, brush parks and elaborate fishing traps between 1 and 3 km long. Many of these activities and equipment are illegal.

Since the government eliminated fishing lot No. 2 in 2001, the flooded forest has almost disappeared because many people from Puok district, Kralanh, Nokor Thom, and Chi Kraeng have come to catch fish and animals. In particular, during these last two years (2004–05), thousands of people came to the village by oxcart. People without ox carts enter the village by truck. In 2004, the number of private trucks was only 30, but they increased to 80 in 2005. The trucks transport people from the villages to the public fishing zone in the Tonle Sap River. Then they carry firewood and fish back to their villages. Thousand of people enter the forest to hunt animals and pump the water to catch fish. Sometimes they clear or burn the forest in order to take advantage of the natural resources.

Source: PPA Village report, Treay village, Siem Reap.

In general, observations from the PPA villages suggest that people report not only fewer fish, but also that they devote more time to fishing and that the intensity of their fishing, such as the size and quantity of fishing equipment, is increasing proportionally. This suggests that poor households are becoming increasingly vulnerable and points to the importance of including sustainable management of fisheries in national poverty reduction strategies.

6.6. The State of CPR and Management Issues

6.6.1. The State of CPR in the MOPS

The MOPS also surveyed local people's perceptions of changes in the availability of products from CPR between 1998 and 2004/05. The survey examined households' perceptions of changes

² Brush parks are common features of many tropical river fisheries. Branches of trees and bushes combined with floating vegetation are placed in shallow, sheltered water to attract fish.

in the availability of products collected from CPR. As seen in Table 6.4 a majority of households reported a decrease in the availability of nearly all products collected from CPR, suggesting serious depletion. Most households expressed concern about a dramatic decline in the availability of important CPR products, such as firewood, timber, fish, bamboo, wild animals and resin.

Table 6.4: Local Perceptions of Trends in Availability of CPR between 1998 and 2004/05 (Share of households)

CPR product	Dramatically increased	Slightly increased	Same	Slightly decreased	Dramatically decreased	Total
Firewood	0	1	22	26	51	100
Timber	0	1	4	9	86	100
Fish	0	1	1	15	83	100
Bamboo/canes	0	0	19	23	58	100
Animal grazing	1	3	42	29	25	100
Fruits/vegetables	1	9	27	33	30	100
Wild animals	0	0	2	9	89	100
Birds	1	1	6	26	66	100
Snails, crabs and oysters	8	7	20	37	28	100
Insects	0	2	8	43	47	100
Frogs	0	2	12	33	53	100
Mice	35	24	24	15	2	100
Resin	0	1	2	19	78	100
Materials for mats	1	7	29	26	37	100
Others	3	14	15	40	28	100

Source: 2004/05 MOPS data from CDRI (forthcoming-a)

These results are consistent with the findings of the PPA and the NRE Unit's own research, and it seems to be a general trend that local people perceive CPR as declining. At the same time, the PPA findings indicate that local communities are able only to a limited extent to benefit from natural resources and to transform natural capital into increased production to escape from poverty. There is an urgent need for the forestry and fishery sub-sectors to address these issues and focus on more pro-poor management approaches involving local people.

6.6.2. Current Management Situation of Forests and Fisheries

During the 1990s, central forest management in Cambodia was highly focused on timber production in large-scale concessions, with little consideration for local livelihoods. The system created many conflicts between concessionaires and communities depending on forests. As a result, one of Cambodia's major natural assets was degraded without making significant contributions to national development and poverty reduction (McKenney *et al.* 2004). The system was terminated in December 2001, when a moratorium on timber logging was declared. Since that time, most forests outside protected areas have been left in a management vacuum, and post-concession forests can be characterised as open access areas under increasing pressure for conversion by local farmers and large-scale land concessions. This situation is having serious negative impacts on forest resources and on the poorest segment of the rural population. To reduce poverty, there is an urgent need to develop and pilot new sustainable forest management models in which local rights to manage, protect and sell forest products are legally secured and recognised.

Steps towards such a model have slowly evolved in small ways through community forestry, which is currently much debated in relation to deconcentration and decentralisation. Community forestry includes a proposed partnership involving commune councils as forest managers (CDRI 2006). At the moment, however, only around 179,000 hectares of community forestry are recognised centrally (MAFF 2006), and areas of decentralised forest management are still negligible compared to concession areas not yet cancelled, which in November 2005 still covered around 2.7 million hectares (WB 2006b). Also, community forestry activities have been focused mainly in degraded areas where it is questionable whether expected benefits are sufficient to cover the local transaction costs of organising sustainable forest management (IFSR 2004). It needs to be a high priority of the government to create an enabling political and legal environment for decentralised units to function as forest managers, and to expand community forestry to more valuable forests to increase the contribution to rural poverty reduction.

Similarly to the forestry sub-sector, conflicts have been common in the fishing sub-sector. In 2000, the sub-sector underwent reform to reduce the number of conflicts and improve the access to fishery resources of small-scale fishers. The government then allocated over 56 percent of commercial fishing lot areas to local communities. In April 2006, there were about 440 community fisheries established across Cambodia, covering 0.54 million hectares, mostly around Tonle Sap Lake (Thay *et al.* 2005; Kurien 2006).

Even though the establishment of community fisheries in the Tonle Sap region is well under way, a number of serious legal, managerial and structural problems remain. An important issue that seems to recur in several locations is that areas released to local communities are often degraded and less productive, similar to the experience of community forestry. The PPA study found that the rapid growth of community fisheries since the 2000 reform, in some cases, has led to problems of local participation in the election of fishery leaders. Community fishery involves many villages that have historically utilised the fishing grounds as CPR under traditional arrangements. Usually, each village in the fishery community nominated representatives to vote for community fishery leaders and committees. This indirect election only partly represents the voices of the villagers, and as a result the leaders may not always be transparent and accountable to all community members. Some leaders of community fishery areas are reported to allow outsiders with illegal gear to fish within the community areas and collect fees that are not transferred to the community account. Some also allow the use of illegal methods, such as electro-fishing, if they are paid “commissions”. Other PPA villages report that their access to fishing areas has declined because of disputes over borders with neighbouring community fisheries and lack of management of areas that were supposed to be used for the fishing by local communities. Also, communities that do not live adjacent to the fishing grounds report being left out and subsequently denied access to the new community fisheries.

6.7. Conclusion

Poverty in Cambodia has recently been analysed in several studies. One of the main conclusions is that the gap between urban and rural poverty increased between 1993/94 and 2004. Poverty is therefore becoming a more processing rural problem. This study has compiled data from different studies and examined the linkages between rural poverty and common property resources to assess the importance of sustainable natural resource management in poverty reduction strategies in Cambodia.

Data analyses from the national 2003/04 CSES and the 2004/05 MOPS, covering seven provinces, show that households relying on CPR as their main income source have a higher poverty rate than

households relying on other activities. The analysis of data from the two surveys found poverty rates between 44 and 55 percent for CPR collectors, both numbers well above the average poverty rate found in the surveys. These results support a scaling up of local findings to describe the importance of CPR as a safety net for poor households.

The two main categories of CPR analysed in this chapter are forests and fisheries. The total livelihood value of forest products in communities living adjacent to forest resources was found to be USD280 and USD345 a year for poor and non-poor households, respectively. Similarly, annual income from fisheries in MOPS was USD95 for poor and USD128 for non-poor households. At the same time, both studies demonstrated that CPR income is relatively most important to poor households.

Some of the local constraints on poor people were identified in the Tonle Sap PPA. It found that poor households often lack the financial, physical and social capital needed to gain full benefits from markets. Often they do not have time to travel to collect products and/or cannot transport products to markets. Income from CPR is often just enough to buy rice, and poor households are not able to invest their CPR income in other activities. Often they have to sell their labour cheaply to better off households just to make a living. Non-poor households, on the other hand, are mainly engaged in the most profitable CPR activities and leave the more labour-intensive low income activities to the poor households. CPR are therefore especially important as a safety net for the poor.

The MOPS and Tonle Sap PPA found that local people perceive the availability of products from CPR to be declining drastically. Several factors seem to have contributed to this trend, including increased population pressure and urban demand for products. External actors also play a major role in degradation through illegal logging or by promoting destructive fishing methods. In the current situation, local communities have not been able to control interventions from outsiders, and their benefits have often been restricted to selling their labour, often very cheaply. There seems to be a trend that outsiders gain most of the profits because of market accessibility and powerful contacts, whereas local people bear most of the costs through less access to their safety net. These findings point to the importance of more pro-poor sustainable management of natural resources as one of the key issues in rural poverty reduction. For this to be realised, continued coordinated efforts by the government, donors and NGOs are needed to find suitable management models in which there is more accountability between the main actors involved in natural resource management.

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Labour Migration in Rural Livelihoods: Challenges and Opportunities

C H A P T E R (7)

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7.1. Introduction

This chapter is based on a review of three recent CDRI studies that focus on the dynamics of rural poverty. The three studies include the Moving Out of Poverty Study (MOPS) covering nine villages from seven provinces, the Participatory Poverty Assessment of the Tonle Sap (PPA) of 24 villages from six provinces around the Tonle Sap Lake, and the Reviewing Poverty Impact of Regional Economic Integration in the Greater Mekong Sub-Region (RETA) in 12 villages, six from Banteay Meanchey bordering Thailand and six from Svay Rieng bordering Vietnam. Although the specific focus of the CDRI studies was not migration, migration figured prominently in each one. The objective of this article is to consolidate some of the key findings concerning the linkages between labour migration, local development and poverty reduction in rural Cambodia.

There is an increasing volume of research on migration issues in Cambodia, with a focus on push and pull factors. Migration is largely viewed as the consequence of adjustments to the labour market that are shaped by disparities in development between rural and urban areas (Godfrey et al. 2001). The links between migration and poverty reduction are complex. For example, migration is seen as the result of poverty and lack of employment, or even as a factor contributing to poverty in rural and urban areas (Chan and So 1999). Some policy makers in developing countries view the flow of labour from rural to urban areas as a critical constraint on development and urbanisation, and therefore needs to be restricted or controlled. Relatively little attention has been given to the positive impacts of migration on local development and poverty reduction, even though this may be increasingly significant relative to other recent rural development initiatives.

Remittances from migrant workers to their families supplement rural incomes, increase consumption and household savings for investment in diversification of production and also boost the local economy (Laczko 2005). The impact of labour migration on rural development and poverty reduction is not only through remittances, but also through transferring technology, improving communications and building social networks for poverty reduction. The magnitude and impact of remittances on local development and poverty reduction in countries like Cambodia, however, has not been clearly understood, although their contribution is believed to be important.

In the short term, however, migration may also cause a shortage of labour in regions of origin and financial shortages for other investments, especially when family savings are used to finance migration. Furthermore, migration may involve high risks of exploitation and human trafficking in the absence of information and protection mechanisms. The potential benefits for employers are low wages as well as flexible and unregulated employment, which in turn place migrant workers at a disadvantage in terms of uncertain employment and in danger of exploitation (World Bank 2006). Trafficking, for example, is driven by the new wave of global and internal economic integration, which widens economic disparities. If such problems can be more effectively addressed, then the contribution of migration to development and poverty alleviation in both recipient areas and regions of origin will be maximised. Otherwise, migration will create heavy social burdens.

This chapter argues that push factors currently play a far more important role than pull factors in prompting people to migrate. Migration in rural Cambodia is a function of poverty. People are being forced to move rather than choosing to move, which means that migration is still a function of circumstance, not necessarily of choice. Labour migration can be a tool to alleviate poverty, but its impact has been limited, and perhaps it is not as powerful as suggested in some literature. As a result, this chapter also argues that labour migration should not be seen a long-term substitute for rural development.

The chapter is divided into six sections. Section 2 depicts general trends and characteristics of labour migration. Section 3 discusses the push factors prompting migration. Section 4 describes and analyses the impacts on poverty reduction and local development. Section 5 discusses risks and challenges faced by labour migrants. Section 6 concludes by summarising the main points and their policy implications.

7.2. Trends and Characteristics of Labour Migration

The MOPS, PPA and RETA, like other studies (Chan and So 1999; Godfrey et al. 2001; IOM 2005) consistently suggest that selling labour, including migration, has become a crucial alternative source of rural livelihoods and an important employment opportunity for the growing labour force in Cambodian rural areas. Traditionally, rural Cambodians often made extra income by selling labour in their own and neighbouring villages. Travelling greater distances for work has now become the norm, and has been on the rise, since the mid-1990s as a result of poverty, lack of employment opportunities and successive crop failures. The movement of labour can be divided into domestic migration and cross-border migration (CBM).

7.2.1. Domestic Migration

Domestic migration consists of two types—short and long distance. Short-distance migrants mainly engage in selling labour for agriculture in their own or adjacent villages. They are mostly women (Annex 1) and are often from very poor single-female-headed households. Because of concerns about personal security and many dependents to feed, they go in search of work during daytime and return home at night.

Long-distance migrants also work in agriculture, some as far away as along the Cambodian-Thailand border, or in fishing-related activities. They also travel to urban areas to find employment in garment factories or construction, which require longer stays at the work location. The involvement of young women in this group has increased in many villages over the last five years. It is important to observe, however, that it is almost impossible for the poor and destitute single-female-headed households, most of who have financial constraints and many dependents, to participate in such long-distance migration.

Most migrant workers are from poor households, with a few coming from medium income or destitute families. The rich rarely migrate because they already have the capacity to diversify their earnings, while the ability of destitute families to go out and search for work is heavily handicapped by financial constraints; leaving only members of the poor and medium income categories to migrate. The very poor are often trapped in unreliable and low-paid jobs available in areas near their village, while the long-distance migrants can earn a higher daily wage between 5000 and 10,000 riels a day (construction workers).

The general dynamic of the flow of rural-rural migration is from areas with high population density and/or degraded common property resources (CPR) to less populated areas where land is still available for legal or illegal conversion to cultivation, or to areas where there are non-farming employment opportunities. Rural-rural migration tends to concentrate in the Tonle Sap basin and along the Cambodia-Thailand border, where significant conversion of bush land, agricultural development and border integration and development have taken place since the mid-1990s. For example, the MOPS villages of Khsach Chi Ros and Dang Kdar have received an inflow of migrants from other parts of Cambodia for resettlement by converting flooded land or bush land to cultivation. Also, several people in the MOPS and PPA study villages have gone to work in rubber plantations in Kompong Cham province. The purposes of such migration are either for short-term employment or permanent resettlement.

Domestic migration is primarily seasonal, and villagers in land resource-based villages tend to migrate more than villagers in water resource-based villages. After completing their own cultivation, adult males and females from poor and medium income households leave their villages in search of work. Migrant workers mostly work in agricultural activities such as transplanting or harvesting or fishing (for rural-rural migration), in the construction and garment industries (for rural-urban migration). In fact, a remarkable seasonal migration to the Tonle Sap Lake for fishing and selling labour in fishing-related activities, collecting resources for sale or clearing flooded land for rural elites is still reported in Khsach Chiros, Kompong Thom province, and in some villages located on the shore of the Tonle Sap in Battambang province. This seasonal migration peaks in the dry season, from January to April.

Table 7.1: Garment Sector in Cambodia

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Jobs	18,703	24,015	51,578	79,131	96,574	122,644	188,061	210,440	233,969	245,598
Factories	20	24	67	129	152	190	186	188	197	206

Source: Council for Development of Cambodia (CDC May 2004), Ministry of Commerce, Garment Manufacturers Association of Cambodia and Customs and Excise Department

Domestically, rapid growth in the garment, construction and tourism industries, shown in Tables 7.1 and 7.2, are currently drawing labour from rural to urban areas. The boom in the garment industry on the outskirts of Phnom Penh has attracted 320,000 workers, mostly young female workers, to move from farming or fishing to work in the capital. Male migrants mostly work in construction that is booming in the larger cities across the country (e.g., Phnom Penh, Siem Reap).

Table 7.2: Employment in Construction and Tourism-Related Industry ('000)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Construction	27	38	54	48	83	70	84	120	153	195	234
Hotels and Restaurants	11	7	6	15	28	19	10	24	27	30	43

Source: International Monetary Fund (IMF 2006)

For domestic migratory workers, an average payment for one day of work in transplanting or harvesting is 4000 riels. The wages of construction workers vary based on their skills: an unskilled worker earns 5000 to 6000 riels per day, while a more skilled worker can earn 10,000 to 13,000 riels per day [CDRI (forthcoming-a), *Moving Out of Poverty Study (MOPS)*, CDRI (forthcoming-b), *Participatory Poverty Assessment of the Tonle Sap (PPA)*, CDRI (forthcoming-c) *Reviewing the Poverty Impact of Regional Economic Integration in the Greater Mekong Sub Region (RETA)*].

7.2.2. Cross-Border Migration

Cross-border migration has been an increasingly important source of household income in rural areas since the mid-1990s. The rapid regional economic integration and the high demand for unskilled labour in Thailand and Malaysia, and more recently Vietnam, have been the primary attraction for Cambodian migrant workers. At the same time, Cambodia receives migrant workers from Vietnam and China. Migration flows into and out of Cambodia have been characterised as “unskilled out-migrants” and “skilled or semi-skilled in-migrants” (Asian Migrant Centre 2003: 104; also see Godfrey et al. 2001).

The number of CBM workers is certainly increasing, although there are no exact figures as most workers are undocumented. According to Godfrey et al. (2001), Cambodia received about 1 million migrants from neighbouring countries in the late 1990s after achieving peace and political stability. At the same time, the number of Cambodian migrants to neighbouring countries also increased. The labour movement into and out of Cambodia contributes crucially to social and economic development and poverty reduction in the country.

Both men and women participated in this labour migration, but in varying numbers according to the destination. Migration to Thailand has been favoured more by men than women. It was observed, although without actual records of migrants from the study villages due to the different natures and objectives of the three studies, that females outnumbered male migrants to Malaysia in 2004. Those migrants were not poor but mostly from medium income households, which could afford the cost of the journey. No one from rich households in the study villages participated in selling labour or cross-border migration since they already had secure income from various occupations at home. In the three studies' villages, many rich households employed the poor to work for them in their businesses.

7.2.2.1 *Work and Wages for Cross-Border Migrants*

Migration to Thailand began in the early 1990s with a few returnees from the Cambodian-Thai border camps (Chan and So 1999; Godfrey et al. 2001). Cambodian migrant workers are mostly unskilled and receive low pay. They are employed in agricultural work such as spraying chemical pesticides, weeding, and harvesting rice, picking beans, and as housekeepers and servants; in light textile and garment work; and as unskilled construction workers (mostly men). A few become beggars. More than two-thirds of CBM are employed as daily wage earners, while less than one third are monthly salary earners (Table 3).

The more recent trend towards migration to Malaysia was spearheaded by the Khmer Muslim community and is likely to expand significantly in the future, although migration via Thailand to Malaysia is largely illegal (CDRI (forthcoming-b), *Participatory Poverty Assessment of the Tonle Sap (PPA)*). In Malaysia, Cambodian migrants, usually from medium income households and with some education, work in garment, electronic and glass factories. Many female migrants reported working as housekeepers.

According to the RETA study, the migration to Vietnam of Svay Rieng villagers is a more recent phenomenon, which began in early 2000. These migrants are mostly seasonal and sell labour for farming. They are from poor and medium income households. Both men and women migrate across borders, but men do so much more frequently.

Table 7.3: Types of Cross-Border Work (%)

Province	Self-employed	Daily wage earner	Monthly salary earner
Banteay Meanchey			
Formal Gate	0	90.1	9.9
Border & Informal Gates	2.9	89.1	8
Town & Urban	0	68	32
Remaining	0.8	74.4	24.7
Svay Rieng			
Formal Gate	0	87.4	12.6
Border & Informal Gates	2.4	76.9	20.7
Town & Urban	0	70.6	29.4
Remaining	0.8	75.7	23.5

Source: NIS survey, 2005

Cross-border migrants can be grouped into four types depending on the location of their work and the duration of their stay for work: border labour migrants, daily cross-border migrants, short-term labour migrants, and long-term labour migrants.

Border labour migrants are those who migrate to areas along the Thailand and Vietnam borders and work as porters, cart pullers, smugglers, construction workers and casino workers. They usually work in villages where a broad range of economic activities takes place, such as at international border gates. Smugglers can earn as much as USD2–10 per day,¹ while other cross-border migrants usually earn much less.

The daily wage for cross-border migrants is generally higher than for domestic migrants. Labourers can make up USD2 per day. Daily workers cross the border to nearby villages as agricultural labourers in exchange for wages of USD1–2 a day. They cross in the early morning and return in the evening via informal border gates or shortcuts. Information about jobs is received from either friends or employers when they visit villages in Cambodia. An unskilled Cambodian construction worker in Thailand can earn about 100 THB (or around 10,000 riels) a day (Annex 2)

Short-term migrants mostly go to work in Thailand for one or two months. Their most common occupations are car cleaners, domestic helpers, farm guards or in animal husbandry. To gain access to these jobs, most have to pay USD75 to a broker or agent who promises employment and arranges the risky trip to workplaces in Thailand through dense forest areas that hide them from the Thai authorities. They can usually earn USD2–4 a day.

Long-term migrants may spend from six months to two years working in Thailand. They typically work in agriculture, construction, animal husbandry and fishing, or as domestic helpers or shop assistants. They can earn USD60–150 per month and some can remit as much as USD100 to their families after several months of work. The majority are illegal migrants who do not possess passports because they are too expensive and the procedure is too complicated. When there is a demand for Cambodian migrant workers, a Thai employer contacts an agent to mobilize them.

¹ Exchange rate of one dollar for 3700 riels at Poipet or in other informal exchanges along Cambodian-Thailand border, while the Phnom Penh exchange rate is 4100 riels per dollar

7.3. Push Factors

Quantitative and qualitative data from the MOPS, PPA and RETA studies show that push factors so far heavily outweigh pull factors as the primary motivation prompting migration. These push factors include a high population growth rate, low productivity in agriculture, a series of crop failures from drought and floods over 2000-05, a growing landless underclass in the rural areas, the rapid decline of natural resources, especially timber and fish, and the gradual elimination of traditional rights to natural resources. These factors have generated acute pressure primarily on young men and women to leave their respective villages in search of work.

Poverty and employment conditions are the main determinants of migration, suggesting that push factors are the most significant aspect of people's decisions to migrate. For example, most of the poor migrants in the PPA study villages indicated they would prefer to stay and work in their village if they could earn enough to support their family and if there was enough development in the village. For this reason, little migration has been observed in fishing villages where fisheries resources are still abundant. Indeed, these areas attract seasonal migrants from other areas of the country.

Push factors alone, however, are not enough to generate labour migration, as migration is also facilitated by pull factors. While livelihood conditions in rural areas are largely responsible for pushing villagers out, relatively peaceful borders, combined with shortages of unskilled labour in Thailand, have generated the necessary demand for labour. The need for unskilled workers in those countries is much greater than the number of Cambodian migrants currently crossing the border. It is widely accepted that the potential better earning opportunities across the borders are a strong factor in stimulating CBM.

Table 7.4 presents an overview of local conditions and adult earners in the MOPS. The driving forces of both domestic and cross border migration are poverty, landlessness, a lack of earning opportunities at home, unequal regional development and urbanisation. Earning opportunities are significantly compromised by the depletion of natural resources, natural calamities such as floods and droughts and a decline in the time spent farming.

Table 7.4: Households Engaged in Selling Labour and Related Variables by Village, 2004-05

Villages	Households selling labour (%)	Poverty rate (%)	Landless (%)*	Average landholding (ha/hh)	Monetary loss in crises (000 riels per household)**	Households needing to buy rice for the whole year (%)
Andoung Trach	93	58	47	2.5	1891 (24)	46
Kanchor	90	47	25	0.9	1928 (27)	33
Krasang	88	27	60	2	3530 (19)	41
Trapeang Prei	86	62	20	1	2187 (25)	18
Dang Kdar	79	67	48	1.4	2002 (23)	9
Kompong Tnaot	78	31	20	0.6	1447 (15)	10
Ba Baong	65	32	12	1.9	2231 (20)	12
Khsach Chi Ros	58	73	30	2.5	2112 (46)	14
Prek Khmeng	54	27	20	1.4	2890 (35)	69

Source: CDR MOPS 1010 household survey in 2004-05

Note: * Percentage of landless households was taken from village leaders, not from the household data.

** Figure in bracket is the mean percentage of monetary loss of crises compared to the average total of household income.

7.3.1. Depletion of Natural Resources

According to the PPA study, the depletion of natural resources plays a key role in pushing people to search for jobs outside their home villages. The poorest villagers depend heavily on CPR, and the depletion of natural resources by excessive commercial exploitation threatens their livelihoods. For example, in agriculture-forestry villages, in addition to losing land, the poor and the destitute find it harder to venture into the forest to collect wood and forest by-products as their access has been restricted.

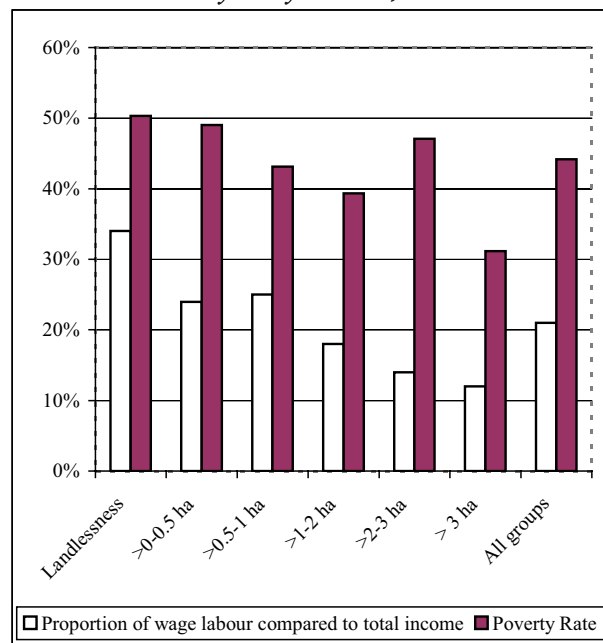
The poor and others have traditionally made a living or extra income from accessing CPR and from CPR-related employments. Such opportunities have become limited or restricted in all villages since the late 1990s. For example, in the MOPS villages of Prek Khmeng, the households selling labour increased from a very few in 2002–03 to 54 percent of households in 2004–05 following a sharp decline in fish stocks from 2003. About 27 percent of males and 19 percent of female earners went in search of work in different places in Kandal province and in Phnom Penh.

7.3.2. Landlessness and Near Landlessness

According to the PPA study, landlessness is another significant push factor in migration. In agricultural villages, land is being concentrated in the hands of rich households. The poor and the destitute are losing land when they use it as collateral and cannot repay a loan or when they sell land to cope with family shocks and crises, mostly related to health.

According to the MOPS, the landless and nearly landless households are more dependent on wage labour inside and outside the village of origin (Figure 7.1). The proportion of income from wage labour is highest for the landless, accounting for almost 35 percent of total household income in 2004 (1,305,000 riels per household). This proportion declines as size of landholding increases:

Figure 7.1: Percentage of income from wage labour and poverty rate by landholding size, from 1010 households surveyed by MOPS, 2004/5



Source: CDRI MOPS

incomes and the accumulation of savings. For landless and nearly landless households that suffer from food insecurity, migration has become the main livelihood pursuit, given the limited earning opportunities at home, whereas it serves to diversify income sources for medium level households with larger landholdings.

7.3.3. Floods, Droughts and Other Natural Calamities

In many of the PPA villages, natural calamities have also played an important role in pushing people out of their villages. In some agricultural villages where rice farming is the primary livelihood, people have been left with no choice other than migration when faced with floods and droughts that adversely affect rice production, in some cases for four or five years in succession.

Across all agricultural villages in the MOPS and PPA, droughts and floods have become more frequent since the mid-1990s. These have caused crop failures and pushed many farmers into severe debt, distress land sales and landlessness, so that they end up heavily dependent on selling labour. For example, in the past, villagers in the PPA village of Santreac PPA did not migrate to sell labour outside the village or in faraway places. They sold labour transplanting seedlings, harvesting rice and ploughing fields only in their own village. However, after experiencing five consecutive years of drought (2000–04) and after having learned that people in neighbouring villages (Kol Totueng and Leach) had migrated to work outside and brought money home, Santreac villagers decided to leave the village to find similar work (CDRI (forthcoming-b), *Participatory Poverty Assessment of the Tonle Sap (PPA)*).

Similarly, many villagers from the PPA village of Roka went to work in construction because at the time there was a drought, and there was also much hotel construction in Siem Reap province. Villagers in Khla Krapeu were also forced to migrate for the same reason when faced with acute food shortages as the consequence of drought for three consecutive years. Many villagers in other

from 24 percent for a landholding up to half a hectare of arable land to 12 percent for the large landholding group of 3 hectares or more. This pattern occurs in all the MOPS villages, except in Khsach Chi Ros, Prek Khmeng, Kanchor and Dang Kdar, where the majority of villagers are still heavily dependent on access to CPR.

Among the nine MOPS villages, the poverty rate is highest, averaging 51 percent, among landless households dependent upon selling labour, ranging from 38 percent in Prek Khmeng and Kompong Tnaot to 100 percent in Dang Kdar. The relationship between the gains from wage labour and poverty reduction, however, may not always be clear because poverty is the main impetus for migration. In rural areas, migration is a strategy to improve a family's ability to respond to shocks and crises, through diversification of

places, such as Balang of the MOPS, were also forced to migrate to work in the garment and construction industries because they could not produce enough income in their village.

7.3.4. Decline in Time Spent Farming

In the MOPS villages, where there is limited diversification and agriculture is dominated by rice, farming provided an average of only about three months employment in the crop year 2004–05. Farming is usually practised between mid-late May to November–December for wet season crops and December–January to March for dry season crops. Adult earners spent an average of three months in farming (Table 7.5). Except for Andoung Trach, where there is a larger than average landholding size, the duration that adults engaged in farming their own land in every village significantly decreased, averaging about five months in 2001 and three months in 2004–05. The decline of farming time is due to more adult family members available to help in farming, damage to wet season rice crops for the last four or five years, land fragmentation and farm mechanisation, particularly in the villages of Krasang and Ba Baong.

The decline of farming time has pushed the poor landless to become itinerant workers for longer periods of time. Among the MOPS villages, Kompong Tnaot and Andoung Trach, where traditional modes of cultivation are employed, still have the longest periods of farming of up to five months. The duration that adult earners spend on farming is between one and one and a half months in the mechanised agricultural village of Krasang, and up to about three months a year in other villages. This means that more time is available for adult farmers to supplement their income in alternative ways.

Table 7.5: Number of Months per Year That Adults (aged 15-54 years) Worked Own Farms, by Village, 2001 and 2004

Villages	Male		Female		Total	
	2001	2004	2001	2004	2001	2004
Andoung Trach	4.4	5.0	4.6	4.8	4.5	4.9
Krasang	3.7	1.4	4.0	1.4	3.9	1.4
Khsach Chiro	5.9	2.9	5.8	3.1	5.9	3.0
Prek Khmeng	3.4	2.6	3.2	2.4	3.3	2.5
Ba Baong	4.7	2.9	4.2	2.9	4.5	2.9
Kanchor	3.9	2.9	3.3	2.8	3.6	2.9
Dang Kdar	3.9	2.7	3.9	2.2	3.9	2.4
Trapeang Prei	6.8	2.6	6.4	2.6	6.6	2.6
Kompong Tnaot	6.3	4.8	6.2	4.9	6.2	4.9
All villages	4.7	3.1	4.6	3.1	4.7	3.1

Source: 2001 figures from Chan & Acharya 2002, p. 78 and 2004 figures from 1010 households surveyed in 2004–05

7.3.5. Facilitating Factors

The improved security situation in rural areas has facilitated migration. In the PPA village of Srei Ronguet, for example, migrant labour has been a significant occupation over the past 10 years and has now become the third main occupation after farming and fishing. There are now 80 families earning their living in this way, and among these, many families regard migration as their main source of livelihood. Ten years ago, there were only 25 families earning income from migration, of which 15 poor families regarded it as their main source of livelihood. At that time, wage labour was confined to transplanting rice seedlings and harvesting rice within the village and nearby, as Khmer

Rouge soldiers were still active in the region and roads were barely passable. Better infrastructure (e.g., roads) and communications (e.g., the use of mobile phones) have also all played a significant role in promoting migration.

7.4. Impacts on Poverty Reduction and Local Development

7.4.1. The Role of Wage Labour in Household Economic Mobility

Wage labour is part of a family strategy to diversify sources of income for the comfortably rich. It was as important as self-employment for the moderately poor in 2001 who progressed into wealth in 2005 (Annex 3).

The average household real income from selling labour and migration has increased dramatically, at least in the nine MOPS villages, by 57 percent between 2001 and 2004–05. There is a great deal of variation, however, ranging from 8 percent in Prek Khmeng, an agriculture-fishing village which started emigration in the early 2000s, to 143 percent in Dang Kdar, where a large majority of people relied on selling their labour to illegal processing enterprises operating there.

Some families have also used remittances from their migrant spouses or children to improve their housing—mostly reported by the medium income or better off households. Migration has enabled some families to move up from poor to medium living standards over the past 10 years. For example, one PPA interviewee reported that selling labour in Banteay Meanchey and on the Cambodian-Thailand border has made it possible for some households to have enough money to buy a TV, to buy pigs to raise and then to sell the pigs to buy a cow and to improve their housing.

According to the MOPS, between 2001 and 2004–05, 14 percent of households that remained moderately poor became more dependent on selling labour due to a remarkable decline of income from agriculture and CPR (Annex 3). Those falling into poverty and the chronically poor experienced similar patterns of income change. Although the proportion of adult earners in these three groups engaging in wage labour is almost twice that of the comfortably rich and not much different from other more mobile groups, the returns from wage labour were significantly smaller than in more mobile groups.

7.4.2. Better off Households Profit More from Migration

The chronically poor cannot travel as far as their better off neighbours in search of employment. They live from hand to mouth—working in farming or carrying earth for a maximum of about 5000 riels and returning to feed four or five dependents at home in the evening. Very often, they have to sell their labour to better-off neighbours in return for credit and receive only half payment for their work.

Furthermore, the financial constraints and weak social networks among the poor also disadvantage them in finding well-paid jobs elsewhere. The poor rarely experience the good fortune of being employed in construction for 6000–10,000 riels per day or in the garment industry for a monthly wage of USD50 unless they have savings or relatives or friends to support them.

In contrast, the better-off have stronger support networks, which at least provide timely information, helping to reduce the transaction costs of migration. This is obvious for upwardly mobile groups in the MOPS villages of Trapeang Prei, Andoung Trach, Krasang, Kanchor and Ba Baong, who can send their daughters to work in garment factories in Phnom Penh. In contrast,

adult earners in Prek Khmeng reported lower returns from emigration than other villages. Youths in the remote village of Dang Kdar are reluctant to go in search of work in Kompong Thom or Phnom Penh, preferring to sell labour for tree cutting or timber-processing in their area.

7.4.3. Offsetting Food Shortages and Monetary Losses

Migration is a new phenomenon for many communities and often begins when people start to face food shortages. The returns from migration are primarily used for offsetting food shortages, with little remaining for productive purposes. The poor landless and single-female-headed households most commonly fall into this category.

Table 6 shows the relative importance of income from domestic and cross-border migration compared to family crises and income from agriculture in the nine MOPS villages in 2004–05. These returns are higher than income from agriculture in Andoung Trach, Krasang, Kanchor, Trapeang Prei, Kompong Tnaot and Dang Kdar. This is because crop production, especially wet season rice crops, was badly affected by natural disasters.

For all the MOPS villages, the returns from wage labour could offset 41 percent of the total costs of family crises, ranging from 19 percent in Prek Khmeng to 96 percent in Kompong Tnaot. These returns more than offset the losses caused by natural disaster-related damage, except in Khsach Chiros and Prek Khmeng, where a lower percentage of households participated in selling labour. It is important to note that villagers in these two villages received increased access to fishing areas after 2000, when the government released some fishing lots. Poor villagers and single-female-headed households that have no male labour for fishing sell labour for both fish-processing and farming in the surrounding area.

Table 7.6: Wage Labour, Monetary Losses in Crises, Natural Disaster-Related Damage and Agricultural Income, by Village, 2004–05

Villages	Returns from wage labour	Average agricultural income	Total monetary loss in crises	Natural disaster-related damages	Returns from selling labour as proportion of total losses in crises
	('000 riel per household)				%
Andoung Trach	1,132	1,061	1,891	724	60
Krasang	2,094	1,813	3,530	1,829	59
Khsach Chiros	439	1,135	2,112	793	21
Prek Khmeng	553	593	2,890	629	19
Ba Baong	617	3,567	2,231	823	28
Kanchor	1,144	644	1,928	973	59
Dang Kdar	757	468	2,002	756	38
Trapeang Prei	1,671	555	2,187	951	76
Kompong Tnaot	1,387	689	1,447	342	96
All villages	1,125	1,215	2,762	1,220	41

Source: 1010 households surveyed in 2004–05 MOPS

7.4.4. Rural-Urban Migration and Livelihood Improvement

The MOPS village of Trapeang Prei is a typical village where livelihoods have improved from migration. This agricultural village located in Odongk district, Kompong Speu province, with poor-quality soil and lacking an irrigation system, is the only village that has received a significant impact from recent urban development as the village is close to Phnom Penh.

Emigration has become a predominant livelihood source since the late 1990s. Between October 2004 and March 2005, which was a high period of emigration, all female and 79 percent of adult male earners migrated. On average, each household earned 1.5 million riels from wage employment—the second highest figure, after Krasang, where each household earned about 2 million riels in 2004–05. Having good roads, Trapeang Prei villagers have been able to migrate farther to sell their labour, mostly in farming and excavating in the neighbouring villages of Kandal province, and in construction or garment factories in Phnom Penh. Migration has, as a result, become a determinant of livelihood improvement and poverty reduction in this community. The share of income from selling labour increased from 41 to almost 50 percent of the total household income between 2001 and 2004–05, the highest proportion among the villages studied.

A few women started migrating to Phnom Penh in the late 1990s. Later other women were convinced to follow as garment workers in either Phnom Penh or Baek Chan, on the outskirts of Phnom Penh. Almost every household now has one or two women aged 18–30 who have completed secondary schooling, or at least can read and write, employed as garment workers. They earn an average of USD60 a month and send some savings home.

Some village men aged 18–40, regardless of educational level, are employed as construction workers in Phnom Penh and other urban areas. A few are employed as company guards in Phnom Penh and earn USD30–50 a month. However, remittances from male migrants are not as significant as those from female migrants. In addition, male migrants are not usually employed as full-time garment workers. The availability of work for men is quite limited in Phnom Penh, and male migrants spend much time searching for employment.

Many households use remittances from their offspring or siblings to buy inputs for rice cultivation, to raise more pigs and cattle or to build or renovate a house. Without such opportunities, the villagers would not have been able to move up to their present living standard given the successive droughts or unreliable rainfall for the last few years. Trapeang Prei seems to be a village that has received a positive impact from recent urban development, as village livelihoods have greatly improved. The number of households living below the poverty line declined from 91 to 62 percent between 2001 and 2005.

7.4.5. Impacts of Cross-Border Migration on Community Development

In the MOPS village of Krasang, an agricultural village in Battambang province, the modernisation of agriculture has speeded up since the mid-1990s, when people began cross-border migration. The average household earned about 2 million riels from domestic and cross-border migration in 2004–05. Some farmers used remittances from their spouses or children to buy hand-tractors, pumps and/or chemical inputs to increase rice yields. The earnings of one adult migrant worker are now considered equivalent to one hectare of farmland in generating family food security.

In the MOPS village of Ba Baong, an agriculture-fishing village in Prey Veng province, besides offsetting food shortages or buying chemical farming inputs, other impacts of migration on livelihood have not yet been clearly seen. A few men who had travelled to Thailand in early 2000 introduced a new cropping technique to farmers, which encouraged changes in rice cultivation from transplanting to sowing seeds, which saves on labour. Also from experiences during migration, some male youths became convinced of the need for more crop diversification. However, this initiative has not been put into practice due to financial constraints, and the youths are not the main decision makers in their families. For other villages, apart from remittances, the impacts of cross-border migration on local development has not yet been observed, other than offsetting food shortages, or buying chemical fertilisers and pesticides for rice cultivation.

7.4.6. Costs of Migration

The poor often cannot afford the cost of CBM and are trapped in local low paying jobs. Domestic migrant workers need some money to make the trip to Phnom Penh or other cities, to pay for transportation and for food and accommodation while searching for jobs. Therefore, the destitute and single-headed households are less able to benefit from employment opportunities generated in urban or border developments. Migrating to other countries requires more money. For example, in the PPA village of Basaet, those who want to migrate to Malaysia need to have at least USD300 each: USD100 for a passport, another USD100 to pay the contractor and the remainder for other expenses such as travel fees and food. Taking this into account, only those from medium income families can migrate as far as Malaysia.

7.5. Risks and Challenges

Moving away from one's home village is always risky. Risks for migrant workers are mostly associated with wage payments, accidents, sickness and abuse. Among the many positive reports from villages, there were also stories of negative experiences. Not surprisingly, cross-border migrants encounter more problems than domestic migrants. Because of the expense of passports and other papers, most Cambodian migrants to Thailand opt for illegal routes, overstaying their one-day passes or being smuggled by contractors.

For example, common problems faced by cross-border migrants to Thailand recorded by Chan and So (1999) and Godfrey et al. (2001) included Thai police occasionally coming to check the workplace, so that Cambodian workers had to flee. If they could not escape the police, they would be taken to prison, where men were kicked, beaten and questioned. They were detained for one to two months before being sent back to Cambodia. Having no legal protection, some migrant workers are abused or exploited by their employers. The workers are exposed to higher risks in Thailand than in their own country and do not always make good incomes.

Although cross-border labour migration is legal, most migrant workers take shortcuts and cross illegally, so when they are caught they are subject to arrest and punishment by both Cambodian and Thai authorities. Because of their status, migrant workers are vulnerable not only to punishment by law, but also to cheating/exploitation, rape and security hazards. All these problems present greater challenges for women than for men.

7.5.1. Legal Status of Cambodian Cross-Border Migrants

All studies on the subject show that the number of Cambodian cross border migrants has risen, especially in the last five years. The majority of CBM is undertaken by informal workers along the borders of Thailand and Vietnam (CDRI (forthcoming-c) *Reviewing the Poverty Impact of Regional Economic Integration in the Greater Mekong Sub Region (RETA)*). More than one-third of Cambodians living in border areas are dependent upon cross-border work. However, there are no exact figures because most cross-border migrants are illegal or quasi-legal, only a small percentage have proper border-crossing and work documents (CDRI (forthcoming-c) *Reviewing the Poverty Impact of Regional Economic Integration in the Greater Mekong Sub Region (RETA)*).

A Memorandum of Understanding (MoU) on Cooperation in Employment of Workers was signed by the Cambodian and Thai governments in May 2003, setting out guidelines for employment and deportation procedures, labour protection, prevention of illegal border crossing and migrant services. According to the MoU, Cambodian workers with proper documentation and meeting

the conditions and requirements can work in Thailand for two years, with a possible extension to four years. Both countries are required by the MoU to apply national laws to protect the rights of migrant workers and to regulate labour disputes. Migrants are to receive the same wages and benefits as national workers (Asian Migrant Centre 2003: 102).

Despite the MoU, most Cambodian migrants in Thailand cross the border illegally, and in doing so they do not have access to legal protection and made vulnerable to various kinds of abuse (CDRI (forthcoming-b), *Participatory Poverty Assessment of the Tonle Sap (PPA)*). In 2004, about 105,000 Cambodian migrants registered with the Thai Ministry of Labour for work permits. Although there are no statistics about the number of Cambodian cross-border migrants, it is estimated that there were around 200,000 Cambodian migrants in Thailand in 2006, meaning that about half of the Cambodians there are working illegally (CDRI (forthcoming-c) *Reviewing the Poverty Impact of Regional Economic Integration in the Greater Mekong Sub Region (RETA)*).

As of August 2006, the transfer of Cambodian migrant workers to Malaysia is based on an exchange note on the recruitment of workers signed by the Governments of Malaysia and Cambodia on 13 December 1996. The note was revised in the Recruitment Procedures for Cambodian Nationals for Employment in Malaysia signed on 30 September 1999 (Maltoni, 2006).

7.5.2. Problems Encountered at the Border

Many returned migrant workers complained that they had experienced physical and verbal abuse from both Thai and Cambodian border officials. On the Thailand border, daily labour migrants have to give up a significant part of their meagre earnings to corrupt officials each time they cross. Although there are now fewer border checkpoints, they have to pay more than before and will be verbally abused or physically assaulted if they try to bargain for lower fees or bribes. A pass card can be obtained, but it is valid for only one week and in one area only; the holder cannot use it to go into other areas. Therefore it has limited value to the holder.

In Svay Rieng, the situation of border labour migrants seems to be better, as there are fewer complaints about abuses or harassment from border officials. Only a few people interviewed in the six villages from the RETA study reported that Vietnamese border authorities had forced them to do weeding or stand in the sun for hours as punishment for crossing the border illegally.

7.5.3. Informal Routes Involve More Risks

According to the RETA study, in order to avoid border authorities, a large majority of cross-border migrants choose informal ways to cross through minefields, forests and rice fields and hence face more risks and costs. In addition, because this activity is illegal, local people lack information about their rights, and in turn risk being exploited and cheated by agents and/or employers and face punishment when arrested by the authorities. All these dangers affect women more than men migrant workers. In some FGDs of the RETA, it was reported that some migrant women had been raped by other migrants when they are far from their homes and without male supporters.

The level of risks and expenses to gain cross-border employment increases with the distance from the border. For example, to gain employment in Bangkok, a person has to pay about USD65 to an agent in border villages or USD75 in non-border villages. The rate of cheating is also observed to be higher in villages far from the border.

For domestic migrants in both rural-rural and rural-urban migration, the chances of employment are less for those who go randomly in search of work. Illiterate women are exposed to higher risks of trafficking or being forced to work in prostitution than those who are educated, according to female youths in the MOPS village of Ba Baong. Besides overwork and poor working conditions, garment factory workers increasingly fear rape by gang members at their rented residences. Their parents enjoy the remittances from their offspring but voice concerns about the futures of their daughters—whether they will be well after finishing their present employment.

7.5.3.1. Cheated by the Agent and Exploited by the Employer

In Banteay Meanchey, many cross-border labour migrants complained about being cheated by agents or being exploited by employers. Some long-term migrant workers mentioned spending USD75, a considerable amount of money for the rural poor, as a fee to an agent without getting the jobs they had been promised. Some reported being brought to a workplace where their employers exploited them through underpayment or by reporting them to the police to be arrested when the work was completed so that they did not have to pay at all. Illegal status makes workers vulnerable to many kinds of abuse.

In Svay Rieng, FGD participants in some of the RETA villages complained bitterly about wage discrimination between Cambodian and Vietnamese workers. Although they do the same work, Cambodian workers usually get 25–40 percent lower wages than the Vietnamese. In Leak Chea village there were also complaints of underpayment, with migrant workers receiving only 80 or 90 percent of the total they were supposed to get. Each bundle of money that was supposed to have 10 banknotes contained only eight or nine. Since the money is not paid directly by the farm owner, they did not know whether their team leader or their employers had exploited them.

Lacking legal protection makes migrants extremely vulnerable to depredations of all kinds—verbal and physical abuse, non-payment of wages, arrest and torture, lack of access to basic health, education and other essential services. Many migrants have reported that they did not dare to report any problems (fraud, abuse, violence) to the Thai authorities. Some noted that a few labour brokers colluded with employers and took advance wages of workers without their consent. Sometimes the wage advance was for one or two years, forcing workers to work for this period in exchange only for basic food. At other times, when it was time to collect wages, the police suddenly appeared on the scene, forcing workers to flee without their wages.

7.5.4. Sending Money Home

Prior to 2000, many migrants experienced arrest or theft because they were illegal and vulnerable. However, CBM is more secure now than in the early stages because it has become easier and safer to send money home through telephone services. A number of phone shops have flourished since 2000 to deal with money transfers from Thailand to Cambodia.

Before the availability of phone services, many migrants were robbed or had all their belongings taken by border authorities when they were arrested. In addition, migrants now have better knowledge of Thailand and networks there which help minimise risks. Through these established networks, some Thai employers have sent vehicles to pick up Cambodian workers at the border. The fees for the phone service are very high, at about 10 percent of the total remittance, and if receivers live in remote areas, the fees increase up to 15 percent. However, it is viewed as worthwhile to use this service rather than carrying money when returning home.

7.5.5. Health

Other challenges for migrants are related to health problems due to hazardous working conditions, including dangerous jobs, such as applying pesticides, and long working hours. Sometimes migrant workers use drugs in order to work harder and longer, and as result they fall sick, and when they cannot work they return home empty handed. Access to health facilities is very limited due to low incomes and fear of deportation. Legal migrants sometimes still do not want to use the health services because of the poor quality of service.

7.6. Conclusion

Domestic and cross-border labour migration is a recent phenomenon attracting the attention of policy makers in Cambodia. Migration has played a crucial role in sustaining rural livelihoods and poverty reduction in light of the recent rate of population growth, depletion of natural resources and lack of livelihood alternatives. There is, however, no clear evidence that shows migration actually promotes rural development. Although migration provides additional or alternative sources of income, it is only a short-term solution and can hardly be deemed as an effective rural development strategy.

Labour migration, however, continues to play an increasingly important role in poverty reduction in a country where around 35 percent of the population lives below the poverty line. It has become a major source of livelihood in urban villages and as well as an alternative source of income in both agricultural and fishing villages. Migration helps diversify income sources, helps rural people save, which puts them in a better financial situation to cope with shocks to their health and livelihoods. It has also become an important coping strategy for the landless poor.

So far, labour migration in Cambodia is generally associated with push factors including population growth, poverty, natural calamities, depletion of natural resources, low agricultural productivity and lack of employment. These factors generally outweigh pull factors created by urban development and growth and the effects of regional integration and border development. Therefore, migration in Cambodia is still a function of necessity, not of choice. This suggests a need for far-reaching development in rural Cambodia to maximise the positive impacts of migration.

The critical challenges facing rural development and poverty reduction lie in the continued outflow of people from areas of high population density with scarce and diminishing natural resources to low density areas where land is still available for conversion to cultivation and to the Tonle Sap region. This observation suggests possible failures of sustainable natural resource management policy and trade-offs between such policy and livelihood resettlement. The latter cannot be halted if no development intervention takes place in the villages of origin.

Cambodian cross-border migrant workers are mostly illegal and are characterised by unskilled workers in hazardous working environments facing high risks of exploitation. If the positive impacts of migration on poverty reduction and rural development are to be maximised, there is a need to build up human capital in skilled workers, and to establish or speed up the establishment of mechanism to protect migrants' rights and to improve their working conditions. The absence of legal framework and legal status leave migrant workers more vulnerable. Given all the risks and difficulties faced by migrants, especially by cross-border migrants, potential benefits from migration have not yet been realised. Domestic migrants, understood to be facing less risks, still have difficulties in having no proper networks, timely and correct information; also most of them have budget constraints.

The impact of migration on household livelihood improvement and local development are mixed. Remittances are usually used to meet basic needs than to invest or increase consumption as suggested by contemporary migration literature. There are some positive impacts on local production, such as increased agricultural modernisation in several villages. However, it is not clear whether these come solely from migration and remittances, since other factors such as development programmes have been introduced to those villages. There is therefore still a need for research into the impact or remittances on rural households and community development, and its policy implications.

Annex 1. Percentage of Adult Earners from the 9 MOPS Villages Participating in Wage Labour at Different Destinations

Village	Adult earners participating in wage labour			Inside village			Outside Village Within Cambodia			Cambodia-Thai Border			In Thailand		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
<i>March–September 2004</i>															
Andoung Trach	48	63	53	8	14	11	29	32	31	48	51	49	15	3	9
Krasang	71	68	69	17	39	28	9	7	8	40	29	35	34	25	30
Khsach Chi Ros	23	43	31	22	39	32	78	61	68						
Prek Khmeng	12	12	12	17	26	22	83	74	78						
Ba Baong	38	68	52	58	55	57	39	39	39	3	5	4			
Kanchor	59	50	55	13	71	36	87	29	64						
Dang Kdar	43	49	45	21	95	52	79	5	48						
Trapeang Prei	67	88	76	7	21	14	93	79	86						
Kompong Tnaot	22	46	33	7	15	12	90	85	87				3		1
All villages	41	49	45	18	42	30	57	40	48	15	12	14	10	6	8
<i>October 2004–March 2005</i>															
Villages	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
Andoung Trach	49	79	63	59	58	59	20	21	20	20	21	20	1		1
Krasang	66	79	72	39	30	38	12	9	12	20	43	23	29	17	27
Khsach Chi Ros	26	54	37	55	75	58	41	25	39				4		4
Prek Khmeng	27	19	23	73	82	74	27	18	26						
Ba Baong	40	56	47	87	69	79	13	31	21						
Kanchor	37	66	49	88	88	88	12	8	11		4	1			
Dang Kdar	60	47	56	73	76	74	27	24	26						
Trapeang Prei	60	58	59	21		16	79	100	84						
Kompong Tnaot	28	53	39	95	86	93	5	14	7						
All villages	43	53	47	63	63	63	22	26	23	7	9	8	7	2	6

Source: CDRI MOPS survey of 1010 households with 2645 adult earners aged 15-54.

Annex 2: Average Earning by Cross-Border Migrants

Types of CB migrant	Average earning (USD)	
	Thailand	Vietnam
Cross-border migrants		
- cart puller and porter	2 /day	1/day
- smuggler	2–10/day	4/day
- construction worker	2/day	1.50 /day
- casino worker	40–80/per month	40–80/month
Daily migrant		
- agricultural worker	2/day	1/day
- pesticide sprayer	3–4/day	2/day
Short term		
- agricultural worker	2/day	-
- construction worker	4/day	-
Medium term		
- agricultural worker	60/month	-
- construction worker	4/day	-
- animal husbandry	80/month	-
- fisherman	75/month	-
- domestic helper	60/month	-
- shop assistant/servant	100/month	-

Source: CDRI RETA, 2005

Annex 3: Per Capita Income from Wage Labour in and Outside Villages, by Wealth Groups, 2001 and 2004

Households	Agriculture		Self-employed		Labour		CPR		Other		Total	
	2001	2004	2001	2004	2001	2004	2001	2004	2001	2004	2001	2004
	<i>(Riels per capita per day in 2001 prices)</i>											
1. Comfortably rich	716	995	427	1,002	347	429	307	306	104	317	1901	3049
2. Gradually into wealth	501	693	114	397	225	389	291	297	52	254	1182	2031
3. Escaping poverty	282	424	63	171	169	420	204	189	27	119	744	1323
4. Static middle	335	421	103	145	170	310	308	274	34	81	951	1231
5. Falling into poverty	564	340	155	241	195	252	390	340	53	49	1357	1222
6. Deepening poverty	281	230	83	109	176	239	259	204	25	101	825	883
7. Chronically poor	213	180	60	124	170	299	177	138	17	43	638	784
	<i>(Percentage)</i>											
1. Comfortably rich	38	33	22	33	18	14	16	10	5	10	100	100
2. Gradually into wealth	42	34	10	20	19	19	25	15	4	12	100	100
3. Escaping poverty	38	32	8	13	23	32	27	14	4	9	100	100
4. Static middle	35	34	11	12	18	25	32	22	4	7	100	100
5. Falling into poverty	42	28	11	20	14	21	29	28	4	4	100	100
6. Deepening poverty	34	26	10	12	21	27	31	23	3	11	100	100
7. Chronically poor	33	23	9	16	27	38	28	18	3	5	100	100

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Conceptualising Accountability: The Cambodian Case

C H A P T E R (8)

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Conceptualising Accountability: The Cambodian Case¹

C H A P T E R (8)

‘The concept of accountability is very essential. The government wants to promote accountability to achieve democratic development. Yet, key actors in charge of promoting accountability may not understand this concept.’

– H.E. Sak Setha, *Director General of the Department of General Administration during Decentralisation Forum on Good Governance, 2006*

‘Government documents say “accountability” is important and they use the term “accountability” a lot. Thus, we [commune councillors] use it a lot too. However, we don’t really understand what it really means. MoI gives us one definition, and different NGOs give us some others. We become confused. Therefore, there should be one consistent definition about the term so that people can agree on it.’

– *Comment from a group of commune councillors during a Decentralisation Forum on Good Governance, 2006*

8.1. Overview

The concept of “accountability” has moved to the forefront of both the Cambodian government and donor community’s concerns in recent years, appearing with increasing frequency in government reports, public speeches and donor agendas concerning good governance, poverty reduction, decentralisation, and democratic development. The long term success of both public sector government reforms and lasting reduction of extreme poverty requires rules-based and pro-poor accountability. Yet, as the above quotes demonstrate, the lack of contextualised understanding of this term, in the technical sense, has led to inconsistency and dubious ownership by the government in policy formulation and implementation. Equally important is the recognition that Cambodia has its own accountability system structured around ‘new patron-client or neopatrimonial relationships’² that is not necessarily supportive of pro-poor service delivery. This means that reformers must work in a governance environment in which the concept is not well understood and the existing accountability system is not pro-poor. To succeed in such a context, reformers need to understand (a) the concept of rules-based accountability; (b) how the existing accountability system functions and (c) the processes by which the existing accountability system may accept, or incorporate, rules-based accountability.

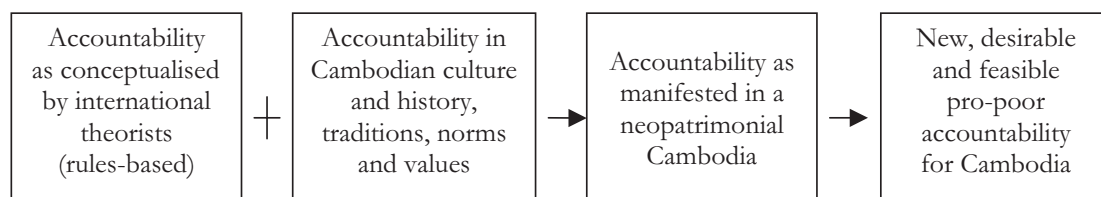
This chapter reviews the accountability literature, and its implications for Cambodia, from two perspectives. First, it examines the history of the concept of ‘accountability’ by (a) highlighting

¹ This literature review is based on the work of CDRI’s Accountability Study Project that has been carried out since mid-2005. For a more detailed discussion of issues raised in this chapter, see the forthcoming CDRI’s ‘Critical Literature Review of Accountability and Neopatrimonialism: Concepts and the Case of Cambodia’ (2006).

² In a governance context, new patron-client relationships are also known as ‘neopatrimonialism,’ defined as ‘a mixed system of government administration, with a rational-legal veneer overlaying a web of personalistic ties characteristic of patrimonial rule,’ Brinkerhoff and Goldsmith (2002: 40)

the prominent international development theories (rules-based) and how these theories have conceptualised accountability; (b) explaining the application of these theories in Cambodia's development processes; and (c) identifying the challenges facing rules-based accountability in Cambodia. Secondly, this chapter discusses how Cambodians understand accountability culturally, historically, administratively, and politically, and how this understanding is shaped in a neopatrimonial context. It provides an appropriately contextualised analytical framework, as illustrated in Figure 1, to define and comprehend this complex concept. The framework explores the different meanings of accountability as (a) defined across different concepts of Public Administration stretching from early-mid twentieth century Traditional Public Administration perspectives, to the more recent, development-focused approaches advocated by bi- and multi-lateral donors including DFID, the World Bank and UNDP; and (b) shaped by Cambodia's unique political evolution, social ideologies and belief systems.

Figure 8.1: Analytical framework to support understanding of accountability in Cambodia



By organising this review around the analytic framework, four key issues surface that are vital to future reform efforts. First, accountability is about more than just relationships between individual actors, as it also operates within a broader governance structure. Secondly, accountability reform can only be achieved through both technical (formal) and socio-political (informal) processes. Thirdly, mainstream understandings of accountability have been predominantly shaped by western liberal governance understandings and practices. Fourthly, Cambodia's unique historical administrative and political culture and practices have had significant impact on the process of promoting rules-based accountability. A good understanding of these four key issues will equip policymakers and implementers, in addition to concerned stakeholders, with practical and effective tools to strengthen public sector accountability.

8.2. Conceptualising Accountability

Accountability has become the central focus of the Royal Government of Cambodia (RGC) in its quest to achieve good governance and poverty reduction (NSDP 2006–2010: 34, D&D SF 2005: 6). The proposed vision of the RGC to restructure the sub-national governance system marks a critical shift towards attaining 'unified administration' at the sub-national level that seeks to instill and promote an 'administratively coordinated' and 'politically integrated' governance system. Realising unified administration is, and will continue to be, an extended process to achieve what is rightly referred to as 'democratic development'. This term is understood to encompass both better 'local governance' and more effective and efficient 'local development' (Rohdewohld and Porter 2006). Within this context, accountability is an indispensable component. Yet, as the term continues to mean different things to different people, developing a consistent and shared understanding between Cambodians and relevant development stakeholders remains an important challenge.

Defining accountability is not a simple process, as it is an ever-expanding, complex and chameleon-like term (Mulgan 2000: 555). Keohane (2002: 2) compares the study of accountability to four

blind men trying to guess what an elephant looks like by each of them touching different parts of the animal. Any attempt to define accountability through too narrow a conceptual lens or without adequate contextualisation risks missing a number of its important dimensions. Thus, the literature review is motivated by the need for clarification, both in terms of analysis and the implications for decentralisation and deconcentration (D & D) policy design. The approach, then, is to first adopt the most useful analytic strengths of different approaches to shed light on the Cambodian case, while also recognizing analytic and practical limitations. The chapter adopts four lenses to study both individual and systemic relationships: technical, political, normative, and critical. These are briefly elaborated below.

8.2.1. Accountability and Individuals, Relationships, and Systems

Understanding accountability requires a balanced analysis with frameworks that emphasise the relationship between individual actors and the structures and systems that enable and constrain actors and their accountabilities. Agency-focussed accountability considers relationships ‘*of whom, to whom*’ with specific objectives ‘*for what*,’ that often entails ‘one-to-one’ accountability between an individual of lower rank to an individual of higher rank. Yet, this article argues that accountability is more complicated than two individual actors regarding themselves as mutually responsible for each other’s actions. Accountability is also determined by the ways the wider governance system affects the behaviours and beliefs of the actors. For example, an individual local official’s ability to act, and the extent to which the person can be held accountable for such action, depends on whether the wider system (e.g. such as public finance) has provided that person with sufficient resources and training to do the job in the first place. It also depends on other structural factors, such as the way the individual was recruited and how much the person needs to act to favour the needs of a patron.

8.2.2. Technical and Political Aspects of Accountability

This two-sided framework exhibits a strong *technical* focus, but is not sufficient for a complete understanding of accountability in the Cambodian *political* context. Informal aspects of Cambodian tradition and culture are still central to current understandings of accountability and politics. Most important are the ways traditional power, and especially the power of patrons and their networks of clients (sometimes described as informal relationships), have in recent years merged together with the formal structure of government, to create a *neopatrimonial* form of government. The structural features (also referred to as *formal*) include the rational-legal bureaucratic or institutional arrangements that are visible, predictable and formally mandated by rules and regulations (e.g. public health guidelines to curb the spread of bird flu, criteria for recruitment and promotion) and are heavily influenced by Western liberal governance practices. The political features (also referred to as *informal*) are shaped by ideologies, beliefs and cultural orientations (e.g. pluralist multi-party political systems, patron-client relationships, followers of the Buddhist belief in karma) that tend to be informal and unpredictable once ideologies or beliefs shift, and unique to Cambodia. Therefore, to ensure a necessary and sufficient understanding of accountability, this chapter gives careful consideration to both *formal* and *informal* aspects of governance that affect accountability.

8.2.3. Normative and Critical Perspectives on Accountability

This framework allows accountability to be defined beyond narrow *normative* terms (where accountability mechanisms are defined and deployed to reduce corruption), but also in broader *critical* terms by shedding light on power relations and politics over time. Overall, then, accountability in this study is approached not just *normatively* (in terms of what different approaches should be

done), but also *critically* (understanding what is the case, and how this has been shaped by history and political power relations).

8.3. Theoretical Evolution of Accountability

The study of accountability has a long history both within Western private management contexts and public sector development. In Western countries, the notion of accountability has been one element in the broader strand of the development of public administration models that have taken many forms over the past century. These models have been influenced by a number of fields and disciplines, particularly Traditional Public Administration (TPA), New Public Management (NPM), and New Institutional Economics (NIE). In developing countries, these models have had a significant impact on the evolution of public administration reforms, as well as on the understanding of accountability. This section provides an overview of TPA, NPM, and NIE to identify key assumptions driving public management models in developing countries.

Each of these theories is an entire field of study in and of itself. This review is constructed to provide an overview that traces the evolution of the notion of accountability over time as the result of changes and adjustments in wider international public administration and development theories. Thus, the chapter reviews the frameworks, their theoretical influence on understanding accountability and their impact on the Cambodian case.

8.3.1. Traditional Public Administration (TPA)

Concerns over decision-making, the use and abuse of power, and the structures and delegation of positions that form government systems are age-old. The notion of creating more efficient management systems that exhibit greater neutrality emerged from the work of early 20th century German sociologist Max Weber, who identified *rational bureaucracy* as a management form that better protected individuals (be it employees or citizens) from the abuse of power by leaders. Weber saw this as an increasingly important mode of political and administrative power in the legal-rational system, as there is a strong separation between the political and administrative aspects of governance, with politically neutral officials enacting policy ‘without fear or favour’ (Weber 1965). He proposed that administration should be governed by objective laws and procedures that treat everybody alike, free from political pressure (e.g. allegiance or bias) and financial favours.

Such a system instils a set of expected behaviours and roles. These include: a) setting the rules for administrators to follow; b) providing directives for recruitment based on objective criteria; c) defining duties to be performed; and d) establishing who should be made accountable in the performance of such duties. Financial and other resources belong to the system as a whole, rather than individuals, and are distributed according to established rules and laws. In the case of the public sector, administrators are expected to be trained professionals motivated by a sense of public duty. In return, they receive a regular salary and are able to ascend a career path by completing designated roles and duties as established through clear service expectations and qualifications.

8.3.1.1. Accountability through Answerability and Enforcement

Answerability and enforcement (Schedler 1999) are two defining aspects of accountability derived from the Traditional Public Administration framework. For TPA, accountability depends on whether a particular employee, when questioned by a superior or other interested party, is able to ‘give an answer’ or ‘give an account’ of their actions according to the rules and delegated responsibilities they have been given. If they are able to answer, they are ‘answer-able.’ He or she is obliged to be answerable to both the institutional hierarchy and rules, as well as to a supervisor, though in the

latter case only in terms of clearly defined duties. Schedler (ibid) proposes that the production of 'reliable facts' (i.e. *information*) and provision of an explanation of why things have happened the way they have (i.e. *justification*) are key characteristics of an accountable system.

Yet, those to whom the account is given must also have the ability to make a judgement of the account, approve or sanction it, accept or reject it, and then enforce compliance with the desired course of action through punishment or reward. In this model, it is the combination of answerability and enforcement that produces accountability. Answerability without sanctions is generally considered to be a weak or inconsequential form of accountability (Schedler, 1999). Thus, enforcement, which is defined as 'rewarding good, and punishing bad behaviour' (ibid), gives 'teeth' to accountability and 'gets the incentives right' (Brinkerhoff, 2001 and Keohane, 2002).

8.3.1.2. Applications to and Limitations of the Cambodian Case

In Cambodia, as in many other developing countries, a version of a legal-rational system such as this has been applied since the colonial period, serving as a foundation for the political and administrative regime established by the French colonial power. Both the French and post-colonial leaders depended on classic French administration models to modernise poor countries by transforming their state institutions along rational lines (Heady 2001, Thion 1993). In practice, this system was dominated from the centre by highly paid ex-patriot French bureaucrats and their Khmer staff.

This model still provides the basic forms and structures, though not always the practices, of much of Cambodian government. For example, the legacy of the French system is still apparent in the structure of the RGC ministries, where each ministry has authority over certain defined areas that is delegated down to lower levels through lines of command and operations (hence 'line ministries'). Positions for officials are structured to follow these same lines of hierarchy. The Civil Servant Statute is another application of TPA in Cambodia. It elaborates the roles and responsibilities for each position in the RGC along rational-bureaucratic hierarchical principles.

Traditional bureaucratic models work well if key assumptions are met, such as respect for authority and organisational structure. Unfortunately, developing countries do not always match such assumptions, as political and administrative realities can be quite different. Although politics and patronage are to some degree involved in all bureaucracies, even in the most stable democracies,³ developing countries often exhibit traditional value orientations toward patron-client social structures, which make the application of TPA models difficult. For example, in the Cambodian experience, as in many other colonies, the French deliberately strengthened the traditional patron-client relationships, promoting powerful Cambodian patrons, especially those linked to the throne, to positions of tax collection and security provision in order to maintain political, military and fiscal control.

As Minogue (2001) points out, decision-making in the public sector does not always conform to existing rules or economic rationality, but is influenced by conflicts, negotiations and exchanges of interests. This is particularly the case in Cambodia since the post-colonial period, where the formal bureaucracy has rarely been powerful in relation to patrimonial and security interests, as a legal-rational system requires a functioning legal system grounded in principles of rule of law to create real answerability and enforceability. The susceptibility of the supposedly legal-rational bureaucracy to patronage influence limits the resources flowing into the system to ensure effective

³ For example, in the United States as many as 70,000 federal positions were open to patronage appointment during the presidency of Harry Truman alone (Van Riper 1958: 58 cited in Brinkerhoff and Goldsmith 2002: 8–9).

functioning. In Cambodia, adequate and predictable fiscal resources are not available and the integrity of intergovernmental transfers does not exist between different levels of government. The result is a weak bureaucracy vulnerable to rent-seeking⁴ activities for private wealth amassment.

8.3.2. *New Public Management (NPM)*

NPM evolved from earlier experiments in the 1950s and 1960s with efforts aimed at decentralizing management in the private sector. This movement, influenced by ‘management guru’ Peter Drucker, focused on ‘letting managers manage’ (Drucker 1954, 1964) by decentralizing decision making, letting managers choose inputs (albeit within budget constraints), and proceeding by whatever means necessary to achieve their objectives (Clark and Newman 1993). NPM was also heavily influenced by Drucker’s ‘Managing for Results’ (1964, 1986) movement, which assumed that managerial decentralisation could actually improve central control over outcomes and quality. This approach, which advocated that managers should be free to use any mechanisms necessary to achieve results, subject to close performance review, came to be more generally termed ‘Managerialism’ (Peters and Waterman 1982). In particular, following a paradigmatic shift towards emerging neo-liberal philosophies of governance, the approach urged ‘setting managers free’ to use market tools, such as private sector contractors (e.g. competition for contracts), to achieve more efficient outcomes (Walsh 1995).

By the 1980s, NPM had gained prominence as an alternative to traditionally-styled public bureaucracies, which critics argued were sluggish and no longer keeping pace with service delivery demands in a rapidly changing world. NPM especially promoted the use of private sector practices by the public sector in order to enhance efficiency and cut ‘government fat.’ Such tools included the privatisation of service delivery, efficiency reforms, contracting out, restructuring the civil service, performance-based management and partnership formation with external actors (Minogue, 2001). Developing new performance incentives for managers, thinking of ‘citizens’ as ‘customers,’ and creating discretion for creative thinking and entrepreneurship in problem solving (Minogue, 2001, Ackerman 2005) were considered key to revitalising the public service. In short, government was expected to ‘steer (and fund), not row’ (Osborne and Gaebler 1992), by setting clear objectives and then letting local managers be entrepreneurial about finding conduits (e.g. NGOs, private contractors) to achieve them.

8.3.2.1. *Accountability through Principal-agent Relationship and Managerial Discretion*

NPM offers a different set of approaches to promoting accountability in the public sector by applying more private-sector oriented notions of *incentives and sanctions* (Hood 1991), such as clearly defined performance requirements and incentives to perform well, as well as steps to prevent public servants from using their positions for personal interest. In this respect, according to Drucker (1964), the performance objectives need to be defined in quantifiable and measurable ways and the quality of the work needs to be controlled. At the same time, managers should be free to choose how to achieve the agreed-upon objectives and results, though in practice this is often within very closely defined and monitored parameters. In short, manager accountability is based on various measurements related to meeting centrally defined objectives.

⁴ In economics, rent seeking is the process by which an individual, organisation, or firm seeks gain through manipulation of the economic environment, rather than through trade and the production of added wealth. Rent seeking generally implies the extraction of uncompensated value from others without taking actions that improve productivity, such as by gaining control of land and other pre-existing natural resources, or by imposing regulations or other government decisions that may affect consumers or businesses (Krueger 1974, Tullock 1967).

An important NPM approach for examining accountability in the public sector is to consider the state, public managers, and other actors delivering services, as embedded within a *principal-agent relationship* (Jensen and Meckling, 1976; Moe, T 1991). As the *principal*, the state needs to have services delivered. As representatives of this principal, public sector managers can choose a variety of agents to do the work. The agent might be a public service manager or an NGO that manages the service to be delivered in such a way as to achieve the contracted outputs. The principal delegates authority to agents along with resources, while at the same time creating incentives for the agent to provide value-for-money in the use of such powers and resources. In all cases, the principal-agent relationship responds to various incentives and is subject to potential abuse, which can be managed through inclusion in the contract and appropriate monitoring, especially by providing clear information about what has and has not occurred. Thus, the potential for agents to deviate from the agreed-upon incentive structures can be systematically reduced (Ross, 1973).

Examples of accountability implications for NPM abound, particularly within *contracting out* arrangements. Managers in the public sector are given the right to contract with the private sector or other levels of government to deliver functions or services. Contractors compete for the right to provide services, but are answerable to the principal through clearly defined output expectations, tight monitoring and evaluation against key performance indicators according to the terms of a contract.

8.3.2.2. Applications to and Limitations of the Cambodian Case

NPM in Cambodia has primarily been applied to contracting out, which has entailed international donors contracting to NGOs to work in Cambodia, as well as RGC ministries increasing use of private firms or NGOs to provide certain public services, such as highway maintenance and local health care. Donors have also tended to use NPM-style accountability and reporting mechanisms, such as contracts, to measure performance against key indicators and outputs, especially in dealing with government agencies. For example, the Cambodian Resettlement and Rehabilitation (CARERE) programme, which provided the basis for Seila,⁵ had decentralised, province-based project management units that developed extensive contractual arrangements with central, provincial and local governments. A more recent example of contracting out for local health service delivery is the multi-donor funded Health Sector Support Project (HSSP). The attempt by the government, with the support of the donor community, to move to programme-based budgeting and management is another example of the influence of NPM. Although such arrangements often provide better quality and more efficient services, as seen elsewhere (Bennett and Mills 1998) this contracting system has not been without problems, some of which are discussed below.

Although NPM was the pre-eminent model for downsizing the Western state in the late 20th century, it is unclear whether a system such as this can be applied in developing countries (Schick 1998, Minogue 2001). Because they are often dominated by informal markets and frequently lack rule-based governments and robust markets, there are risks in applying NPM approaches. This is because NPM approaches can also lead to fragmentation of accountability as various players (i.e., government, NGO, private firms) deliver services within narrow vertical accountability relations, but with greatly reduced shared accountability or horizontal coordination (Rohdewohld and Porter 2006).

Another shortcoming of NPM approaches is the fact that NPM sees accountability primarily as a principal-agent relationship. As indicated by Moe (1991) and Keohane (2002), it would be

⁵ Seila is a national program that employs a multidimensional approach to governance that promotes good governance concepts, supports local government systems and structures, and provides donor coordination mechanisms (Rusten *et al.* 2004).

misleading to study accountability with respect only to specific principal-agent relationships, since all accountability relationships are embedded in broader institutional and political arrangements and contexts, all of which constitute *accountability systems*. As noted above, such institutional arrangements are both formal (e.g. the structure of government and its finances) and informal. The formal institutions include, inter alia, the rules and regulations and organisational frameworks, whereas the informal ones might include political culture, the personal commitment of powerful leaders, wider cultures of political participation, and the role of civil society in holding others accountable (Jutting, 2003). This issue is of great significance in developing countries like Cambodia, where informal relations play a significant role in establishing and maintaining such accountabilities.

8.3.3. *New Institutional Economics (NIE)*

The discipline of NIE (North 1981, 1990; Williamson 1985) emerged in the early 1980s as a hybrid theory which incorporated Institutional Theory and Neo-Classical Economics. NIE suggests that economic development cannot be viewed and understood using only Neo-Classical Economic assumptions that free or unregulated markets are the basis for successful economic functioning. Rather, NIE starts with the assumption that perfect markets do not exist outside theoretical economic models and builds on the fundamental neo-classical assumptions of scarcity of resources and the need for competition. It then incorporates the importance of information, ideas and relevance of ‘transaction costs’ (see below) and relates them to production costs and the wider efficiency of markets which promote growth (North, 1990).

Central to NIE is its special definition of *institutions*, which has become highly influential in development circles (World Development Report 1997, 2002). NIE proponents suggest that ‘getting the institutions right’ should result in economic growth and poverty reduction, at least in the long term. Defined from an NIE perspective, *institutions* do not refer primarily to big government agencies and departments, but to the everyday *rules and resources* (especially information) that actors bring to economic or market exchanges or transactions (North 1990, World Bank 2002). New institutional economists like Douglass North propose that more efficient institutions are necessary to reduce the costs of human exchange, what he terms ‘transaction costs’ (North, 1990).

NIE exponents like North, Williamson, Ostrom (1990) and Coase (1988) hold that societies that have succeeded economically are societies in which efficient market exchange mechanisms (i.e. institutions) have developed over time. They are also societies where centralised control of economies has been weakened, and where many competing actors engage in repeated transactions, enhancing efficiency and generating market-led growth over time. In such cases, heavy handed regulatory institutions are not needed because consumers demand accountability (and create efficiency) themselves by using their capacity for ‘choice, voice, and exit’ (e.g. their ability to choose, go to another supplier, or spread negative information about a poor supplier).⁶ What matters then for economic development is how market institutions function, which theorists propose include three factors: 1) the existence of multiple actors for clients to choose between (competition); 2) the availability of reliable information; and 3) an environment where agreed frameworks of exchange (formal and informal contractual arrangements) can be made. In the 2002 World Development Report, *Strengthening Institutions for Markets* (World Bank 2002, 11), this three part recipe would be formulated into ‘inform, enforce, compete.’

⁶ See Hirschman (1970) 1970. *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States*. Cambridge, MA: Harvard University Press.

8.3.3.1. Accountability through Institutions, Markets, Information, Contract, Choice

NIE theorists promote the notion that many points of small-scale accountability generate much greater overall accountability. They predict that the establishment of a strong market, consisting of many competing actors delivering public services to client-customers, will ensure accountability as clients are presented with more choices. With this expanded range of choice, clients themselves can enforce accountability by choosing their preferred suppliers (World Bank 2004), thereby creating strong incentives for competing suppliers to perform well. Where providers fail to deliver, consumers with a choice of different provider opportunities can exercise the power of exit (threatening to go elsewhere), or voice (warning others about the poor service, or complaining to a watchdog group or the media) (World Bank 2002). Better quality health and education would come through people choosing better service providers from a range of public and private options. Competition would force prices down, generating still greater efficiency. In this sense, markets would create incentives for building local knowledge, which could be used to hold suppliers accountable. Marketising and decentralising governance transactions would do away with the need for ponderous mechanisms for centralised surveillance and accountability (Mullins 2004).

8.3.3.2. Applications to and Limitations of the Cambodian Case

What is important with regard to accountability in Cambodian governance is the way NIE principles have spilt over into the delivery of services and the proliferation of private and non-government organisations. The effects of NIE-related reforms have been experienced in two phases by developing countries like Cambodia. The first phase, 'marketisation of services,' is discussed here alongside NPM as part of a wider neo-liberalisation/state-minimising phase, during which state services were opened up to contractors or NGOs. The second phase, 'putting fragmented services back together again through partnerships and harmonisation,' has now become a particular imperative following the fragmentation of NPM and NIE.

In the first phase, NPM, NIE and public choice-related reforms first occurred in donor countries, and affected Cambodia only indirectly (Craig and Porter 2006). Donor countries opened up their aid and development programmes to literally thousands of competing private contractors and NGOs. These NGOs would, according to NPM output-oriented objectives, be held accountable primarily to their own governments. They would have little direct accountability to either local governments, clients or other NGOs and programmes working in the same province or even commune. In Cambodia, public choice models also encouraged the deregulation of education and health sectors, which, because of state weakness, already had many private schools and clinics. This model continues to be relevant to Cambodia as it still informs many influential perspectives, including those regarding the need for competition in services, multiple actors in various activities, and the wider need for privatisation and decentralisation. In decentralisation circles, the Seila programme has been especially active in promoting competitive contracting, albeit within a framework that promotes stronger local accountability.

NIE provides a framework that positively (as described above) and negatively (as discussed below) affects both accountability and decentralisation of service delivery. In many situations, it is clear that consumer voice and choice are not as powerful a means of holding providers accountable as predicted. For instance, watchdog organisations often prove to have few teeth, especially where powerful actors threaten social regulation and security (CDRI, 2004). For many public services, such as education and health, the client/citizens do not have sufficient information about the performance of the providers, be they state or non-state. In addition, even in cases where awareness of poor performance exists, citizens are faced with very limited choices and are therefore unable to make strong demands for change in cases of poor enforcement.

In Cambodia, as elsewhere, this model has impacted *horizontal accountability*, which is defined as the ability of governments at all levels to effectively coordinate actors in their territories to mutually achieve outcomes, such as poverty reduction (Mullins 2004). It partly explains the fragmentation of NGO and donor activities, as donor country governments have used aspects of this theory to provide fragmented funding to many NGOs, each of which is only directly accountable to the contracting agency in their own country. Service delivery in Cambodia is thus fragmented, creating a very complex aid environment that Cambodian officials have not been able to effectively coordinate or control (Craig and Porter 2006, Rohdewohld and Porter 2006). One consequence is that such systems create multiple agencies, accountable not to the Cambodian state or people, but rather to meeting their own contracted outputs. In Cambodia, as elsewhere in the world, issues of horizontal accountability and coordination between NGOs, local governments, and line ministries have become complex and problematic (Mullins 2004, Rohdewohld and Porter 2006). In short, ‘inform, enforce, compete,’ may not be sufficient to build accountability around good quality services and other outcomes for the poor in Cambodia.

As described above, TPA, NPM and NIE all form an important part of the theoretical evolution of the concept of accountability. In addition, these models have contributed to the development of second-generation reform frameworks promoted by international development agencies, to which this chapter now turns.

8.4. Evolution of Accountability Through Donor Conceptions

The three models discussed above represent some of the most influential thinking concerning public administration and development in both developed and developing countries. Although NPM and NIE remain highly influential approaches to governance and accountability relationships, other approaches have also gained prominence in international development circles since the mid-late 1990s. In some cases, this has been in reaction to the downsizing, fragmentation and horizontal coordination issues raised by NPM and NIE approaches.

This chapter now turns to several development-focussed models that have had a particularly strong influence on Cambodian management systems and conceptualisations of accountability. These models include ‘Capable State Approaches’, decentralisation, political accountability, social accountability, triangle accountability and horizontal accountability for shared outcomes.

8.4.1. Capable State Approaches—the World Development Report 1997 and Others

The 1997 World Development Report (WB, 1997) introduced the notion of the ‘capable state’, arguing for greater roles for the state in development in order to complement, not replace markets. Capable state approaches combine many concepts from TPA, NPM and NIE, but rather than focusing on downsizing the role of the state as much as possible, a key facet of this strategy is to build up institutional capacity to remedy market failures. The development of state accountability thus becomes a cornerstone of such an approach. Now under the banner of ‘good governance’, the capable state should focus its activities on the functions that match its potential capacity, which, if done well, will promote market and economic growth.

To address these problems and their root causes, the 1997 World Development Report suggests that governments focus reforms on three important building blocks. Firstly, a government must build a strong central capacity for formulating, coordinating, and translating policies into strategic outcomes. To do this, mechanisms that lead to well-informed, accountable and disciplined decision-making processes must be created. Secondly, after policies are formulated and translated into such strategies, processes are needed to transform them into results. To do that, effective management

structures, together with strong voices and participation from citizens, are required to ensure satisfactory performance by the State. The third building block of an effective state must include motivated and capable civil servants who make up the lifeblood of the system.

8.4.1.1. Accountability through Strengthening the State

Moving beyond the service delivery arrangements formulated by NPM and NIE, the Capable State approach places primary emphasis on bringing the state back into the service delivery process to deal with market failures. The approach is to strengthen the role of the state to ensure accountability regardless of who delivers them. The World Bank (1997) has proposed that the primary role of the state is to ensure improved performance in service delivery arrangements by promoting different forms of accountability, which should be applied depending on specific arrangements or modes of service delivery (e.g. by the market, the broader public sector, or core public sectors). Thus, like NPM and NIE approaches, markets and the private sector are encouraged to provide public services in order to expand user choice, and delivery options can be further expanded through contracting out to NGOs and performance-based government agencies. The difference under a capable state approach is that the state maintains a significant role in facilitating and monitoring service delivery and maintaining responsibility for delivery of certain core public services, since this approach considers compliance with rules and the loyalty of civil servants crucial to their successful delivery.

8.4.1.2. Applications to and Limitations of the Cambodian Case

Good governance and state capacity building make up the core of the development agenda for both the RGC and donors⁷ and is highlighted in the National Strategic Development Plan (NSDP) for 2006–2010 and the Governance Action Plan (GAP). It is most extensively elaborated in the Rectangular Strategy (2004) of the RGC, which clearly indicates that ‘good governance’ is core to successful poverty reduction. The Rectangular Strategy names four key areas in such reforms: (a) general anti-corruption efforts; (b) legal and judicial; (c) public administration; and (d) armed forces (RGC, 2004: 4). These reforms reflect the capable state approach as they aim to strengthen the capacity of the RGC to promote other aspects of development including: (a) enhancement of the agricultural sector; (b) private sector growth and employment; (c) continued rehabilitation and construction of physical infrastructure; and (d) capacity building and human resource development (ibid: 5).

The capable state model, founded on liberal governance assumptions in the same vein as TPA, NPM, and NIE approaches, requires a high level of political commitment, a strong democratic process, and a political middle class to hold service delivery actors accountable. In neopatrimonial settings, however, such conditions often do not exist. Accountability is readily undermined by an absence of rule of law, inadequate pay for civil servants, and the abuse and capture of contractual arrangements by powerful patrons. In fact, policy formation processes often have little relevance to real resource flows in the implementation of pro-poor policy strategies (Hughes and Conway 2004). Thus, danger lurks in the application of a ‘good governance’ agenda that assumes the existence of a capable state. In Cambodia, as well as many other countries, neopatrimonialism and capable state reforms have been able to coexist without radically altering the dominance of the neopatrimonial order (van de Walle 2004, Craig and Porter 2006).

⁷ The Country Assistance Strategy (CAS) for 2005–2008 of the World Bank Group in cooperation with the Asian Development Bank (ADB), UK Department for International Development (DFID), and the UN Development Systems (UNDS) makes clear the need to focus on good governance through the country program, adding that poor governance has been the primary constraint on the impact of the donors’ assistance on poverty reduction (WB 2005:ii).

8.4.2. Decentralisation

Decentralisation refers to ‘reversing the concentration of administration at a single centre and conferring powers of local government’ and involves the delegation of power to lower levels in a territorial hierarchy (Smith 1985: 1). Decentralisation generally refers to two processes: *political decentralisation* and *administrative decentralisation* (Rusten, Kim, Eng and Pak 2004).⁸ Political decentralisation refers to ‘the transfer of decision-making power to citizens or their elected representative’ (Cohen and Peterson 1999: 22). Administrative decentralisation, or deconcentration, means ‘the transfer of authority over specified decision-making, financial, and management functions by administrative means to different levels under the jurisdictional authority of the central government’ (ibid: 24).

A core principle is ‘subsidiarity’ (Breton *et al.* 1998), which means that functions should be assigned to the lowest level of government capable of performing them. It has been a tool employed in combination with NPM, NIE, and capable state approaches as a way to increase accountability, particularly at lower levels of service delivery functions. Decentralisation under the capable state perspective, however, is not just a matter of assigning governance functions to the market or to local managers. Decentralisation efforts must ensure that the local state is also capable. Clear ‘assignments’, ‘delegations’ and ‘functions’ must be in place to ensure civil servants understand and are capable of performing the tasks allocated to them, and receive adequate support by capable human resources and adequate financing through inter-governmental fiscal transfers and management systems (Bahl and Smoke 2003).

8.4.2.1. Accountability through Decentralisation

Decentralisation processes are designed to create stronger accountability between citizen and state by “bringing government closer to the people”. In turn, accountability is crucial for decentralisation to succeed (Manor 1999:67). The quality of accountability depends first on (a) the accountability of the elected representatives to the citizen in their territories; and (b) accountability of the local bureaucrats, other government agencies and executive officials towards the elected representatives (ibid). The two accountability relationships must complement one another to make government at the local level more responsive to citizen desires and more effective in service delivery (Blair 2000: 21, see also Faguet 2000, Mullins 2004, Craig and Porter 2006).⁹

Creating accountability between bureaucrats and local elected representatives also requires the establishment of appropriate formal administrative structures of a decentralised system. This includes consideration of (a) size and level of the local governments; (b) the mix of devolved and deconcentrated institutional arrangements; (c) effective government and government-NGO coordination; (d) phased assignment of functions and resources; and (e) local government autonomy and capacity (Manor and Crook 1998, Cohen and Peterson 1999, Smoke 2000a, b).

8.4.2.2. Applications to and Limitations of the Cambodian Case

Decentralisation has been a significant component of development efforts in Cambodia, with the first activities occurring in conjunction with UNDP’s CARERE programme in the mid-1990s, which

⁸ See ‘Administrative Decentralisation: Strategies for Developing Countries’ by John M. Cohen and Stephen B. Peterson (1999) for detailed discussion of the conceptual evolution of decentralisation and its many other various definitions.

⁹ Local coordination is also encouraged (as for example in Cambodia’s District Integration Workshops), and can offer both horizontal (between local departments) and vertical (between communes and provincial departments) accountability.

later evolved into the 'Seila Programme'. This programme increased the focus on building a capable, local state by engaging citizen participation, building the capacity of local officials, and establishing a reliable intergovernmental transfer system. A decade later, Cambodia's political decentralisation has begun with the election of Commune Councils in 2002.¹⁰ The source of financing for the local development activities comes from national transfers in the form of a 'development budget'. Seila has introduced and built capacity around many measures designed to increase transparency and promote accountability to commune and lower level actors through participatory planning and enforced contract measures. Seila's budgetary accountability and enforceability (and ongoing donor confidence) has been strongly safeguarded by (a) maintaining separate (some say parallel) foreign currency, inter-bank transfer systems (albeit locally administered and existing within the RGC treasury structure); (b) closely monitoring contractual arrangements; (c) installing centrally-funded advisors; and (d) focusing a great deal of capacity building on provincial and lower-level officials.

Despite notable advances in certain aspects of political decentralisation, administrative decentralisation or deconcentration has been characterised by consistently slow progress (RGC 2005). For example, at the sub-national level, line departments work very much along vertical lines with little horizontal coordination (CDRI 2006). In such arrangements, most of the functions and resources still rest with central ministries, leaving provincial and district governors with little power (Horng *et al.* 2005). This suggests that deconcentration (administrative decentralisation) still lags behind political decentralisation.

The virtues and limitations of enhancing accountability via decentralisation activities are described in an extensive body of literature (Prudhomme 1995, Batley 1999, Mullins 2004, Shah 2006, Craig and Porter 2006). Decentralisation accountability and performance depends on national and local arrangements. As Crook and Manor (1998) describe, 'it is clear... that even the most appropriately designed institutions for decentralisation cannot work independently of, or even against, contradictory forces coming from the political and social structures within which they are embedded' (p. 302). In the Cambodian case, it is apparent that decentralisation and the underlying social and political structures of neopatrimonialism typically work in close relation, sometimes disrupting, sometimes reinforcing, each other. In contexts where there is a vertically integrated neopatrimonial system, fiscally decentralised arrangements can be captured by local patrons and transferred to the central patrons. Under these arrangements, decentralised governance arrangements struggle to maintain effective service delivery (e.g., irrigated water, control of bird flu) because effective horizontal coordination between local actors, such as the provincial line department, the Provincial Governor's Office, the district, and the Commune Councils is missing. The arrangements may also fail to reign in unlawful interests that are able to colonise local spaces opened up by the decentralisation process, turning them into (neo) patrimonial domains (Prudhomme 1995, Craig and Porter 2006).

8.4.3. Political Accountability

Political accountability refers to the institutions, procedures, and mechanisms that ensure government responsiveness to citizen needs (DFID 2006).¹¹ Political accountability defines the relationship between state and society as a core principle of democratisation, and thus has major

¹⁰ The most comprehensive account of this and related administrative and fiscal decentralisation activities are to be found in Rusten, Kim, Eng and Pak (2005). Accounts of important parts of this process can also be found in Westcott and Porter (2001) Romeo and Spykerelle (2004), Rudengren and Ojendal, (2002), Hughes (2005), Turner (2002), Blunt and Turner (2005), UNCDF (2006), and at the Seila programme website www.seila.gov.kh.

¹¹ DFID Key Sheet: Decentralisation and Political Accountability, website www.keysheet.org.

implications for all other aspects of accountability (March and Olsen 1995, Fox 2000, Brinkerhoff 2001, Keohane 2002, WDR 2004, Burke and Nil 2004, Malena, Foster and Singh 2004, Rusten *et al.* 2004, Horng *et al.* 2005). Political accountability has two pathways: vertical and horizontal (DFID Key Sheet 2006). Vertical political accountability is achieved through regular, free and fair elections and is linked to the division of power at different levels of government (national, sub-national, and local). Horizontal accountability is created through the separation of powers (executive, legislative and judiciary) that create checks and balances to prevent the abuse of power (DFID 2006, Schedler *et al.* 1999). Horizontal political accountability can be promoted through demand by non-state institutions, such as civil society organisations, political parties, and international actors (Fox 2000: 2).

8.4.3.1. Accountability through Democratic Political Competition

Theory proposes that democratic political competition through elections is important for creating political accountability. Political competition, in particular the right to vote, allows people to choose the kinds of leadership they want, and to shape leaders' attitudes towards policy. Such competition requires government officials to acknowledge that their performance is directly related to people's trust, and thus, their vote in elections. Elections also require officials to be accountable for the performance of their government portfolios, as well as their participation in collective decision-making at cabinet level, since they are representatives of the elected party. Additional components of political accountability, such as access to information, an active media, installation of policy watchdog groups, and the ability to impose sanctions for non-performance, create additional mechanisms that can ensure politicians are responsive to their constituents' wishes, not just to their party or other powerful interests (March and Olsen 1995:162). Legislative bodies, a strong and independent court system, a free press, other independent actors, and individual citizens can enhance political accountability by accessing and disseminating information as well as by creating and enforcing sanctions for ill performance by the elected leaders.

In summary, political accountability is established over time through a mix of activities which engenders both vertical and horizontal accountability both within and outside the government. For example, elections can strengthen the accountability of officials to citizens, but they must be frequent, transparent, and fair. Incentives must be created to encourage elected officials to diversify investments into social services such as health and education, rather than solely focusing on highly visible, vote-securing projects like roads or bridges.

8.4.3.2. Applications to and Limitations of the Cambodian Case

During the last decade, there have been three consecutive national elections that have produced governments in which two parties share power. The 2002 elections of local commune councils is a major example of the creation of stronger vertical political accountability. These elected councils received some discretionary funds to implement development plans established through a local participatory planning process that requires commune councils to be increasingly accountable to its citizens. The external funds made available to finance civil society organisations, including the media, human rights organisations, parliamentary watch programmes and election observer organisations, are intended to establish and maintain processes that inform citizens about the government's activities.

A limitation of political accountability is that elections can be a weak mechanism for enforcing accountability since what matters most is what happens between elections (Keohane 2002). This requires strengthening horizontal mechanisms to ensure accountability to citizens between elections

(Malena *et al.* 2004: 2). Cambodia and other developing countries, however, have experienced limited achievement on this front.¹² Access to agencies and disclosure of information about government operations is often restricted or well guarded (March and Olsen 1995: 163). Exacerbating the problem of political accountability is the lack of credible political competition, poor transparency in public policy-making, and the politicisation of the executive over the legislature and the judiciary (DFID 2006).

Cambodia is also plagued by many such challenges. Elected representatives and state bureaucrats are rarely called upon to be accountable for their decisions or performance, such as in the lack of responsibility taken at the national level for delivery of previously allocated commune/sangkat funds in 2004 (Rusten *et al.* 2004). At the same time, there is poor information sharing between elected councils and citizens, and almost no mechanisms for ensuring satisfactory performance. Because elections are based on proportional representation along party lines, they tend to weaken political accountability since individual politicians who are removed from one position can be reinstated to another position based on their placement on the party's list (Horng *et al.* 2005: 9).¹³

8.4.4. Social Accountability

Social accountability is defined as an approach that relies on civic engagement by ordinary citizens and/or civil society organisations (CSO) participating directly or indirectly in promoting accountability (World Bank 2003: 1). These efforts have been described as supporting the 'demand side' of political accountability, which means strengthening people's demands for such accountability by fostering and strengthening civil society participation (Malena *et al.* 2004, DFID 2006), particularly civic engagement with state officials, in order to make them more accountable. Public sector reforms including decentralisation efforts also create venues for enhanced social accountability.

Social accountability is an approach that has been particularly promoted by the World Bank and DFID in recent years as policy makers seek to add another dimension to political accountability (Malena *et al.* 2004, Ackerman 2005, DFID 2006). Two key assumptions drive this agenda. First, although governments can do much to strengthen internal accountability, it is not sufficient to ensure accountability in all government operations (Ackerman 2005: 11). The second assumption is that society is the key actor that can force government accountability (Ackerman 2005). After all, why should government pay heed to accountability if there is no demand for it?

8.4.4.1. Demand-side Accountability

Earlier government accountability efforts had an 'either-or' orientation (Uphoff 1996: 36) and thus focused solely on supply-side efforts through government mechanisms (e.g., strengthening state institutions, establishing rules and regulations, empowering the judiciary), or purely on civil society efforts to ensure such accountability. By contrast, current social accountability thinking assumes a 'both-and' frame in which neither government nor civil society can be left out of the accountability equation. Thus, programme designs now focus on building reinforcing partnerships based on mutual interests between civil society and government actors. 'State-society synergy' is now a crucial element (World Bank 2005: 13) of social accountability efforts, which is made up of a group of 'soft' institutions which theorists argue have been previously under-exploited as

¹² March and Olsen argue that 'enforcing political accountability is impossible, not so much because of resource inequalities among citizens as because of the size and complexity of the public sector' (1995:165).

¹³ Since it is parties that are elected rather than individuals, it is difficult to remove an individual who may have party support but no popular mandate.

powerful accountability tools: citizen participation, NGO and watchdog networks, and partnerships with NGOs and donors. These actors engage in a number of actions and mechanisms promoted by social accountability advocates as capable of enhancing society's demand for government accountability (Malena *et al.* 2004: 3). These include (a) promotion of citizens voice and user report cards; (b) demonstrations, advocacy campaigns, and investigations of public interest problems; and (c) use of media and unions to monitor progress and increase participation in a government's policy making processes and budget activities.

Temporary ad-hoc initiatives typically achieve only short-term solutions with limited impact, resulting in a lack of long-term institutionalisation of reforms. To create long-term accountability, advocates encourage societal participation in all stages of government implementation of policies, with government agencies taking an active role in creating laws which mandate ongoing citizen inputs into the policymaking process. Broad-based participation from civil society actors is considered to be at the heart of creating sustainable social accountability, since widely inclusive interests are seen as more legitimate than those of small groups (Ackerman 2005: 22).

8.4.4.2. Applications to and Limitations of the Cambodian Case

Cambodia is just beginning to explore opportunities to enhance social accountability, and emerging examples include NGO associations, such as those that have formed around election monitoring and human rights promotion since the early 1990s. Such groups exert demands on government accountability through education and awareness activities, advocacy and public campaigns demanding government responses to public problems, and mobilising individuals to form associations to address certain public problems. Other examples of engaging citizen participation in local politics and development to enhance upward accountability are the creation of Village Development Committees (VDC). The VDCs play a significant role in citizen participation in local planning processes, including identification and prioritisation of local issues, allocation of local funds, and monitoring the quality of projects implemented by commune councils. The most recent example of the implementation of a social accountability tool has been the establishment of an accountability board to monitor the use of the commune/*sangkat* fund (CSF). This serves as a mechanism to ensure accountability within commune elections, citizen participation in commune affairs, and oversight of complaints regarding the misuse of C/S funds or poor quality projects.

With regard to the limitations of social accountability, Malena, Foster and Singh (2004) allude to the following challenges: i) the perception of the legitimacy of civil society actors; (b) the lack of a clearly defined constituency and accountability of local and international CSOs; (c) the difficulty of civil society leaders in exercising their accountability-demanding duties in a neopatrimonial regime, and worse yet, the possibility of co-optation of CSOs by entrenched interest groups; and (d) possible distortion of the primary accountability relationship between citizens and elected leaders by the omnipresence of CSOs seeking to provide short-term services, but to the detriment of long-term sustainability when these CSOs leave. In Cambodia, these problems abound. For example, few local and international CSOs pay attention to long term sustainability, as many operate from an output-oriented mode to satisfy their short term contractual obligations with donors (see Rohdewohld and Porter 2006).

8.4.5. Triangle Accountability

The 2004 World Development Report (WDR), *Making Services Work for Poor People*, brings many of the principles of earlier public administration approaches forward, repackaging them into an expanded vision of accountability and improved public service delivery for developing countries. Five key accountability dimensions are suggested:

- delegation (meaning clear assignments);
- finance (adequate funding at all levels);
- performance (of public servants, ministries, and other service providers);
- information about performance, (as described above, see also Schedler 1999); and
- enforceability (WB 2004: 47).

This WDR approach increases focus on the need to enhance structural integrity as well as individual performance to improve institutional accountability. In particular, it views accountability not simply from an *ex post* perspective (after the event) but also from an *ex ante* perspective; namely, accountability issues should be relevant before, during and after events take place. Thus, the report argues that one cannot strengthen accountability by holding providers responsible for outputs and outcomes in isolation. If providers do not receive clear delegation of assignments that precisely specify the desired objectives, increasing enforceability is unfair and ineffective. If providers are not given adequate resources, holding them accountable for poor outcomes is again unfair and ineffective.’ (WB, 2001: 47). Therefore, accountability relationships can be said to be triangular since they occur between the state (politicians and policy makers), service providers (the managers and frontline workers), and citizens or clients of services. The range of accountability modes invoked by the triangle accountability model entail both direct and indirect accountability relationships and hold NIE-oriented assumptions at their base, particularly the importance of connecting the poor to functioning markets at the same time as ensuring that services, and their governance, are focused on achieving outcomes that directly help the poor.

8.4.5.1. Accountability through Triangle Relationships between Policymakers, Service Providers and Citizens

The triangle accountability model provides analytic flexibility for considering complex accountability relations at all levels of government in Cambodia. For instance, national-level accountability relationships are formed by citizens electing politicians and policymakers into office and entail policymakers demonstrating accountability back to voters, creating what the model terms the ‘people-policymaker/politicians’ accountability relationship. In addition, politicians in the Cambodian government are typically the primary policymakers, but do not perform the actual functions of the state, which are delegated to bureaucrats. This delegation creates a relationship where bureaucrats are primarily accountable to politicians, creating ‘policymaker/politician-service provider’ accountability relationships. Yet Cambodian voters also deal directly with bureaucrats through service-oriented interactions taking place in numerous public sectors, from enrolling a child in school, to visiting a primary health centre, obtaining a driver’s license, or interacting with a policeman, thus constructing a ‘service provider-people’ accountability relationship. This model is equally powerful for dissecting accountability relationships at the local level, where commune/sangkat councils make up the ‘politicians/policymakers,’ clerks and selected project contractors are the ‘service providers,’ and ‘local people’ serve as the electors of the councils and the beneficiaries of the services or goods.

8.4.6. Horizontal Accountability Towards Shared Accountability

In recent years, a great deal of international discussion about accountability relates to problems emerging from the application of New Public Management and New Institutional approaches to public administration. Very early on, observers of these approaches noted that they created major coordination problems (Rhodes 1999). In development circles, this problem has been treated as a matter of coordination between donors (harmonisation), and addressed mainly through the formation of mechanisms like Sector Wide Approaches (SWAs) that try to coordinate all donor activities within a particular sector around agreed priority programmes, although rarely around targets and outcomes. In the Cambodian context, more robust shared donor coordination and

accountability efforts include the Seila programme. To some extent too, indicators such as the Millennium Development Goals have also played a coordinating role. Issues of coordination dealing with the multiplicity of different agencies, and how their activities can be coordinated or ‘joined up’, then, are of increasing importance in donor countries as well as Cambodia.

8.4.6.1. Accountability through Horizontal Coordination around Targets and Outcomes

Observation of fragmentation and how accountability based on actual outcomes can be undermined has led to a number of governments and sectors in donor countries moving to strengthen their ability to ‘ensure’ social outcomes through better ‘joined up’ governance (Giddens 2004). In countries like New Zealand and the UK, which originally led NPM reforms, there has been recognition that new institutional fragmentation had gone much too far (Boston, et al., 1996). In their respective reviews of existing governance arrangements, these governments sought, as one commentator put it, to have ‘all the king’s horses and all the king’s men’ pooling their efforts to ensure that the ‘Humpty Dumpty’ of the shattered state could be put together again (Gregory 2003). Approaches emphasising ‘managing for outcomes’, rather than just the outputs specified in typical NPM approaches are among the strategies that have been tried.

‘Managing for outcomes’ proposed that managers should be held accountable not just for delivering on a narrow range of outputs (e.g., number of tube wells dug), but rather on wider outcomes, such as sustainable, equitable access to drinking water achieved for all the people in a particular province. This means that managers would have to consider matters beyond just their own organisation and tasks. For example, the provincial agency in charge of rural healthcare needs to consider how to integrate its tasks with the agency responsible for basic education as well as the local government and community. The rural healthcare agency might also have to coordinate with other NGOs working in the same area to ensure even coverage.

8.4.6.2. Applications to and Limitations of the Cambodian Case

Evidence of much uncoordinated donor activity and multiple agencies working with different variations of contracts and partnerships, as well as very different accountabilities, can be readily observed throughout Cambodia. Nonetheless, attempts to increase horizontal accountability have been around for some time, especially under SWAp and Seila arrangements.¹⁴ One hope is that the new D&D arrangements will strengthen horizontal coordination by creating ‘unified administrations’ at the sub-national level with the aim of establishing and promoting an administratively coordinated and politically integrated governance system.

While SWAps and Seila’s District Integration Workshops are examples of approaches that seek to increase coordination and horizontal accountability, it is clear that so far they have not had the success they might have. Coordination involving NGOs (representing citizens) and provincial line departments (e.g. often the primary service provider) is mainly voluntary and typically does not move beyond lower levels of coordination activities, such as District Integration Workshops, which themselves have limited coordinating reach. Such coordination is often restricted to individual projects. It is also difficult to get the government’s local actors and departments to collaborate to achieve outcomes and exercise shared accountability when there is no mandatory obligation to do so, and when vertical accountabilities back to particular principals, and the costs of coordinating (e.g., travelling to and holding meetings) are not usually written into such contracts or mandates.

¹⁴ For more information, please see RGC 2006 (development cooperation), RGC 2006 (NSDP), Seila Task Force 2005, WB CAS 2004.

Sections 3 and 4 have elaborated in some detail the conceptual grounding of accountability shaped by theories and the more recent development-oriented thinking of major development agencies. The chapter now turns to a review of the history of Cambodian political economic governance, how and on what basis it has functioned, the pros and cons of such a governance system, and how these have contributed to the Cambodian understanding of accountability.

8.5. Patrimonialism and Neopatrimonialism: Theories and Cambodian Examples

The discussion above has demonstrated the strong attention paid by Western models to technical factors of governance systems based on formal rules and rational bureaucracy. A formal legal-rational bureaucracy, though necessary, does not sufficiently resolve the intricacy of the Cambodian governance system, within which informal interests intertwine with and often dominate the formal structures. This system can be characterised as neopatrimonial, as discussed in the international literature. We now turn to that literature for an overview of traditional patron-client relationships, which is the foundation for understanding neopatrimonialism.

In this section, a typology of characteristics of traditional patron-client relationships and neopatrimonial bureaucracies is provided. The discussion avoids the temptation to exact normative judgment on these complex relationships and instead presents simple typologies and documented impacts of such relationships. The analysis is then extended to consider the broader implications of such systems on the role of the state, and more specifically, on accountability in present-day administrative structures in Cambodia.

8.5.1. *Patrimonialism*

The concept of patronage (patrimonialism) was first elaborated by Weber (1965, 1978). Using the term *traditional patrimonial governance*, Weber describes a situation in which administrative positions and structures are set up by patrons who then assign authority to deputies over certain parts of the overall patronage domain. In short, patrimonialism is a power regime based on the personal arrangement of the patron, and his/her discretionary ability to dispense favours and resources to clients, who in turn rule as sub-patrons within their own domains (Weber 1978: 1010f). Such patron-client relationships remain common in Southeast Asia, South America, much of the African continent and less-developed sections of Europe (Scott, 1977, Neher 1981). Several prominent scholars propose that such relationships make up the heart of power and authority dynamics at both local and central levels (Scott 1972, Hanks 1975, Neher 1981). Scott defines patronage in these contexts as ‘a special case of dyadic (two person) ties involving a largely instrumental friendship in which an individual of higher social-economic status (patron) uses his influence and resources to provide protection or benefits, or both, for a person of lower status (client) who, for his part, reciprocates by offering general support and assistance, including personal services to [the] patron’ (Scott 1977: 92).

8.5.1.1. *Chief Characteristics of Patrimonialism*

Patrimonialism can manifest itself in different forms, but it has been observed to possess a number of common characteristics across various political settings, such as high adaptability, personalised power, wealth accumulation, hierarchy and unequal reciprocity, cultural and traditional values, and negative impact on pro-poor service delivery. The high adaptability helps explain why patrimonialism is so persistent (Scott 1977, Brinkerhoff 2002). A patrimonial regime never disappears completely, often managing to emerge in a different form (Brinkerhoff 2002). Such adaptability is possible because patrimonial relationships are largely embedded in interpersonal interactions, making it resistant to change in economic situations, political regimes or modernisation efforts (Eisenstadt

1984). Patrimonialism assumes ‘entourage’ and ‘circle’ (Hanks 1975) or ‘cluster’ and ‘pyramid’ (Scott 1977) structures because there is normally only a small group of resource-rich patrons to whom everyone else aspires to be close. ‘Entourage’ refers to people who are immediate clients of the patron and compete to nurture favourable relationships with the patron (Hanks 1975). The entourage people serve as sub-patrons to other fellows down the hierarchy who in turn are referred to as their ‘circle’ (Hanks 1975, Scott 1977). Resources and information that are shared within entourages and circles in turn work to reinforce the regime.

Patrimonial administration features a high degree of ‘personalised power’. The power is personalised through the direct and indirect control of resources, which helps to maintain and reinforce a patron’s authority. In the public sector, a patron can be the embodiment of legislative, executive and judicial power. The rulers retain personal sovereignty over law and rules, often personally adjudicating over disputes. In short, ‘the patrimonial state offers the whole realm of the ruler’s discretion as the hunting ground for the accumulation of wealth’ (Weber 1978: 1099).

Another characteristic of patrimonialism is, therefore, personal wealth amassment. The patron is able to accumulate personal wealth because he/she holds direct or indirect control over important resources—be they economic or social, information or knowledge. The patron exploits this resource-controlling advantage by seeking rents from individuals who wish to use the resources. Brinkerhoff and Goldsmith (2002) argue that patrons are also able to amass wealth through the appointment, promotion and transfer of staff, selling lucrative positions, and the delay of approval of major investment projects in order to seek under-the-table rents. Patrimonial regimes also exhibit strong hierarchy and vast inequality in benefit sharing. The patron usually commands the highest portion of resources and rent. The sub-patrons and clients need to ensure that the patron is given the highest share of the benefits, giving rise to what is commonly termed ‘unequal reciprocal relationships’ (Weber 1978, Kaufmann 1974). The dependence of entourage and circle individuals on the power and resources of the patron maintains the practice of the patron receiving the greatest share, even though the patron may do very little actual work (Weber 1978).

The nature of patronage is also shaped by cultural and traditional values. Attitudes towards religion, relationships to authority, and social order have significant impacts on a society’s patronage structures (Eisenstadt 1984, Scott 1977, Neher 1981, and Hanks 1975). For instance, Buddhist concepts of merit, karma and leader benevolence have profound impacts on basic social, political, economic and cultural patterns of Burmese, Thai, Laotian, and Cambodian people, which in turn affect the notion of hierarchy in these societies (Neher 1981: 92, Eisenstadt 1984: 117–137). Patrimonial practices are also said to adversely impact the poor (Neher 1981, Brinkerhoff and Goldsmith 2002). Because access to important resources is tightly held by powerful patrons and their immediate cluster, the poor and the disadvantaged people are deprived of basic resources to maintain their livelihood (Auyero 2001). In other words, the limited choice and crisis-prone livelihood of the poor necessitates the need to live and work in and support the patron’s domain in order to guarantee survival.

8.5.2. Neopatrimonialism

As the name suggests, neopatrimonialism maintains the essential features of classic patrimonialism. Bratton and van de Walle (1994) define neo-patrimony as a regime where:

...the chief executive maintains authority through personal patronage, rather than through ideology or law. As with classic patrimonialism, the right to rule is ascribed to a person rather than an office. In contemporary neopatrimonialism, relationships of loyalty and dependence pervade a formal politics and

administrative system and leaders occupy bureaucratic offices less to perform public service than to acquire personal wealth and status. The distinction between private and public interests is purposely blurred. The essence of neopatrimonialism is the award by public officials of personal favours, both within the state and in society. In return for material rewards, clients mobilise political support and refer all decisions upwards as a mark of deference to patrons (Bratton and van de Walle, 1994:458)

A shorter definition provided by Brinkerhoff and Goldsmith (2002) depicts neopatrimonial regimes as ‘a mixed system of government administration, with a rational-legal veneer overlaying a web of personalistic ties characteristic of patrimonial rule’ (p. 40). In essence, neopatrimonialism concerns a hybrid¹⁵ form of governance incorporating both traditional patrimonial behaviours and rational-legal administrative arrangements. An excellent summary of the term’s origins and analytic use can be found in Erdmann and Engel (2006).

8.5.2.1. Chief Characteristics of Neopatrimonialism

Neopatrimonialism is a new form of patrimonialism, and therefore shares many of the classic patrimonial features. The ‘neo’ aspects of neopatrimonial regime are its ‘adjustments’ to operate in tandem with, or even dominate, its partner, the rational-legal system. Neopatrimonial power is maintained through mastery of the formal and informal system, combining resources from the cultural (traditional), family, economic, political and administrative worlds (Bayart 1993, Braathen 2002). A number of notable characteristics are described below.

Neopatrimonialism is a highly personalised, patron focused, and often presidential system, in which the benefits of resource extraction through formal state apparatus are confined solely to a small group of elites. Even when operating alongside and beneath the rational governance system, the patronage system remains personalised, focusing especially on the patron and a small number of clients close to him or her. Such regimes are highly ‘presidential’, with great power and discretion over a large share of the state’s resources residing with the leader, even though he or she may be elected (van de Walle 2001: 52). As Chabal and Daloz (1999) note, the patron also becomes the personal focus of hopes and problems. There is often a ‘universal resort to personalised solutions to societal problems’ (p. xix): when people have, for example, land issues, they will travel to where the person they think can resolve the problem resides. The high degree of personalisation is possible because of the *geographical centre of power*, which is normally based around central political figures, central ministries and central military command, and their immediate clusters. The ability to co-opt both the formal and the informal models of governing for personal wealth creation is another key feature of neopatrimonial regimes. Despite the presence of the formal rational-legal institutions, such as the rules and regulations that seek to curtail the opportunistic behaviours of the powerful, they prove very adaptive. In fact, regulatory and judicial processes are used as mechanisms to further solidify power and accumulate personal wealth (Brinkerhoff and Goldsmith 2002).

Neopatrimonial forms of governance also exhibit both manipulation of policy implementation and disruption of judicial accountability. The interpersonal obligations and loyalty embedded in the traditional patron-client relationships produce great difficulties for the rule-based rational-legal bureaucracy in the implementation of policy. The result is a system replete with selectivity, informality, and discretion in the application of judicial, regulatory and bureaucratic rules. Hence, as O’Donnell (1996) points out, ‘formal rules about how political and administrative institutions are supposed to work are often poor guides to what actually happens’ (p. 40). With regard to

¹⁵ A hybrid system or ‘hybridity’ refers to a situation where democratic structures merge with local/historical political cultures and institutions; exhibiting both authoritarian and democratic characteristics (Diamond, 2002); operating through both formal/bureaucratic and informal/patrimonial mechanisms (van de Walle 2001).

inequity, neopatrimonial practices also exacerbate the problem (Brinkerhoff and Goldsmith 2002). Because neopatrimonial governance allows broad discretion and informality, the delivery of public services (e.g., health, education) suffers (Bratton and van de Walle 1994).

Another prominent attribute of neopatrimonialism is the *systemic fiscal crisis* observed by Van de Walle (2001: 52). He argues that the state is chronically starved of resources. Taxes and other revenues are either not collected, subject to highly selective collection or skimming, or routinely avoided. Thus, public funds formally designated to provide services or pay salaries are skimmed, or reduced by handling ‘percentages’, or diverted into private bank accounts. Finance therefore becomes a vulnerable point, or ‘Achilles heel’, of neopatrimonialism (Callaghy 1984). Last but not least, the neopatrimonial relationships that pervade formal governance systems from top to bottom become institutionalised and highly reform resistant. Neopatrimonialism is composed of a hierarchy of various layers of patron-client relationships that often map directly onto formal bureaucratic organisation charts. As a result, a chain of dyadic (two-sided) exchanges, from village level to the highest reaches of the central state (Van de Walle 2001: 51) make extensive use of networks, create horizontal and vertical informal links and brokering and protection arrangements, which ultimately firmly link the centre and periphery (Kettering 1988).

8.5.3. *Patrimonialism in Cambodia*

As discussed earlier, patrimonial practices are historically prevalent in most societies. Cambodia has also exhibited a rather unique set of patrimonial practices in its history. For example, Thion (1993) remarks: ‘The backbone of [Cambodian] traditional political structure was the patron-client system of dyadic relationships’ (p. 78). The chief characteristics of patrimonialism mentioned in the empirically grounded international literature serve as a useful benchmark for considering the Cambodian case. This section attempts to add to the empirical body of evidence of patrimonial features by reviewing manifestations of Cambodian patrimony. In particular, the section touches upon the historical and present-day orientations to power and leadership in both the political and social environment, and the assumptions underlying the patron-client exchange relationships.

Cambodia’s experience as a patrimonial society can be traced as far back as the pre-Angkorian period, with Indian, Hindu, and Buddhist values deeply influencing the notion of patronage. Cambodia’s colonial experience as a French protectorate, as well as the country’s more recent history of internal conflict, has further influenced the nature of patron-client relationships. A number of basic features of patrimonialism in Cambodia are observed below.

First is the personalisation of power in national leaders, which has been evident in several historical periods, including King Sihanouk’s *Sangkum Reastr Niyum* and General Lon Nol’s Khmer Republic. Such personalisation continues strongly into the present day. *Sangkum Reastr Niyum* was a socialist movement founded by the young King Sihanouk and swept all seats in the national elections in 1955 (Chandler 1991). The political scene was dominated by Sihanouk, whose popular support and respect from common people was derived from the concept of ‘royal authority’ (Ledgerwood *et al.* 1994), which allowed him to enjoy personalised and absolute power to rule without being challenged (Chandler 1991, 1996, Ebihara *et al.* 1994). In the following Lon Nol’s regime, the General ‘saw himself at the pinnacle of Cambodian society’ (Chandler 1991: 5) and later moved to abolish freedom of expression and to censure the press (Martin 1994: 131).

Second, interpersonal obligations and chains of unequal reciprocity have existed under the prevailing *ksae* and *knorng* relationship. *Ksae* literally means ‘rope or string’ and refers to the string of clients who rely on the protection and support of their *knorng*, which means literally ‘back’, or analogously as ‘patron’. This relationship creates strongly intertwined interpersonal obligations, as

each client is also a patron to a network of clients below. In times of need, clients located lower down the *ksae* seek help and intervention from the *knorng* directly above him, continuing the patron-client chain all the way to the top of the *ksae* as needed. The recent turbulent and violent history of Cambodia characterised by great physical hardship and insecurity further necessitates this *ksae* and *knorng* practice, which exists in both administrative and political spheres (Roberts 2001, Un 2004). Such practice become the norm when neither the state nor the family is able to offer protection to individuals (Scott 1972).

The third feature concerns the traditional values of karma, merit and ceremonialism embedded in the spiritual values that emerge from a *syncretic* blend of Hinduism, Animism and Buddhism. Buddhist beliefs are closely woven into the complex social hierarchies of Cambodian society and inform social, political, economic, and cultural orientations for individuals, families, villages, and the nation (Ebihara 1968). The concept of *karma*, a centrepiece of Buddhism that pertains to the sum of one's good and bad actions in current, previous and future lifetimes, influences perceptions of the social order and promotes the existence of unequal patron-client relationships in Cambodia. David Chandler writes, 'according to popular belief, merit accumulated in previous lives [goes] a long way towards explaining a person's social position' (1991:04). People lower down the social strata accept their socio-economic position, but expect those with higher status to respect and tolerate those existing at the lower strata. For example, urban elites contribute to the building of tangible merit-gaining public good, such as schools or pagodas in the countryside.

The dominant social behaviours of 'conflict avoidance' and 'face saving' are the other key elements that support patrimonial practice in Cambodia because they uphold the notion of *hierarchy*. Ordinary Cambodians prefer to avoid conflict of any kind, especially if it involves those who are considered more powerful. On many occasions, they may also prefer to be humble and take the peaceful and acquiescent path (O'Leary and Nee 2001). Observation suggests that ordinary Cambodians would often prefer to be the 'loser' in a conflict if it involves powerful people. A patrimonial system survives well in such a belief system. Similarly, the practice of face saving or non-questioning of the higher authority reinforces patron-clientelism. Cambodians sustain and strongly encourage the culture of face-saving, which 'neither knowledge nor the coming of the modern world' could weaken (Martin 1994: 14). Martin further states that 'to avoid loss of face means to persist in one's errors. Khmers do this with a great deal of elegance, concealing their feelings behind the facade of a charming smile directed at their interlocutor, Khmer or foreigner' (ibid).

8.5.4. Neopatrimonialism in Cambodia

As discussed in section 5.2, neopatrimonialism is a governance system comprised of rational-legal bureaucratic institutions and traditional patrimonial culture (Brinkerhoff and Goldsmith 2002; van de Walle 2001). This section discusses neopatrimonial practices in Cambodia since the economic liberalisation of 1989 and considers how the emergence of a neopatrimonial form of governance influences administrative, economic and political functioning. Since data on such phenomena is extremely limited, the analysis is based on a number of scholarly chapters on contemporary Cambodian politics (Sedara 2001, Hughes and Conway 2004, Rusten *et al.* 2004, Heder 2005, Un 2005) and recent reports on challenges to Cambodia issued by the donor community (USAID 2004, World Bank 2005). Anecdotal evidence from CDRI field visits to five provinces in late 2005 further augments this analysis. Due to the limited nature of this literature, this review does not make any conclusive judgements but explores a number of characteristics of Cambodia's neopatrimonial environment.

First, neopatrimonialism in Cambodia promotes centralisation and is mainly supported by rural patronage. Neopatrimonial practices feature 'centralism,' which means power is typically

centred around central-level figures (Calavan, Briquets and O'Brien 2004) and central ministries exercising control over resources. A second characteristic of neopatrimonialism in contemporary Cambodia involves the informal and personalised capture of the formal state institutions for self-enrichment. Since the economic liberalisation of the early 1990s, the state 'has employed the rationale of economic development to free up resources that could then be used to bolster regime legitimacy through the award of gifts and positions to clients, which in turn generates the power and opportunity to extract rent' (Hughes 2003: 61). The use of administrative positions 'among state employees engaging jointly or individually in economic activities in which the abuse of their position constitute[s] the profitable element' has also been common (ibid: 42; Calavan *et al.* 2004). Political scientist Steve Heder (2005) points out that family connections and economic interests are what link key state and non-state players (i.e. government and business) together, observing the blurred distinction between the public and private domain:

This decisive melding of bureaucratic, military and economic power is rooted in a sea change of socioeconomic transformation driven by this self-regenerating, oligopolistic and predatory entrepreneurial elite... [whose] revolution [has] generat[ed] unprecedented growth and wealth in a few sectors (p. 114)

The mutually beneficial relationships emerging from such "melding" have built a strong and cohesive, but informal, state apparatus, making it politically challenging to discipline questionable entrepreneurial activities in which other patrons or clients are involved (Hughes and Conway 2004: 27). According to Hughes, *The Civil Servants Law (1994)* 'declared that state officials and members of the military could not be prosecuted for any crime unless the court first gained the permission of their immediate superiors in the civil service or armed forces.' (2003: 43). Hughes further notes that attempts to get such permission 'frequently went unanswered' (ibid: 43). Another depiction of the personalisation of solutions to public good problems is evidenced in villagers camping out in front of the National Assembly to ask for help or intervention concerning disputes occurring at the local level. People do not trust the formal institutions, such as the court or the police, but appeal to powerful patrons higher up in the system to solve their disputes.

A third attribute of Cambodia's neopatrimonialism concerns the politicisation of state institutions by a strong executive branch. Politically-connected patronage impairs the foundation of democracy, which is the principle of 'separation of powers' and 'checks and balances.' Loyalty to political leaders and party networks and hierarchies overrides accountability to constituencies (World Bank 2004, Calavan *et al.*, 2004) within an environment where the distinction and independence of the three branches of government is blurred.

A fourth element relates to the subordination of the formal state institutions to the informal interests, or a blurred distinction between the two, and the implications of this subordination for accountability. Hughes and Conway (2004: 35) argue that the important implications of the subordination of the state system to network interests include "the degree of political interest in different sector ministries...depending on the prospects that these Ministries offer for control over resources and power." The dominant political interest in the state's bureaucratic functioning results in a situation where the level of ministries' influence is judged based on "their ability to mobilize resources from within, via networks of rent-seeking activity; the personal influence of their ministers with the Prime Minister; and their ability to capture resources from donors" (ibid: 39). As a consequence of this subordination, neopatrimonialism in Cambodia has given rise to powerful alternative accountability lines based on political and personal loyalty, mutual economic interests and family connections (Heder 2005).

A fifth feature is the disruption of core administrative functions and service delivery. By design, neopatrimony is not conducive to pro-poor service delivery, as bureaucrats in such arrangements

typically hold their position to increase personal wealth rather than develop quality public services (Bratton and van de Walle 1994). Hughes and Conway (2004) identify a key aim of certain Cambodian senior officials to be 'the retention of discretionary action in order to facilitate any personal deals with rent seeking potential that may become available' (p. 42). Basic and essential services for the poor and private sector assistance are particularly susceptible to tampering by patrons. For one, neopatrimony undermines the quality, as well as equity, of public service delivery by creating permanent fiscal crises which have kept state apparatus under-funded, thus preventing available resources from reaching frontline services on a broad and equitable scale. Salaries that are inadequate to support a decent living, coupled with the chronic lack of teaching and medical supplies, for example, make it difficult to expect satisfactory performances from state teachers or health professionals.

A sixth feature is that neopatrimonial practice is present from the central to sub-national level. Exploratory fieldwork in six provinces (CDRI 2006) found that only a few influential players appear to control access to large resources, such as natural resources and externally-financed development spending. These elites are often affiliated with the ruling political party and enjoy close relationships with local economic elites and the regional military. They have benefited economically from the decentralisation process, which has allowed them to capture some control over resources and engage in contracting for major state-sponsored investment projects.¹⁶ Another group of actors at the provincial level is the party-affiliated technical bureaucrats who engage informally with resource holding elites in order to gain access to scarce resources. But even these few well-connected, capable bureaucrats who are able to receive salary supplements from various externally financed projects (e.g. Seila, NRDP, RPRP, LMAP¹⁷) are generally negatively impacted by centralised patrimonial behaviour. For example, the salary supplement one staff member receives is informally shared with the supervisors, making the take-home amount minimal. The typical result is resentment and the engagement in 'survival' corruption, purportedly to maintain a basic standard of living.¹⁸

At the community level, neopatrimonial interests are also present, even though the democratic election of commune councils in 2002 marked a shift from uni-party domination of the local political arena to multiple party engagement.¹⁹ Despite this, local politics remain vulnerable to hijacking by traditional patrimonial interests. For example, a 2005 GTZ-funded assessment by Bunly and Dongelmans of the local planning process identifies a number of examples of rational-legal processes which are subject to interference from outside interests, including the inclusion of 'high priority needs...at the instigation of PBC [Commune Planning and Budget Committee] members... without being reviewed by villagers during the village meeting' (p. 5). Conversely, 'community officials see themselves as under the direction of higher-level authorities and.... un-reviewed projects are included in their priority list if suggested by a higher authority' (p. 5).

Last, but not least, neopatrimonialism in Cambodia has become institutionalised, making it difficult to reform. Cambodia is currently involved in a series of long term public administration reforms,

¹⁶ For instance, interviewees reported that a former head of Provincial Department of Rural Development in one northeastern province-owned two civil construction entities: a construction company and a quarry company. The interviewees reported that the two companies won numerous contracts of a prominent development project (CDRI 2006).

¹⁷ NRDP: Northwestern Rural Development Project; RPRP: Rural Poverty Reduction Project; LMAP: Land Management and Administration Project.

¹⁸ Interview with bureaucrats working in Kampong Cham province, February 2006.

¹⁹ The commune electoral law allows for each political party to have at least one member on the Commune Council (i.e. the winning party holds the position of chief, the second-placed party receives the first deputy chief position, and the third-placed party is entitled to the second deputy chief position).

most notably in the areas of decentralisation, civil service and public finance, all of which take place in Cambodia's unique socio-cultural, economic, administrative and political environment. After several years of implementation, donors have increased pressure on the government to improve governance and fight corruption among its officials (World Bank 2004, 2005), but progress has been slow. Possible explanations include the lack of willingness to see the reform fully completed by government staff and the lack of strong and coherent demands from lower level bureaucrats, since successful reforms may wipe out rent-seeking opportunities on which their own livelihoods depend (Hughes and Conway 2004).

8.6. Conclusion: A Definition of Public Sector Accountability for Cambodia?

This chapter observes that (a) public sector accountability is about more than relationships between individual actors, but is also about wider structural relationships, (b) public sector accountability can only be achieved through both technical and political processes, (c) public sector accountability has been shaped predominantly by western liberal states, and (d) understanding Cambodia's history of administrative and political culture and practices is critical to promoting accountability with the aim of realising democratic development. Specifically, the chapter highlights how the many frameworks have been put to use in a unique neopatrimonial environment of Cambodia as well as the difficulties facing the applications of these frameworks. Therefore, achieving pro-poor public sector accountability in Cambodia requires that the term be defined taking into consideration not just the corrupt and 'informal' practices of individual actors, but also the structural, technical and political factors that promote such practices. The following contextualised definition of accountability has been developed to account for such considerations and to reflect the goals of key government policy documents such as NSDP, Rectangular Strategy and Decentralisation & Deconcentration Strategic Framework.

- Accountability is a personal, administrative and political value that is found in all systems of government, in formal and informal, political and administrative forms.
- It involves the relationship between two actors, as well as the mechanisms, rules, and resources that enable the system to function accountably.
- A system of accountability which serves the public interest should be Cambodian owned and reflect Cambodian values.
- Supported by public participation and political responsiveness, the system should build trust in public institutions by exhibiting administrative neutrality and responsibility, protecting the public good, and supporting the poor.
- A more accountable system will be structured to provide a clear assignment of roles and responsibilities, adequate and predictable resources, horizontal and vertical coordination, transparency, enforcement of the law, and incentives for all to perform.

As the definition suggests, it is reasonable to conclude that building pro-poor accountability in a neopatrimonial governance context is extraordinarily complex. The success of instituting a pro-poor accountability system to achieve democratic development in today's Cambodia depends on the ability to craft functional models and practices of accountability, that are largely founded upon legal-rational bureaucratic arrangements and popular democracy, and to understand and adapt these to the local political (informal) interests. It is likely that unbalanced attention to these aspects will result in only 'partial' accountability and a limited chance for sustainable delivery of basic and essential services that benefit the poor.

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