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Annual Development Review 2004-05

Chapter (1) - Introduction

Chapter (2) - Macroeconomic Performance

Chapter (3) - Cambodia's Garment Industry Post 2005

Chapter (4) - Linking Tourism to Poverty Reduction

Chapter (5) - Natural Resources and Environment

Chapter (6) - Competitiveness of Cambodian Agriculture

Chapter (7) - Decentralisation and Deconcentration Reforms in Cambodia

Chapter (8) - Moving Out of Poverty: Preliminary Findings from Two Villages

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List of Acronyms

ADB	Asian Development Bank
ATC	Agreement on Textiles and Clothing
CBNRM	Community Based Natural Resource Management
CCs	Commune/sangkat councils
CDRI	Cambodia Development Resource Institute
CFSD	Community Forestry Subdecree
CGTC	Cambodia Garment Training Centre
CPR	Common Property Resources
CSF	Commune/Sangkat Fund
CSES	Cambodia Socio-Economic Surveys
D&D	Decentralisation and Deconcentration
DoF	Department of Fisheries
FA	Forestry Administration
FIAS	Foreign Investment Advisory Services
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
GMAC	Garment Manufacturers' Association of Cambodia
IFSR	Independent Forest Sector Review
ILO	International Labour Organization
IMC	Inter-ministerial committee
IMF	International Monetary Fund
IPM	Integrated Pest Management
LAMC	Law on Administration and Management of Communes/Sangkats
MAFF	Ministry of Agriculture, Forestry and Fisheries
MEF	Ministry of Economy and Finance
MFA	Multi-Fibre Agreement
MIME	Ministry of Industry, Mines and Energy
MLMUPC	Ministry of Land Management, Urban Planning and Construction
MoE	Ministry of Environment
MoI	Ministry of Interior
MOPS	Moving Out of Poverty Study
NBC	National Bank of Cambodia
NCSC	National Committee for Support to the Communes
NTFPs	Non Timber Forest Products
PDRD	Provincial Department of Rural Development
PPA	Participatory Poverty Assessment
PPHA	Phnom Penh Hotels Associations
PLG	Partnership for Local Governance
SADZ	Special Agricultural Development Zones
SRHAGHA	Siem Reap and Hotels and Guest Houses Association
T&C	Textiles and Clothing
TTSA	Travel and Tourism Satellite Accounting
WTTC	World Travel and Tourism Council

Foreword

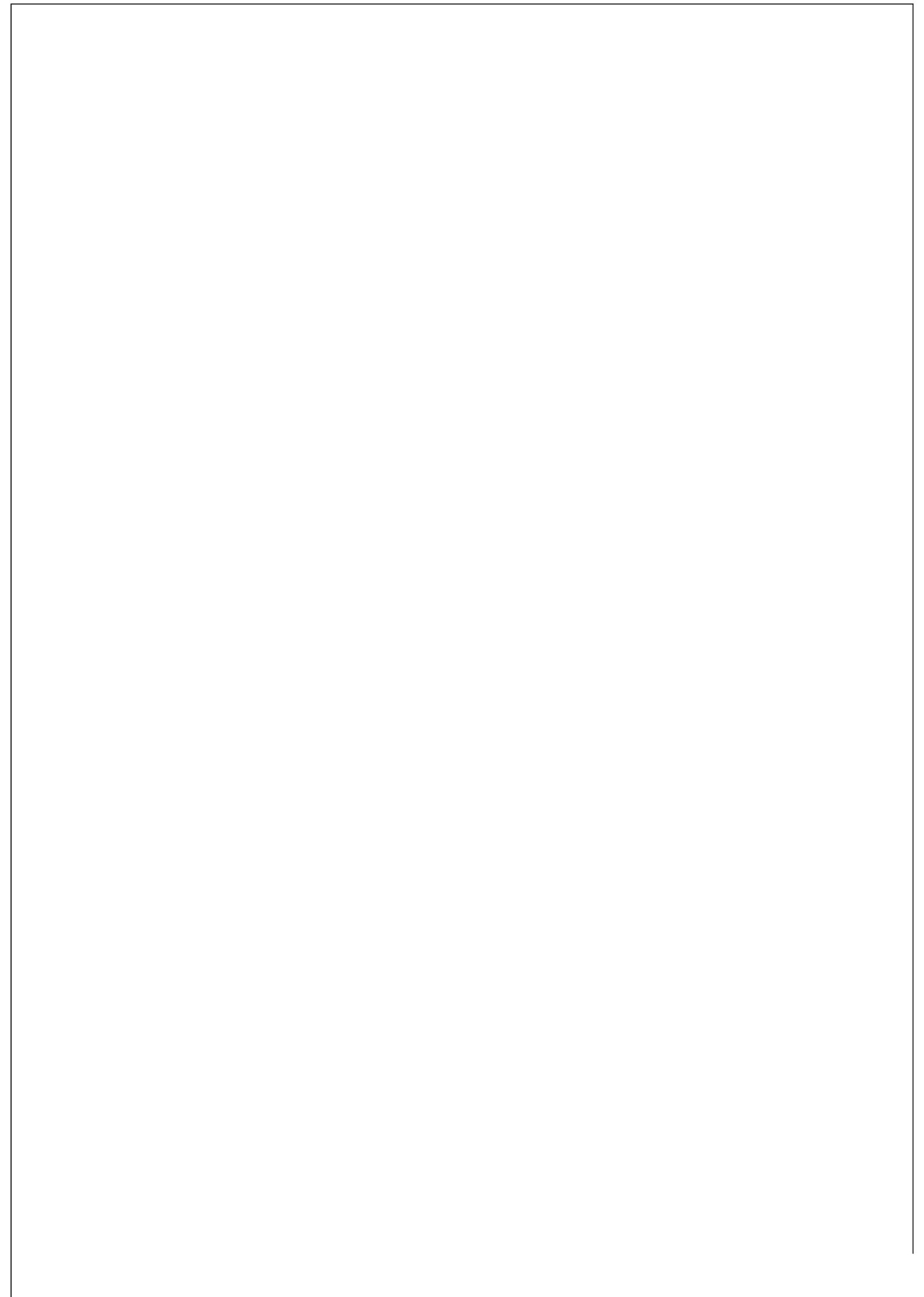
The Cambodia Development Resource Institute (CDRI) is pleased to publish the first issue of its new annual publication, the Annual Development Review (ADR), for the period 2004-5. The ADR will replace CDRI's earlier publication, the Annual Economic Review. Why have we chosen to broaden the scope of our major annual publication in this way?

As this first issue of the ADR shows, Cambodia's macro-economic performance has remained strong in recent years, benefiting from the achievement of peace and stability that Cambodia has enjoyed since 1998. This has had a positive impact on growth and to a certain extent, on poverty reduction. However, as Cambodia enters another stage of its development, and the implementation of a new National Strategic Development Plan for 2006-10, there are other critical issues that will also determine the development outcomes and well-being of the Cambodian people. Many of these issues now form the core of CDRI's research and policy work - trade and its potential contribution to poverty reduction and development, the role of key industries such as garment manufacturing and tourism, governance and public institutional reforms such as decentralisation and deconcentration, natural resources and environmental management, agricultural development, human security, and, of course, the cross-cutting issue of more effective strategies for poverty reduction, particularly in rural Cambodia.

Each year CDRI will bring together the outcomes and lessons of its major research and policy work in a series of peer-reviewed articles written by CDRI researchers in the Annual Development Review. Beginning in 2006, a set of accessible research and policy briefs and information products in Khmer and English will also be released at the same time as the ADR to communicate the major development issues in the ADR to a broader Cambodian audience. These publications will also be available on CDRI's website. We hope this high quality and regularly updated information resource will be useful for policy makers, researchers, international development agencies, civil society and the private sector in Cambodia, and for others in the international development research and policy community. CDRI will of course continue to publish its quarterly Cambodia Development Review and monthly Flash Report on the Cambodian Economy.

CDRI would welcome critical feedback on our new Annual Development Review so we can further enhance its quality and relevance. Please send any suggestions on improvements to cdri@camnet.com.kh.

Larry Strange
Executive Director
Cambodia Development Resource Institute
December 2005





INTRODUCTION: CRITICAL DEVELOPMENT ISSUES

C H A P T E R (1)



By:
K.A.S. Murshid

Introduction: Critical Development Issues

C H A P T E R (1)

1.1. Economic Performance

The performance of the Cambodian economy can be described as good, with GDP growth rates of 6–7 percent per annum being posted quite regularly since the late 1990s. This performance, however, needs to be judged against some important underlying weaknesses. First, the high growth rates reflect, in part, the low base level of the early to mid-1990s, as the economy began to emerge from war and destruction. Secondly, the sources of growth have been limited, mainly to garments and tourism and their related impact on construction. These growth sources are largely viewed as being inadequately interlinked with the rest of the economy, in particular with the rural-agricultural sector and, within it, the poor and very poor segments of the population. The development debate fostered by international agencies has taken this assessment into account in arguing in favour of pro-poor growth strategies to ensure that the poverty reduction goals of the government will be realised. A major part of such a strategy will require careful analysis of the potential for poverty reduction of the fast-growing sectors (tourism, garments) in terms of forging pro-poor linkages to domestic product, service and labour markets.

1.2. Pro-Poor Growth Sources and Linkages

While pro-poor linkages are weak, it is important to acknowledge that quite significant, even if uneven, linkages do exist. The demand for young female workers from rural areas created by the rapid expansion of garments production and exports illustrates this point well. There are inadequate data available to reveal the impact that remittances from garments workers have had in their villages of origin. CDRI field research has documented the fact that many villages and rural households have come to rely heavily on such remittances, even though the direct beneficiaries are rarely from the ranks of the poor.¹ Similar linkages have been observed in the construction sector, which has drawn large numbers of unskilled young men from the villages. Once again, while these linkages are easily seen at the micro or village level, their aggregate significance has not yet been established. An indirect indication that this type of demand is quite limited is the large and growing informal seasonal migration of labour from Cambodia, mainly to Thailand but also to Vietnam, as well as growing evidence of a large labour surplus in agriculture.² In addition, a small but steady stream of Cambodians migrate to Malaysia annually—a trend that could gain momentum quite quickly.

Domestic linkages with the rapidly growing tourism sector are another area that requires close attention. A preliminary assessment (reported in this volume) observes that in the Siem Reap area, “... people tend to benefit more from employment in the construction, services and handicraft sectors than from the agricultural sector. Those with better education and/or skill as well as

¹ World Bank (2005), *Poverty Assessment for Cambodia* (forthcoming), which quotes CDRI field reports from two ongoing studies: *Participatory Poverty Assessment of the Tonle Sap and Moving Out of Poverty Study*.

² Tong, Kimsun (2005), “Labour Surplus in Cambodian Agriculture” (mimeographed) (Phnom Penh: CDRI).

financial resources are able to acquire better paying jobs, while those from poorer households tend to end up working in lower income jobs. In either case, it appears that people are increasingly abandoning farming in favour of wage employment in the tourism sector. In areas further from the city, individual members of households are migrating to the city to work in the construction and services sector. In areas closer to the city, entire households are abandoning farming by selling land and moving into the secondary and tertiary employment sectors". There is evidence of a clear shift in the structure of employment away from the primary sector to the secondary and tertiary sectors, particularly in and around Siem Reap town.

The future of tourism is difficult to predict. The sector has grown by leaps and bounds, and the government believes that past trends will be not only maintained but even exceeded. However, the sector is very sensitive, as was demonstrated during the outbreak of SARS in 2003–04, and could be set back again by the bird-flu scare gaining momentum. The trend that we are likely to see would generally be positive, but with random shocks that could cause serious short-term damage to the industry.

The historical rate of expansion of the garments sector, however, cannot be sustained in the face of the withdrawal of the US market quotas enjoyed by LDCs with the end of the Multi-Fibre Agreement (MFA) in 2004. This is perhaps the single most important reason that Cambodia is in urgent need of quickly identifying new sources of growth. For such growth to be pro-poor, it has to be broad-based, equitable and rapid. It is difficult to envisage any kind of broad-based growth that does not include agriculture, off- and non-farm activities, SMEs and generation of agricultural value-added. Studies conducted by CDRI have clearly shown that there is huge potential for adding value in numerous crop and non-crop (e.g. fisheries) sectors that currently remain unexploited because of severe constraints in production, marketing, energy costs and transactions costs. This has resulted in the paradoxical situation that Cambodia exports unprocessed crops like soybeans, maize, cashew nuts and even paddy rice to its neighbours, but the same items are imported to Cambodia in processed form or are re-exported to a third country after processing in Vietnam or Thailand. Cambodia also imports large quantities of fruits and vegetables from its neighbours, suggesting significant scope for import substitution if costs can be lowered.

There may well be other areas of growth within the informal sector, which remains incompletely understood and documented. A recent CDRI study on SMEs failed to identify any dynamism in this sector, alluding to a poor regulatory environment, low levels of technology, inability to compete with imported goods that flow freely across the porous borders and poor domestic demand.³ Another study, however, has found the emergence of a very complex subcontracting system of garments for the Thai market, with capital, fabric and inputs provided by Thai and Khmer entrepreneurs to Cambodian women resident in the border provinces. These women are organised into small stitching units of 10–30 under the overall supervision of a subcontractor.⁴ This remarkable cross-border activity is very labour-intensive, completely informal and expanding rapidly. This has been made possible by a more relaxed border administration, improved trust and information flows and a more favourable climate that supports trade and cross-border movements.

³ Kang (2005), *Small and Medium Enterprises in Cambodia* (Phnom Penh: CDRI-The Asia Foundation) (forth coming).

⁴ Murshid and Tuot (2005) *The Cross Border Economy of Cambodia: An Exploratory Study*, Working Paper 32 (Phnom Penh: CDRI).

Increasingly, the quest for pro-poor growth will be almost synonymous with pro-poor trade. As a small country with a limited domestic market, Cambodia has little choice but to enter the regional and world market aggressively. It has to emerge as a trading and exporting nation based on its dynamic comparative advantages. As a member of ASEAN/AFTA and a signatory to the ASEAN-China FTA as well as part of the WTO, Cambodia has adopted all the trappings of globalisation. The country will now need to implement vigorously the reforms associated with these agreements, as well as undertake a host of policy measures and infrastructural investments, in order to reap the full benefits of trade. A change from open, unregulated trade as it now exists, with little or no enforcement of trade laws and regulations, to a regulated free trade regime as envisaged under WTO rules would constitute a quantum jump for the country. Initially, the best way forward would be to develop a comprehensive regional integration strategy that fully exploits Cambodia's strategic location. Thus serious thought needs to be given to developing and enhancing cross-border economies through appropriate investments and policies. In this connection, much can be learned from the experience of China and Vietnam, e.g. in the context of developing special zones in border areas. A serious constraint, however, is the quality of human capital and the availability of a skilled workforce. The skilled labour market in Cambodia remains thin, and unless this situation is tackled rapidly, much of the demand for skilled labour generated in the country may have to be filled by foreigners.

Cambodia, along with the rest of the developing world, is anxiously awaiting the outcome of the Hong Kong round of the next WTO ministerial meeting, particularly in relation to the fate of agriculture. If good progress is made on this front, new avenues of (agriculture-based) growth will almost certainly open up, generating huge interest from both domestic and foreign investors in high-value crop production and agro-processing.⁵ This should provide fresh impetus to the quick implementation of the domestic trade/institutional reform agenda.

1.3. The Natural Resource Base

Cambodia is rich in natural resources, including land, water and forests. In addition, there are gemstones, gold and the likelihood of significant deposits of oil and gas. Despite a rich natural resource base, rural poverty is very high by regional standards. Traditionally, land, water and forest resources were characterised by "open access" for local communities. This came to a stop with the advent of the Pol Pot regime, reopened with the defeat of the Khmer Rouge, but has been restricted again through formal and informal control over these resources by a host of agencies/coteries and powerful individuals exercising ad hoc and arbitrary powers, often backed by the military, powerful government factions and lobbies. This type of "ownership" has led not only to large-scale alienation of ordinary villagers, especially the poor, who have traditionally depended on natural resources to supplement their livelihoods, but has also contributed to rapid degradation of the resource base, including fisheries and forests. There is little incentive for these types of "owners" to engage in sustainable, productive use of these resources with a longer term view. On the contrary, the motivation is strictly short-term gains, which usually results in overexploitation and depletion of natural resources. The outcome has been predictable: around 50 percent of the land area is considered to be forested but only 10 percent of the forested area has retained its pristine form, with the bulk of the forests having become seriously degraded.

⁵ Potential investors would be drawn by the abundant land available in the country for productive use, but given the problems of titling, illegal land grabbing and powerful (unproductive/ speculative) interests controlling land and forests, major land reforms would need to be initiated in order to attract genuine investors with a longer term vision.

Given the great importance of natural resources to livelihood strategies of rural Cambodians, it is vital to implement a set of policies and create institutions that strike a balance between competing goals and objectives: commercial exploitation, community access and sustainable use.⁶ The current focus on community forestry (and fisheries) can at best be a partial solution to this complex problem. Past experience with large concessions has yielded very few results. For example, as of December 2003, the MAFF had granted 25 land concessions for agricultural production covering 724,000 hectares. Only 10 of the concessions had initiated any planting activities, in about 14,000 hectares. In other words, as in the case of forest concessions, these large-scale land/agricultural concessions have not yielded any benefits. While the government appears to have imposed a moratorium on further concessions as well as taken steps to cancel some existing ones, there are strong lobbies trying to reverse these decisions.

In parallel with the decline in access to natural resources, the land question has assumed increasing importance. Landlessness appears to have grown quickly as more and more smallholders find it difficult to generate a sustainable livelihood from agriculture alone. In part, successive drought is responsible, along with the demand for speculative land investments by urban investors looking for a place to park their wealth. A special case is seen in Siem Reap, where land speculation has reached a record high. This rapidly evolving land market needs careful analysis: it is perhaps rational for some households to sell their high-value lands to enter into trade or business, while for others, the factors contributing to landlessness may have more to do with evictions, displacement or sheer push factors brought on by acute debt, poverty or shocks (e.g. drought and crop failures).

There is still an opportunity for Cambodia to undertake major land reforms involving not just titling (currently much in vogue) but also including redistribution, resettlement and infrastructure development. Such a comprehensive approach would go a long way towards equitable, broad-based development. While it is true that the government has rushed through a sub-decree on “social concessions” for land (apparently in response to a lot of donor pressure), implementation promises to be slow, painstaking and uneven.

1.4. Governance Matters

Perhaps the most difficult challenges facing Cambodia today are the problems of weak governance, widespread corruption, lack of accountability and transparency in government transactions and a climate of impunity combined with arbitrary exercise and abuse of power for personal gain. Vital decisions relating to FDI, land and forest concessions, procurement and purchases, allocation of resources, building and infrastructure contracts and so on are opportunities not so much for promoting national development as for the exercise of power and influence to indulge in favouritism and cronyism. The problem is not limited to a small number of powerful people but appears pervasive, affecting every ministry and every department. Official agencies that have an interface with the private sector (customs, police, tax officials and inspectors) usually come in for the harshest criticism.

The solution to this deeply embedded malaise that both the government and the donor community are discussing is public sector reforms focusing on capacity building and putting in place appropriate systems and procedures. The debate is wide-ranging in scope and extent but nevertheless seems

⁶ Of the more than 10 million Cambodians currently living in rural areas, more than 8.5 million depend on natural resources to support their livelihoods.

not to touch upon the basic political economy of power and politics in Cambodia and the delicate balance of complex, often contending forces kept in check through an elaborate system of threat and fear combined with patronage distribution, benefits and pay-offs. This may well be the price of political stability, and an indication of the very sensitive and difficult quest for good government. Clearly the source of all patronage systems is public resources, whether financial or physical, and if good government marks an end to the giving and taking of favours, peace and stability could be jeopardised. Perhaps this is the reason that the public debate remains limited to non-sensitive (and less important issues) like capacity building and management structures and reporting systems, accounting procedures and the legal framework, e.g. for public procurement. In the same vein, the efforts to decentralise administration and deconcentrate powers to the level of the commune are best seen as an attempt at a “technical fix” to a problem that is deeply rooted in the nature of the state, where core instincts are conservative, secretive, keen to retain and expand power and control over resources rather than decentralise, deregulate and delegate. There is no question that good local government can play a big role in pro-poor development. There is, however, nothing automatic about it.

1.5. Whither Poverty Reduction?

In aggregate terms, the record of poverty reduction, unsurprisingly, has raised grave concerns. Unofficial poverty estimates based on the latest Cambodia Socio-Economic Surveys (CSES) suggest a fairly modest decline in the head count ratio, serving to highlight the rather weak growth-poverty linkage in Cambodia.⁷ At the same time, inequality has risen dramatically, exacerbating the rich-poor divide as well as the rural-urban divide—a situation further compounded by rapidly accelerating landlessness in the countryside, as already observed.

The picture at the disaggregated level, gleaned from participatory assessments and field surveys undertaken by CDRI in recent months, appears to be in broad conformity with the trend in aggregate poverty as suggested above. The route to poverty reduction has been diverse and varied, depending on the agro-ecological context, access to natural resources, geographical location (e.g. near towns or border areas) and local history (e.g. of land distribution, resettlement). A review of the major processes that have contributed to poverty reduction is illustrative of precarious livelihoods being derived from an increasingly uncertain, risky and vulnerable economic and ecological context. Successive years of drought have left many households food insecure, forcing them to make a living based on a combination of strategies depending on local circumstances and opportunities. For some, there was little alternative but to increase collection, gathering, hunting and fishing efforts under ever more precarious or dangerous circumstances, e.g. for those living around the Tonle Sap area. Such activities include collecting rats and grasshoppers for sale, involving both male and female labour. Others have sought work in the towns in construction sites or in farms across the Thai border. Some areas benefited from the deregulation of the fishing sector, which permits local communities to fish in nearby water bodies without hindrance.⁸ These benefits, however, were short-term, as the huge increase in fishing effort that resulted led to a dramatic fall in both quantity and quality of the (per capita) catch. It may well be that the most sustainable poverty reduction (and not necessarily the sharpest) was in irrigated areas, where

⁷ Official estimates of poverty based on the latest round of the CSES (2003–04) are not yet available. Unofficial estimates by a World Bank consultant suggest a small decline in poverty rates over time.

⁸ In 2001 the government deregulated 56 percent of all fishing lots, opening these up to community access, in a dramatic but controversial move.

production conditions were favourable for double cropping and cultivation of modern rice varieties, including hybrids.

Thus, we would tend to conclude that while aggregate poverty has certainly declined overall, the rate of decline has been small, and even this rate may not be sustainable over longer periods without a major breakthrough in stimulating new and broad-based rural agricultural activities.

1.6. Risks and Threats

Quite apart from the micro-level risks that rural households appear to be increasingly confronted with, it is important to underline a number of broader risks and threats that could derail Cambodia's development strategy, e.g. as envisioned under the NSDP/PRSP currently being mooted. These include the following:

- Avian flu could take a heavy toll on the tourism sector.
- MFA withdrawal and accession to WTO: Cambodia has been lucky to have been able to retain its share of the garment market. Major reforms (e.g. of port administration and customs procedures) along with substantial backward linkages will be required if this share is to be sustained and expanded. Competition from China is temporarily suspended but very much looms on the horizon, and cannot be ignored.
- The expansion of the “grey economy” is a serious threat to private sector development, especially to the “genuine” domestic private sector. There is every sign that the government is entering into massive contracts with single, unsolicited bidders in a non-transparent and secretive manner, and probably on terms that militate against the national interest. This grey economy has already engulfed huge areas of land and forests, and now seems poised to expand into lucrative urban real estate, large-scale construction projects and investments.⁹
- Inequalities have increased tremendously within rural and urban areas as well as between urban and rural areas. While the poverty discourse has been around for some time, discussion of inequality has been missing. This does not bode well for social cohesion and cooperation in a country where a legacy of distrust and mutual antagonism remains high.
- HIV, drugs, youth gangs and domestic violence: Although these are often lumped together, there is no reason to believe that they are necessarily related. HIV infection rates pose a severe threat to the nation, although the rate of increase in new infections has tended to decline. On the other hand, there are widespread reports of greatly increased drug use among youth all over the country, the emergence of violent youth gangs in many villages and a sharp rise in domestic violence and crimes against women and children. The factors underlying these previously unheard-of issues are not at all well understood but need urgent remedial action. Once again, these threaten the basis of a society that is still trying to recover from the Khmer Rouge period.
- Political stability: Political activity is deeply distrusted; tolerance of criticism is very low. So, while there is apparent stability in the country, this may well be superficial and kept in place by a combination of threat, “persuasion” and patronage. These tactics discourage people from expressing their views freely, raise frustration and in the longer term may lead to violent

⁹ These same pressures (and Realpolitik) could defeat the series of regulatory reforms that are at various stages of formulation and implementation, e.g. the Land Law, fisheries reforms and forestry reforms (e.g. sub-decree on community forestry of 2003).

protest or worse. “Unpredictable” large-scale violence is not at all rare in Cambodia, as exemplified by the anti-Thai riots of 2003.

1.7. The Annual Development Review

This is CDRI’s first annual review of critical development issues, replacing the earlier Annual Economic Review in an effort to provide a more holistic assessment of Cambodia’s development challenges. The basic principles for selecting the articles in this volume are that they should focus on some crucial aspect of development in order to provide new information, analysis or insight, that they should be based on recently completed or ongoing research conducted by CDRI and that they are likely to make a positive contribution to current development dialogues and policy debates. These articles are as follows:

Chapter 2: Macro-Economic Performance

This chapter takes a detailed look at national accounts, national and sectoral growth rates, the budget and the balance of trade and payments, money, interest rates, exchange rates and inflation, along with a review of the situation of vulnerable workers over recent years. The last is based on quarterly CDRI surveys that began in 1997. The chapter ends with an assessment of the short-term outlook of the economy. From macro performance, we then move to the major sources of growth. Thus, Chapter 3 focuses on the garment industry and Chapter 4 examines the potential of the tourism sector for poverty reduction.

Chapter 3: Cambodia’s Garment Industry Post-2005: Situational Analysis and Strategic Responses at Factory and Association Level

The article reviews the current global context of the industry, the position of Cambodia, the importance and challenges faced by the sector and the responses being mooted at the firm and association level.

Chapter 4: Linking Tourism to Poverty Reduction

Annual tourist arrivals to Cambodia now exceed the one million mark. Domestic tourism too has picked up momentum with rising disposable incomes of urban Cambodians. This chapter is a preliminary attempt to examine the effects on the local economy in and around the main tourist centre (Siem Reap) and the potential for poverty reduction through forging pro-poor rural linkages to this vibrant and dynamic sector.

Chapter 5: Natural Resources and Environment: Issues, Constraints and Challenges

This chapter provides a succinct overview of the status of natural resources in Cambodia, critically examines the current legislation and management practices in operation and explores the linkages with rural livelihoods and coping strategies. It discusses the threats and challenges to the natural resource base and explores the implication of the government’s decentralisation policy for natural resource management.

Chapter 6: Competitiveness of Cambodian Agriculture: A Case Study of Maize, Soybeans and Cassava in Cambodia, Thailand and Vietnam

This study indicates that Cambodia faces many production and marketing constraints that drastically reduce its competitiveness in cross-border trade in crops like soybeans, maize and cassava. Production constraints include lack of quality seeds, technology, information and credit. Marketing constraints include lack of market information, high transportation costs and fees and poor relationships/mistrust between farmers and buyers. Most agricultural exports are unprocessed because Cambodia has very limited agro-processing capacity, and exports are informal in nature and subject to high informal fees at border crossings. The study highlights the lower returns faced by Cambodian producers compared to those of its neighbours, while transport costs, transaction costs and interest rates are much higher.

Chapter 7: Decentralisation and Deconcentration (D&D) Reforms in Cambodia: An Early Review

D&D is considered a major component in the strategy of broad-based, pro-poor development, whereby the benefits of growth can reach local communities. This is also expected to stimulate democratisation and accountability, allowing local people to have a voice in determining their own futures. Thus, recent reforms undertaken by the government have generated a great deal of excitement and hope. This chapter provides an early assessment of these reforms and the challenges and potentials associated with them. It notes that the success of D&D reforms depends on numerous closely linked factors: appropriate policy, a clear and practical legal framework, effective mechanisms for ensuring accountability and unambiguous delegation of service delivery roles supported by adequate financing and political will. To date, the government has made significant gains, but the challenges are daunting. While elections have been conducted and a framework has been officially adopted, considerable problems remain with accountability, delegation of functions and financing.

Chapter 8: Moving Out of Poverty: Preliminary Findings from Two Villages—Case Studies of Babaong and Trapeang Prey

Poverty reduction is the ultimate goal of the Government's development strategy, and as a signatory to the MDGs, Cambodia is committed to halving poverty by 2015. Poverty in Cambodia has certain broad characteristics: the problem is essentially rural and agricultural, with the bulk of the poor situated just below the poverty line. Hard-core poverty is less than 10 percent. We have a reasonable understanding of poverty status and trends. However, our understanding of the dynamics of poverty, both moving out of and into it, remains weak. This chapter provides some analysis of poverty dynamics using data from two villages—an agriculturally advanced village and a backward one—to raise some extremely interesting issues.¹⁰ The experience of the two villages brings out the sharp contrast in rural fortunes across different landscapes. The most striking finding is that despite favourable initial conditions and good overall performance in the advanced village, the rate of poverty decline was smaller, compared to the “backward” area. New work opportunities outside the village (in garments and construction) appear to have more than compensated for the poor resource endowments of the latter.

¹⁰ The data are from a much larger CDRI study entitled *Moving Out of Poverty*, which is expected to be completed in early 2006.

Macroeconomic Performance

C H A P T E R (2)

By:
Phim Runsarith
Tong Kimsun, Hing Vutha
Pon Dorina and Ouch Chandarany

Macroeconomic Performance

C H A P T E R (2)

2.1. Introduction

The Cambodian economy performed well in 2004. Gross domestic product (GDP), which had grown by an average of 6.6 percent per year over the period 2000–2003, accelerated to 7.7 percent in 2004. This growth was largely driven by expansion in both industrial and service sectors. Agriculture, however, was badly hit by both natural and man-made disasters.

The agricultural sector shrank by 2 percent in 2004 due to unfavourable weather and avian influenza. Crop production dropped by 3.4 percent due to drought. The livestock and poultry sub-sector increased by 4.3 percent from the previous year, compared to a 5.1 percent increase in 2003. Fisheries also experienced a moderate decline of 3.3 percent due to continued over-fishing and subsistence pressure. During the same period, forestry value added rose slightly by 0.2 percent.

The industrial sector performed well in 2004, expanding by 16 percent over the previous year. All sub-sectors grew remarkably well. Mining accelerated by 9 percent. Manufacturing was boosted by 17.4 percent, mainly due to a rapid increase of garment exports before the ending of the quota system. The electricity, gas and water sub-sectors grew relatively slowly by 4.6 percent in 2004, compared to 16 percent in 2003. Construction remained strong, posting 13 percent growth in 2004, up from 11 percent in 2003, led by private investments.

The services sector rose by 9.2 percent in 2004, thanks largely to expansion in the tourism industry. Tourism has forward and backward linkages with the service sector. The beneficiaries will be not just travel, hotel, restaurant and tourist establishments but also retail trade, transportation, communications and finance. Hotels, restaurants and other services, which directly benefit from tourism growth and infrastructure development, grew by 6.2 percent, 23.6 percent and 18.5 percent respectively. Transport and communications expanded by 6.2 percent thanks to the rise in demand for postal services and internet usage. The finance sub-sector expanded by 6.6 percent over the previous year, suggesting growing confidence in the banking system. Real estate activity also recovered, rising by 3.3 percent after declining for three years. However, public administration continued to decrease for the sixth consecutive year, shrinking by 6.7 percent in real terms, despite an increase in public sector wages.

Cambodia registered a greater trade deficit, which rose from \$531 million in 2003 to \$665 million in 2004, leading to an increase in the current account deficit to \$568 million, or 12 percent of GDP. Financial accounts and overall balance experienced greater surplus rising from \$167 million and \$31 million in 2003 to \$377 million and \$127 million in 2004 respectively. External trade increased more rapidly than GDP in 2004, and imports grew at a faster pace than exports. The total value of exports rose to \$2,375 million or about 49 percent of GDP boosted by strong growth in garment exports, which accounted for nearly \$2 billion in 2004. Other export items were rubber, forest products and fishing products, which accounted for 2 percent, 0.5 percent and

1.6 percent respectively of total exports. Imports grew 18 percent over the year, to \$3,040 million or about 62 percent of GDP, of which retained imports accounted for \$2,880 million. The major import commodities are food/beverages/medicine, construction materials, vehicles, textiles and energy products.

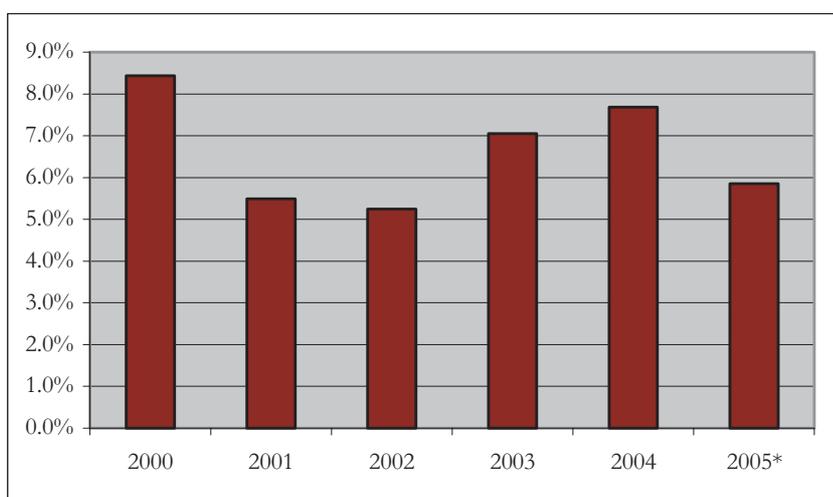
Cambodia's budget deficit improved for the second consecutive year, declining to 864.5 billion riels in 2004, from 992 billion riels in 2003. As a percentage of GDP, the deficit amounted to 4.4 percent in 2004, compared with 5.7 percent in 2003. The liquidity of the banking system expanded by 30 percent to 4,329.3 billion riels in 2004, while the average dollar and riel 12-month lending and deposit interest rates in December 2004 declined from December 2003. During the same period, the average official riel exchange rate continued to depreciate against the US dollar, while the riel inflation rate in Phnom Penh rose to 3.87 percent from 1.15 percent.

2.2. Recent Developments and Trends

2.2.1. GDP Growth and Sectoral Performance

Cambodia's economy grew significantly in 2004 compared to the previous several years. Real GDP growth accelerated to 7.7 percent in 2004, up from 7 percent in 2003 and above the average of 6.6 percent from 2000 to 2003. The industrial and services sectors expanded remarkably, while the agricultural sector suffered from prolonged drought and accumulated neglect.

Figure 2.1: Real GDP Growth

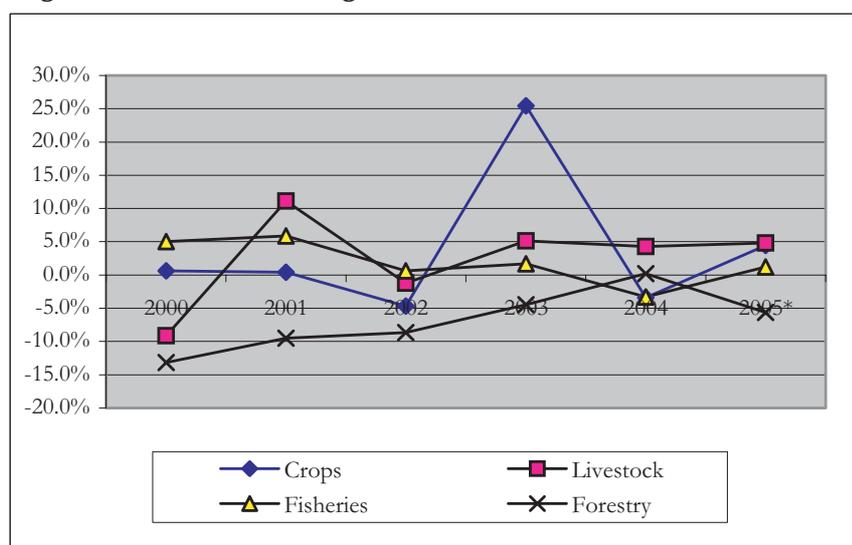


Sources: NIS for 2000-2004, CDRI projection for 2005

2.2.1.1 Agriculture

Agriculture, which accounts for about 30 percent of the country's GDP and employs about 70 percent of the labour force, contracted by 2 percent in 2004 after a strong performance in 2003. Many factors contributed to this downward trend. First, drought, which occurred in the middle and late rainy season, damaged crops and lowered yields. Second, Cambodia's natural resources, including fish and forest stocks, are declining due to increasing population pressure and illegal exploitation. Third, the growth of livestock and poultry production was interrupted by bird flu.

Figure 2.2: Growth in Agriculture



Sources: NIS for 2000–2004, CDRI projection for 2005

Supply shocks including drought, flood, fire and pest damage were responsible for the poor performance in 2004. Statistics released by MAFF revealed that about 13 percent of the cultivated area was damaged and that productivity declined to 1.98 tons/ha of paddy, a 6 percent decrease from the previous year. The losses are estimated to cost Cambodian farmers \$107 million in damaged crops, of which \$101 million can be attributed to drought alone.¹ Irrigation and water control in Cambodia are still largely underdeveloped, and farmers continue to use traditional methods.² Real value added for crops fell by about 3 percent in 2004, compared with growth of 25 percent in 2003.³ Crops accounted for about 15 percent of 2004 GDP, down from 16.7 percent in 2003, and below the average contribution of 15.8 percent over 2000–2003.

Livestock and poultry play an important role in food security and poverty reduction in rural Cambodia. Value added in livestock and poultry declined to 4.3 percent of GDP in 2004, lower than the gain of 5.1 percent in 2003, as a result of the outbreak of avian influenza. Although the production of livestock grew remarkably, the negative performance of poultry production weakened this sub-sector. The number of cattle and buffaloes increased by an estimated 1.2 percent, and the number of pigs rose by 5.4 percent over the previous year, while the production of chickens and ducks decreased by 12.6 percent. In general, productivity in livestock and poultry is still low due to infectious diseases and traditional technology.

Fish is a major contributor to food supplies (the main source of protein), and fishing is an important source of employment. Fishing value added accounted for about 9 percent of GDP in 2004, the fourth largest sub-sector, after manufacturing, crops and trade. Despite rich endowment, fish production in Cambodia has generally shown a downward trend in recent years. Recorded production has declined alarmingly over the last several years, dropping by about 27 percent since 2001 and by about 13 percent in 2004 alone.⁴ In value added, the fisheries sub-sector shrank by 3 percent from the previous year. This decline is likely linked to increasing population pressures on natural resources and the ecosystem, e.g. agricultural encroachment, development, deforestation and over-exploitation. Recently, experts and environmentalists have expressed concern that dam

¹ CDRI estimates.

² World Bank 2004.

³ MAFF data.

⁴ Based on MAFF data.

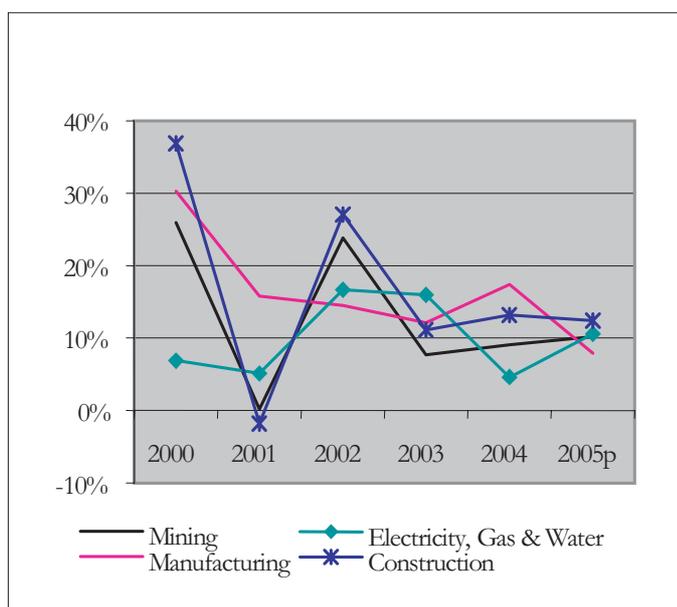
construction in China may have adverse effects on fish in Tonle Sap Lake. In addition, there is a positive relationship between fish production and water levels in the Tonle Sap. The lower water level of the Tonle Sap contributes to decreases in fish stock. Dams also constrain fish migration, which is important in maintaining fish stocks.⁵

Forestry and logging are principal additional sources of income for rural Cambodians and account for 1.8 percent of GDP. In 2004, they registered a slight increase from the previous year by 0.2 percent, after continuous decline since 1999. Extensive illegal logging and over-exploitation have been blamed for declining forest stocks during the 1990s. A moratorium on logging was put in place in 2002 to protect forests from further degradation and is an additional explanation of why forestry and logging value added decreased for the past several years. However, it is likely that the value added in forestry is underestimated since it is based only on the commercial value of timber, without taking into account either the values of non-timber forest products such as food and medicine, or the ecological functions and services that forests provide, such as watershed maintenance and biodiversity protection.

2.2.1.2 Industry

The industrial sector contributed about 30 percent of GDP and employed about 10 percent of the labour force, while continuing to enjoy strong growth in 2004. Real industrial value added expanded by 16 percent, higher than the average of 14 percent from 2000 to 2003. All major sub-sectors registered positive growth, and the pace of growth accelerated across most sub-sectors.

Figure 2.3: Growth in Industry



Sources: NIS for 2000-2004, CDRI projection for 2005

The mining and quarrying sub-sector grew by 9 percent in 2004, after 8 percent growth in 2003. This acceleration could be traced to higher demand from the construction sector. Recent figures from the Ministry of Industry, Mines and Energy show that the number of mineral exploitation

⁵ Brad pettitt *et al.*, Conflict Governance and Livelihoods: The Challenge of Community Fisheries on the Tonle Sap, www.lars2.org/unedited.papers/pettitt.pdf

zones increased to 156 in 2004, from 133 in 2003. Although this sub-sector contributed little to 2004 GDP (about 0.3 percent), there is high expectation that it will boost the economy in the future. Most geologists agree that there is great potential for substantial oil and gas discoveries. If commercial development is feasible, this could provide a valuable source of energy for a country that depends on fuel imports for electricity, which is expensively produced and delivered only to urban areas.

The manufacturing sub-sector continued to surge in 2004, growing by 16 percent, compared to an expansion of 12 percent in 2003. The garment industry, which employs some 290,000 workers, was still the main driving force behind this robust growth. Cambodian textile exports in 2004 were valued at \$1,969 million, a 25 percent increase from 2003. Strong growth in textile production, however, was partially offset by a sharp drop in value added in rubber manufacturing due to a decline in planted area as more old rubber trees were cut down.

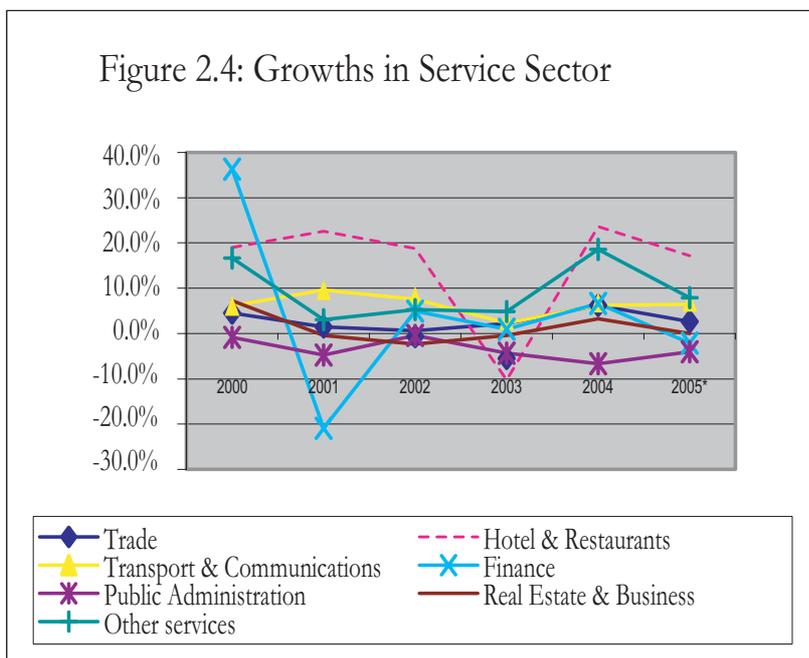
Value added in electricity, gas and water rose by about 5 percent in 2004, less than the 16 percent gain in 2003. This sub-sector accounted for about 0.5 percent of GDP, a small contribution. Electricity generation and water supply in Cambodia remain undeveloped and struggle to meet growing demand. Almost all power and water supply plants are small and service only a limited number of consumers, particularly in the Phnom Penh area. The Cambodia Socio-Economic Survey (CSES) 2003–2004 revealed that the number of people who have no access to electricity and water was still significantly large. Of the total population, about 80 percent do not have electricity or state-provided water. The limited supply of electricity and its high cost translate into high production costs in manufacturing and processing, making business in Cambodia less attractive to both existing and new investors.

The construction sub-sector gained 13 percent in 2004, up from the 11 percent growth registered in 2003. The growing strength of this sub-sector could be attributed to stronger private demand. During the past several years, public construction has been strengthened by the development of public infrastructure, mainly financed by the government through bilateral and multilateral assistance, while private construction had been driven by market demand for residential housing, hotels and factories.

2.2.1.3 Services

The services sector, which represents 35 percent of GDP and employs about 18 percent of the labour force, expanded robustly by 9.2 percent in 2004, from 0.2 percent in 2003. All service sub-sectors (see table 2.4) except public administration performed well thanks to the expansion of domestic and foreign demand. Tourism has strong forward and backward linkages with the services sector.

Figure 2.4: Growth in Services



Sources: NIS for 2000-2004, CDRI projection for 2005

The trade sub-sector grew by 6.2 percent in 2004, thanks mainly to the improvement in transport infrastructure and the surging number of tourist arrivals. Improvement in the country’s infrastructure not only spurred demand for vehicles, but also speeded up transportation and stimulated trade in remote areas. Retail sales were also boosted.

The hotels and restaurants sub-sector recovered from a 10.3 percent decline in 2003, growing by 23.6 percent in 2004. This sub-sector directly benefited from infrastructure development and tourism growth; 2004 witnessed an impressive increase of about 50 percent in international visitors. Moreover, the visitors stayed longer in 2004 than in the previous several years.⁶ Hotel occupancy rate was 52 percent, about 2 percent above the rate in 2003. Domestic tourism, a new phenomenon in the last several years, played a supporting role for this sub-sector. The total number of Cambodian visitors was estimated to have grown by 200 percent over the previous year, reaching 4.3 million in 2004. This trend is likely to continue as road conditions improve and Cambodians increasingly choose to spend their vacations in different parts of the country.

The transport and telecommunications sub-sector increased by 6.2 percent in 2004, compared to only 2.3 percent in 2003. The increase is attributable to the growth in tourism and the surge in demand for postal and internet services. According to the MPTC, revenue from posts and telecoms rose by 19.6 percent in 2004.

⁶ The average length of stay was 6.3 days in 2004 and 5.5 days in 2003 (MoT).

Financial value added rebounded remarkably, growing at 6.6 percent in 2004, compared to only 0.9 percent in 2003. This sudden growth can be traced to a rapid increase in time and savings deposits plus foreign currency deposits, resulting from improved credibility of the banking sector and high real interest rates. Figures released by the National Bank of Cambodia indicate that the total time and savings deposits and foreign deposits by the end of 2004 amounted to 3,176 billion riels, a 33 percent increase compared to a year earlier.

Public administration declined for the sixth consecutive year, falling by 6.7 percent in real terms. This continuous drop largely reflects a rise in the inflation rate. Data released by the NIS reveal that the overall price index rose by about 10 percent from 2000 to 2004. Inflation takes a heavy toll on civil servants, who receive a meagre salary.

Real estate recovered moderately after declining for three years. During 2004, value added in this sub-sector increased 3.3 percent over the previous year. This growth may be linked to the return of political stability after the elections in 2003. It appears that people in the real estate business preferred to wait until the elections were over before making big investment decisions.

Other services did well in 2004, growing at 18.5 percent. This sub-sector benefited from the expansion in the casino industry and private education services. However, the lack of a legal framework makes it difficult for the government to collect taxes from gambling institutions.

2.2.2. Consumption Expenditure and Investment

2.2.2.1. Final Consumption Expenditure

According to recently released data from the NIS, real final consumption expenditure rose 7.3 percent in 2004, 5 to 6 percentage points more than in 2001–2003. This is largely due to a rise in real household final consumption expenditure, which has a larger share (91 percent) than the other two main components (private non-profit organisation consumption expenditure and government consumption expenditure).

Real household final consumption expenditure (Table 1) increased by 8.2 percent over the previous year, compared to 1.7 percent and 0.8 percent increase in 2003 and 2002 respectively. “The National Institute of Statistics, with technical assistance from the International Monetary Fund (IMF), has adjusted all sector expenditure estimations to reflect the revised annual average population estimates; expenditure on domestic gambling and adult entertainment, increased spending on mobile phones, computer equipment, other electronics and white goods, motor vehicles and motor cycles, fuel, and internet services from 1993 onwards.”⁷ Consequently, the 2004 national accounts (adjusted) data look more realistic than the unadjusted figures. Nonetheless, there is no explanation for the sudden increase in real household final consumption expenditure between 2003 and 2004.

⁷ National Accounts of Cambodia, 1993–2004, page 41.

Table 2.1: Household Final Consumption Expenditure (in billion riel)

	2000	2001	2002	2003	2004
Food, Beverages and Tobacco	7,822	7,870	7,919	8,042	8,553
Clothing and Footwear	331	333	335	341	364
Housing and Utilities	2,214	2,239	2,264	2,310	2,602
Household Furnishings and Operations	99	100	101	102	111
Medical Care and Health	724	729	733	745	827
Transport and Communication	439	445	451	461	508
Recreation and Education	323	328	332	339	391
Personal Care and Effects	258	260	262	266	290
Household Final Consumption Expenditure	12,211	12,303	12,397	12,606	13,646
	<i>Percent Change Over Previous Year</i>				
Food, Beverages and Tobacco		0.6	0.6	1.6	6.4
Clothing and Footwear		0.7	0.7	1.6	6.7
Housing and Utilities		1.1	1.1	2.0	12.7
Household Furnishings and Operations		0.7	0.7	1.7	8.2
Medical Care and Health		0.6	0.6	1.6	11.1
Transport and Communications		1.4	1.3	2.2	10.3
Recreation and Education		1.3	1.3	2.2	15.1
Personal Care and Effects		0.8	0.8	1.7	8.7
Household Final Consumption Expenditure		0.8	0.8	1.7	8.2

Source: NIS 2005

To explore the possibility of a sudden increase in real household final consumption expenditure, we will look closely at both demand and supply. On the demand side, household consumption expenditure mainly depends on three factors: household income, taxes and population growth. In 2004, GDP per capita rose by 5.6 percent, 0.6 percentage points more than in 2003, whereas the population growth rate held steady at 1.9 percent during 2000–2004, according to the National Institute of Statistics. There was no particular tax reduction in 2004. On the supply side, household consumption expenditure mainly depends on domestically produced goods and services⁸ and imported goods and services. Cambodia's agricultural production contracted by 2 percent in 2004. During the same period, industrial production including textiles, apparel and footwear—manufactured mainly for export—grew by 16 percent. Excluding these three main items, Cambodia's industrial production rose by 6 percent over 2003. In 2004, the services sector increased by 9.2 percent. Using the nominal data compiled from the Customs and Excise Department, Cambodia's imports of food, beverages and tobacco⁹ rose less than 10 percent in real terms. Taking these together, an increase of real household final consumption expenditure of 8.2 percent seems unrealistic.

⁸ The proportional contributions of agriculture, industry and services to GDP in 2004 are 31 percent, 23 percent and 36 percent respectively.

⁹ Expenditures on food, beverages and tobacco have the largest share (62 percent) in total household consumption expenditure, followed by housing and utilities (19 percent).

Table 2.2: Fixed Asset Investments Approved (\$million)

	2000	2001	2002	2003	2004	2005*
Agriculture	9.7	5.6	38.8	3.7	12.3	3.2
Industry	N/A	99.8	57.4	142.6	170.8	402.5**
<i>Garments</i>	N/A	23	17.9	74.8	116.6	35.8
Services	N/A	111.4	143.3	167.7	91.7	53.3
<i>Hotels</i>	N/A	70.8	45.1	113.6	14.1	42.4
Total	N/A	216.8	239.6	314	275	459.1

Source: Council for the Development of Cambodia

* Data are to March 2005. ** Excluding aluminium-smelting project worth \$3,190.5 million.

According to the Council for the Development of Cambodia (CDC), investment projects (including expansion projects) in 2004 amounted to \$275 million in fixed assets, less than the \$314 million in 2003. If the projects are fully implemented, they will create about 66,152 jobs, of which 74 percent will be for skilled workers, 20 percent for unskilled workers and the remaining 6 percent for managers, engineers, technicians, supervisors and staff. There are two main components in investment projects: approved projects and expansion projects. Due to the limited data released by CDC, it is impossible to break down the expansion projects, worth \$59 million in 2004, by sources of financing. Of \$216 million approval projects, however, about 65 percent—equivalent to \$140 million—came from overseas, led by China with \$80.6 million, followed by Malaysia with \$23.2 million and Taiwan with \$12.9 million. Cambodian investors contributed about 35 percent of the project approvals, accounting for \$76 million.

The industrial sector attracted the largest share of investment projects in 2004, accounting for \$170 million, 62 percent of total investments. Of this, about \$116.6 million was allocated to the garment sector, followed by energy with \$38.6 million and plastics with \$6 million. If the projects are implemented, they will generate 63,350 jobs (96 percent of total jobs generated in all sectors), of which 59,345 will be in the garment sector (93.7 percent of total jobs in the industrial sector). For 2004, investment projects in the garment sector reached their highest value in the past four years, rising by 56 percent compared to 2003, in the midst of growing concerns regarding quota expiration in early 2005.

The services sector received \$91.8 million in investment approvals, the second largest share, after industry. The value of investment projects in services was less than half of that in those industry. However, services will gain only 3.6 percent (2,027 jobs) of the total jobs generated. Of 10 investment projects in the services sector, half relate to tourism. Only two hotel projects, worth \$14 million, were approved in 2004, down sharply from 11 projects with \$114 million in 2003.

Agriculture received only \$12.3 million, expected to create 775 jobs, the smallest amount among all sectors. Only two investment projects were committed for agro-industry. Investment in the agricultural sector has stagnated for the last two years, after peaking in 1996 at \$118 million and fluctuating roughly between \$51 million and \$65 million during 1997–1999. The investment commitment in agro-industry during 2002–2004 is \$51.6 million, accounting for 94 percent of total investment in the agricultural sector in those years.

According to recent data from the CDC, investment projects approved amounted to \$459.1 million during the first three months of 2005 (excluding an aluminium smelter project worth

\$3,190.5 million), which is more than the total combined investments in the past four years. Of the \$459.1 million, investment in petroleum and mining accounted for \$201 million and \$156 million, respectively. Taking the aluminium smelting project into account, total investments approved in 2005 will likely be the highest since 1994.

2.2.3. Balance of Payments and Trade Performance

2.2.3.1. Balance of Payments

Current Account

Cambodia's current account deficit in 2004, at \$568 million or 12 percent of GDP, rose from \$417 million in 2003. The widening deficit was caused by a greater trade deficit, although the net service surplus increased.

The trade balance in 2004 registered a deficit of \$665 million, or 14 percent of GDP. The total value of exports in 2004 rose to \$2,375 million or 49 percent of GDP, of which domestic exports were \$2,240 million and re-exports \$134 million. Exports grew by 16 percent from the previous year and by 75 percent from 2000. The stable growth in exports is attributed to strong growth in garment exports, which reached almost \$2 billion in 2004. Imports, on the other hand, increased at a faster pace than exports at 18 percent, reaching \$3,040 million, of which retained imports amounted to \$2,880 million. The faster growth in imports is largely driven by growing domestic consumption, the rising price of petroleum products and growing demand for raw materials for the production of clothing products, such as yarn, fabric and accessories for the production of garments.

The surplus in services increased by 35 percent to \$180 million, or 3.7 percent of GDP. The improvement in the service surplus was due to a significant increase in receipts from travel services as a result of high growth in tourism.

Capital Account

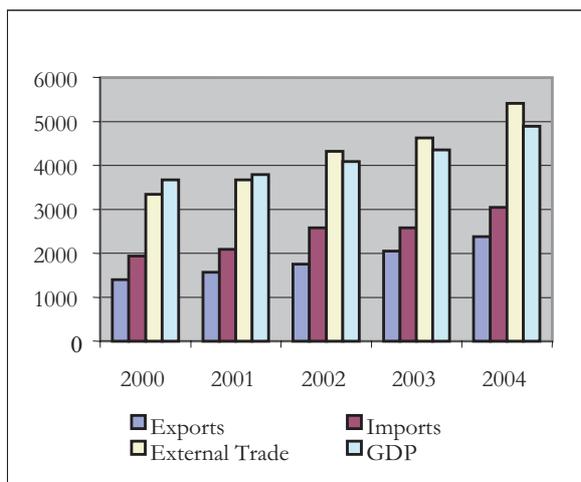
The capital account surplus in 2004 increased substantially from the previous year to \$377 million, or 8 percent of GDP, due to a significant rise in non-official investment accompanied by a small rise in repayment of loans. Official sector loans, excluding IMF loans, fell by 6 percent to \$139 million. Foreign direct investment increased by 63 percent from \$77 million in 2003 to \$126 million in 2004. The greater capital account surplus caused the overall balance in 2004 to increase from \$31 million to \$127 million, or around 6 percent of GDP.

2.2.3.2. Trade Performance

External Trade

Cambodia's foreign trade increased steadily during 2000–2004 at an annual average rate of 17 percent. The growth was driven by a continuous increase in imports caused by rising consumption and demands for imported products and by rapid export expansion, especially in the garment sector. In 2004, total foreign trade exceeded GDP, rising to \$5,414 million from \$4,623 million in 2003.

Figure 2.5: Cambodia's Trade



Source: NBC and NIS

Cambodia's trade dependence index, which is the ratio of the sum of merchandise exports and imports to GDP, in 2004 rose to 111 percent, compared to 106 percent in 2003 and 96 percent in 2000.

Cambodian export performance has been impressive over the last five years, with an annual average growth of 16 percent. The major export commodities are clothing, non-clothing products, rubber and forest and fishing products. Garment exports, which account for 80 percent of total exports, were \$1,969 million in 2004, compared to \$1,580 million in 2003. The US and EU are the two major markets for Cambodia's garment exports. Around 70 percent of garments are exported to the US and around 25 percent to the EU. Cambodia also exports small amounts of natural resource-based products, such as rubber and forest and fish products. In 2004, rubber exports amounted to \$10.6 million, rising from \$2.8 million in 2003. Exports of forest products, which include timber, plywood, veneer and other articles from wood, fell slightly from \$11.1 million in 2003 to \$10.2 million in 2004, while exports of fish products increased from \$35.1 million in 2003 to \$38.3 million in 2004.

Table 2.3: Commodity Exports: 2000-2004 (\$ million)

	2000	2001	2002	2003	2004
Exports*	1401	1571	1750	2046	2375
Of which: Clothing**	925.2	1156.2	1290.6	1580.3	1969.0
Non-clothing	36.9	46.0	65.2	48.1	57.9
Rubber	29.6	23.5	4.3	2.8	10.6
Forestry	32.6	22.3	16.0	10.2	11.1
Fish	5.4	6.0	29.7	35.1	38.3
	Annual percentage change				
Exports	24	12	11	17	16
Of which: Clothing	-	25	12	22	25
Non-clothing	-	25	42	-26	21
Rubber	-	-21	-82	-34	272
Forestry	-	-31	-28	-36	9
Fish	-	12	395	18	9

Source: Customs and Excise Department

* The value of total exports is cited from the Balance of Payments by NBC, which includes the value of unrecorded exports.

** The values of exports of these commodities are recorded and reported by the Customs and Excise Department.

Cambodia's imports have grown steadily during the last five years 2000-2004, at an annual average rate of 14 percent. In 2004, total imports reached \$3,040 million, an 18 percent increase from the previous year. The main categories of taxable import commodities are food/beverages/medicine, construction materials, textiles, vehicles and energy products. Imports of food,

Table 2.4: Commodity Imports: 2000-2004 (\$ million)

	2000	2001	2002	2003	2004
Imports*	1939	2094	2577	2577	3040
Of which: Food/Beverage/Medicine**	166.8	186.9	176.9	163.5	187.6
Construction materials	61.5	69.2	74.4	68.0	74.0
Textiles	49.4	39.9	44.8	43.7	45.4
Vehicles	59.5	51.8	73.5	77.4	126.6
Energy	160.5	200.3	159.6	197.0	194.3
	Annual percentage change				
Imports	22	8	23	0	18
Of which: Food/Beverages/Medicine	-	12	-5	-8	15
Construction materials	-	13	8	-9	9
Textiles	-	-19	12	-2	4
Vehicles	-	-13	42	5	64
Energy	-	25	-20	23	-1

Source: Customs and Excise Department

* The value of total imports is cited the balance of Payment by NBC which includes the value of unrecorded imports.

** Taxable imports as categorised by the Customs and Excise Department.

beverages and medicine increased by 15 percent from 2003 to \$187.6 million due to growing domestic consumption. Imports of construction materials, which include steel, cement and other construction equipment, increased 9 percent to \$74 million, due to the rapid growth of the construction sector (13 percent). Imports of textiles were stable at around \$45 million, while imports of vehicles boomed in 2004, amounting to \$126.6 million. Energy imports, which include gasoline, diesel, fuel oil, lubricants and others, were recorded at \$194.3 million, a 1 percent decline from 2003. However, there was widespread smuggling of gasoline from Vietnam and Thailand. Hence, the real value of energy imports is likely to be much higher.

2.2.3.3. Evolution of Cambodia's Revealed Comparative Advantage

The revealed comparative advantage (RCA) index¹⁰ is a commonly used tool to identify sectors in which a country enjoys relative competitive strength. The index compares the share of a given sector in national exports with the share of this sector in world exports. Values above 1 indicate that the country is specialised in the sector.

Cambodia's revealed comparative advantage has changed fundamentally over the last decade from natural resource-based products to labour-intensive manufacturing products. Prior to 1995, Cambodia's comparative advantage was in natural resource products such as rubber, wood products and fresh food. However, since 1996 the comparative advantage has shifted into clothing and leather products. Cambodia's specialisation in clothing was ranked second in the world and specialisation in leather products ninth during 1999–2003. The change in specialisation to clothing and leather products is primarily caused by Cambodia's acquisition of preferential market access for its clothing and non-clothing exports to the US, EU and some developed countries i.e. through MFN tariff rates and GSP schemes.

Table 2.5: Cambodia's Revealed Comparative Advantage Index

	1996-2000		1997-2001		1999-2003	
	RCA	Rank	RCA	Rank	RCA	Rank
Clothing	25.2	2	24.99	2	25.66	2
Leather products	6.4	10	6.64	8	5.63	9
Fresh food	0.87	126	0.67	127	0.29	157
Wood products	1.18	53	0.66	77	0.24	114

Source: International Trade Centre

¹⁰ The index is proposed by Balassa (1965) and measured by dividing a country's share of world exports of a particular product by the same country's share of world export of all products.

$$RCA_{ij} \text{ Index} = \frac{X_{ij}/X_{wj}}{\sum X_{it} / \sum X_{wt}}$$

Where: X_{ij} is country i 's export of commodity j

X_{wj} is world's export of commodity j

$\sum X_{it}$ is country i 's total export

$\sum X_{wt}$ is the world's total export

2.2.4. Fiscal and Monetary Developments

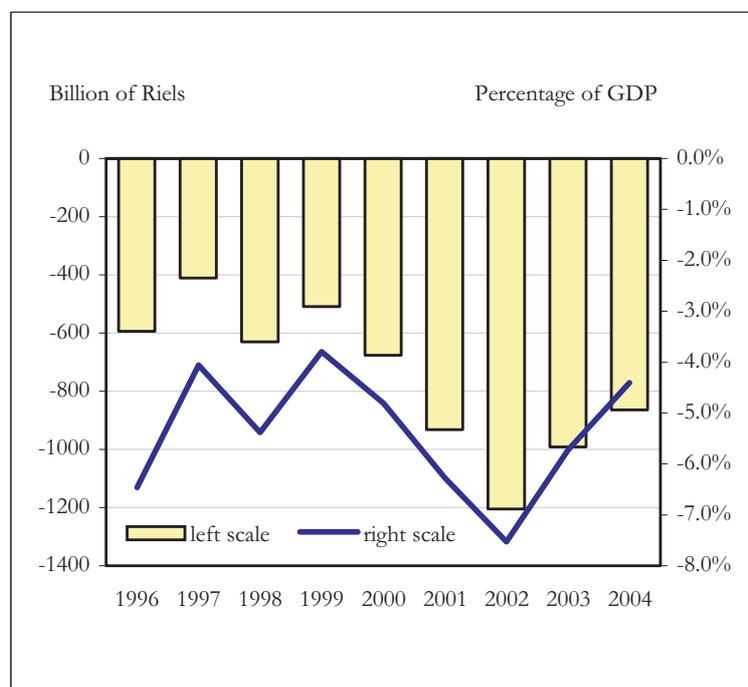
2.2.4.1 Fiscal Developments

According to the Ministry of Economy and Finance, the major fiscal objectives for 2004 were to improve revenue collection, which declined in 2003, and to focus more strongly on development and social spending, primarily in health, education, agriculture and rural development, while defence spending would be gradually reduced.

Budget Balance

Cambodia's budget deficit declined for the second consecutive year, after increasing from 1999 to 2002. In 2004, the government posted an overall budget deficit on a cash basis (including expenditure adjustment) of 864.5 billion riels (\$215 million), 12.8 percent lower than in 2003. However, the recorded deficit in 2004 was 74.5 billion riels higher than the target, 790 billion riels. The budget deficit amounted to 4.4 percent of GDP¹¹ in 2004, compared with 5.7 percent in 2003.

Figure 2.6: Budget Balance



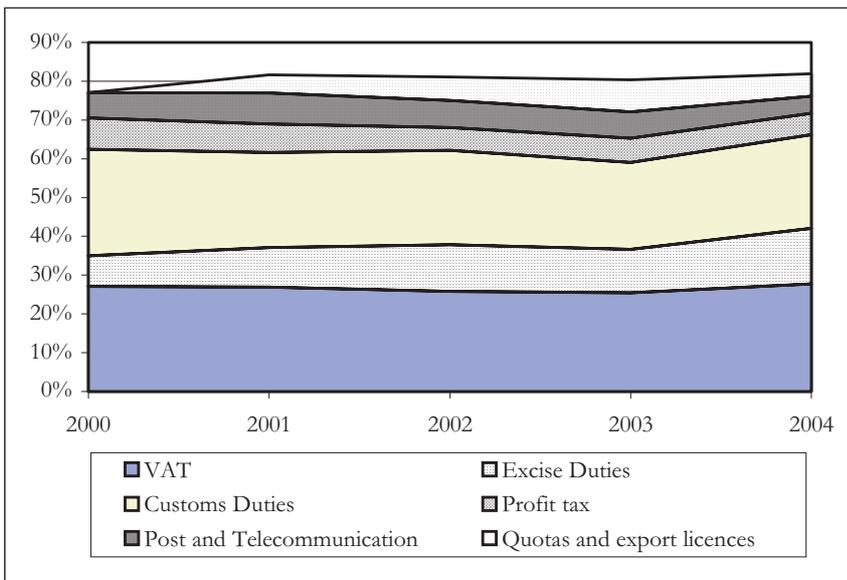
Source: Data from Ministry of Economy and Finance

Budget Revenue

Since 2000, the major sources of Cambodia's domestic revenue have been VAT, customs duties, excise duties, posts and telecommunications, profit tax and quotas and export licences. These accounted for approximately 80 percent of total domestic revenues. Revenues from VAT, customs duties, excise duties, and quota and export licences represented more than 90 percent of the target set by the budget law, while revenues collected from Posts and Telecommunications and profit tax reached about 80 percent.

¹¹ GDP calculated by the National Institute of Statistics.

Figure 2.7: Major Sources of Domestic Revenue



Source: Data from Ministry of Economy and Finance

For 2004, these sources continued to dominate total domestic revenue, which was set at 11.88 percent of GDP (equivalent to 2,126 billion riels, or 6 percent more than in the budget law of 2003). To meet this target, the government committed itself to some reforms, strongly focusing on the collection of tax arrears, continuing to strengthen anti-smuggling efforts, identifying and starting collection of non-tax arrears and further improvement of tax and customs administration and procedures.¹²

As a result, actual revenue collection reached 10.8 percent of GDP in 2004, up from 10.2 percent in 2003. It achieved its nominal target amount in 2004, recording an increase of 21 percent (to 2,126.7 billion riels or \$529 million) compared to 2003. In 2003, only 88 percent of the target was reached. The improved domestic revenue collection resulted from a growth in tax collections, primarily a recovery in revenue from excise duties, VAT and customs duties, which made up 66.2 percent of total government revenue in 2004, up from 59.1 percent in 2003. Revenue from excise duties, VAT and customs duties on imports amounted to 54.2 percent of total government revenue in 2004, up from 48.6 percent in 2003. This growth resulted from an increase in volumes and prices of imported goods (primarily prices of petroleum products, food and beverages), in addition to the effect of fiscal measures, especially anti-smuggling efforts.

Revenue from excise duties in 2004, which accounted for 14.3 percent of total budget revenue, reached 116 percent of the target, equivalent to 304.4 billion riels (\$75.7 million). It rose to 1.6 percent of GDP in 2004, from 1.1 percent in 2003. This was partly due to an increase in excise tax rates on some product imports. For example, excise taxes on beer imports were raised to 30 percent from 10 percent in 2000, and on many other imports they were introduced or increased.

In 2004, about 84 percent of total excise tax revenue was levied on imported goods, 55.5 percent more than in the previous year.

¹² IMF (2004), Staff Report for 2004 article IV consultation, (IMF, Cambodia).

Table 2.6: Government Budget Revenue

	2000	2001	2002	2003	2004	2005*	Average 2001-04
	Annual Percentage Change						
Total Domestic Revenues	-	7.5	14.0	1.2	20.5	8.1	10.8
Current Revenue	-	9.1	13.6	0.3	21.6	8.3	11.2
Tax Revenue	-	5.4	11.9	-0.6	29.3	10.4	11.5
- VAT	-	6.8	9.1	0.0	31.4	10.5	11.8
- Excise Duties	-	37.4	35.9	-6.0	54.0	14.0	30.3
- Customs Duties	-	-3.8	12.8	-6.7	29.9	9.7	8.0
- Profit Tax	-	-2.0	-9.1	7.1	6.7	4.8	0.7
Non-Tax Revenue	-	20.0	18.1	2.5	3.2	2.1	11.0
- Forest Exploitation	-	-28.5	-49.2	-55.2	-72.8	1743.9	-51.4
- Tourism	-	-	35.6	3.8	42.5	77.0	20.5
- Civil Aviation	-	63.4	-17.2	-35.3	24.0	48.7	8.7
- Posts and Telecommunications	-	32.9	0.2	-2.2	-21.4	44.0	2.4
- Visa Fees	-	-	45.1	1.6	51.3	34.4	24.5
- Quota and Export Licences	-	-	48.1	37.4	-15.7	-59.3	17.5
Capital Revenue	-	-69.1	79.5	93.0	-38.0	-17.8	16.3
	Percentage of Gross Domestic Product** (at current prices)						
Total Domestic Revenues	10.1	10.3	10.9	10.2	10.8	-	10.6
Current Revenue	9.9	10.2	10.8	10.0	10.7	-	10.4
Tax Revenue	7.4	7.4	7.7	7.0	8.0	-	7.5
- VAT	2.7	2.8	2.8	2.6	3.0	-	2.8
- Excise Duties	0.8	1.0	1.3	1.1	1.6	-	1.3
- Customs Duties	2.8	2.5	2.6	2.3	2.6	-	2.5
- Profit Tax	0.8	0.8	0.6	0.6	0.6	-	0.7
Non-Tax Revenue	2.5	2.9	3.1	3.0	2.7	-	2.9
- Forest Exploitation	0.3	0.2	0.1	0.0	0.0	-	0.1
- Tourism	-	0.1	0.1	0.1	0.1	-	0.1
- Civil Aviation	0.2	0.3	0.2	0.1	0.1	-	0.2
- Posts and Telecommunications	0.7	0.8	0.8	0.7	0.5	-	0.7
- Visa Fees	-	0.2	0.3	0.2	0.3	-	0.2
- Quota and Export Licences	-	0.5	0.7	0.8	0.6	-	0.7
Capital Revenue	0.2	0.1	0.1	0.2	0.1	-	0.1

Source: Ministry of Economy and Finance

* Estimated target set by the budget law of 2005.

** GDP calculated by NIS.

Revenue from VAT was 590.6 billion riels (\$147 million) in 2004, 27.8 percent of total domestic revenue. In 2004, recorded revenue from VAT was 16 percent higher than projected and increased to 3 percent of GDP from 2.6 percent in the preceding year. Of total VAT revenue in 2004, 68.4 percent was imposed on imports, 28 percent more than in the preceding year.

Customs duty collection, consisting of import and export duties and customs penalties, increased to 2.6 percent of GDP (513.3 billion riels or \$128 million) in 2004, compared with 2.3 percent in 2003. Customs duties on imports, which met 100 percent of the target, accounted for 96 percent of total revenue from customs in 2004, 31 percent more than one year earlier. In late 2003, the government both increased and reduced customs rates on various imported goods, including spare parts. Hence, the increase in customs revenue from imports was mainly linked to the increase in quantities and prices of some imported products. Also, some positive signs came from anti-smuggling measures. Revenue from import duties on petroleum products rose by 35 percent to 133.2 billion riels. Since 2002, the revenue from import duties on petroleum products on average has met only 70 percent of its target.

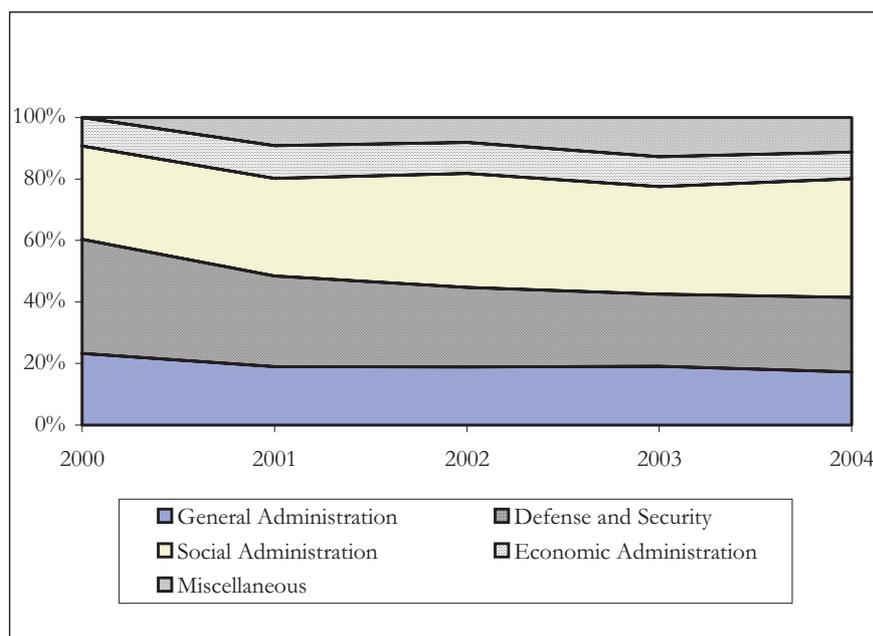
Non-tax revenue, which represented about 25 percent of the total domestic revenue, met only 84 percent of the target in 2004. Achieved non-tax revenue has risen since 2001, amounting to around 530 billion riels (\$132 million) in 2004. Compared to the preceding year, it rose by 3.2 percent. Nevertheless, as a portion of GDP, non-tax revenue declined to 2.7 percent from 3 percent, because GDP growth was faster. Major sources of non-tax revenue, including revenue from visa fees, tourism and civil aviation, increased, but were offset by a decline in revenues from posts and telecommunications, quota auctions, export licences and forest exploitation revenues.

In 2004, domestic capital revenue, forming about 0.9 percent of the total domestic revenue, declined to 0.1 percent of GDP or 19.4 billion riels, compared with 0.2 percent in 2003. The sources of domestic capital revenue were privatisation, the selling of immovable state property and other domestic capital revenue.

Budget Expenditure

Total budget expenditure on a cash basis amounted to 2,991.3 billion riels (\$744.2 million) in 2004, 8.5 percent more than in the previous year. As a percentage of GDP, total expenditure on a cash basis fell for the second consecutive year, to 15.2 percent in 2004, from 15.9 percent in 2003 and 18.4 percent in 2002. Similarly, capital expenditure declined to 6.2 percent of GDP (1,224.5 billion riels) in 2004, from 6.8 percent in 2003 and 8.7 percent in 2002.

Figure 2.8: Main Areas of Current Expenditure



Source: Data from Ministry of Economy and Finance

After increasing to 10.2 percent of GDP in 2003, current expenditure dropped to 8.9 percent (1,745.6 billion riels) in 2004. Among the major items of total current expenditure, social administration accounted for the largest portion, on average about 35 percent for the last five years (2000–2004), and defence and security were the second largest portion, around 28 percent. Expenditures on general and economic administration averaged about 20 and 10 percent of current expenditure, respectively. Expenditures of four priority ministries,¹³ amounted to about 29 percent of total current expenditure.

In 2004, social spending accounted for 38.5 percent of current expenditure, which was similar to the government’s projection of 38.6 percent in the budget law, compared to 35 percent in 2003. However, it did not receive its full budget planned in 2004, reaching 92 percent (672.3 billion riels). And about 44 percent of spending occurred in December, according to provisional data released by the Ministry of Economy and Finance. As a portion of GDP, social spending declined to 3.4 percent in 2004, from 3.6 percent in the preceding year.

¹³ These are Education, Youth and Sport; Health; Agriculture, Forestry and Fisheries; and Rural Development.

Table 2.7: Government Budget Expenditure

	2000	2001	2002	2003	2004	2005*	Average 2001-04
	Annual Percentage Change						
Total Budget Expenditures (on cash basis)	-	21.3	19.8	-6.5	8.5	2.9	10.8
Current Expenditure	-	16.5	11.3	11.6	-0.7	13.6	9.7
General Administration	-	-5.1	10.9	12.8	-10.2	-3.9	2.1
Defence and Security	-	-7.4	-2.5	1.0	2.9	6.9	-1.5
Social Administration	-	21.9	29.7	5.6	9.2	11.6	16.6
- Ministry of Public Health	-	27.4	26.7	5.2	11.0	24.3	17.6
- Ministry of Education, Youth and Sport	-	26.2	38.4	3.7	8.5	12.5	19.2
Economic Administration	-	34.0	5.8	6.9	-11.3	32.2	8.9
- Ministry of Agriculture, Forestry and Fishery	-	30.1	30.1	-1.6	-1.2	30.0	14.4
- Ministry of Rural Development	-	64.8	47.8	-8.1	-1.6	48.2	25.7
Miscellaneous	-	-	-1.9	77.1	-12.1	47.5	15.8
Capital Expenditure	-	33.6	26.1	-15.7	4.6	-10.6	12.2
	Percentage of Gross Domestic Product** (at current prices)						
Total Budget Expenditures (on cash basis)	14.4	16.6	18.4	15.9	15.2	-	16.5
Current Expenditure	8.6	9.5	9.8	10.2	8.9	-	9.6
General Administration	2.0	1.8	1.9	1.9	1.5	-	1.8
Defence and Security	3.2	2.8	2.5	2.4	2.2	-	2.5
Social Administration	2.6	3.0	3.6	3.6	3.4	-	3.4
- Ministry of Public Health	0.7	0.9	1.0	1.0	1.0	-	1.0
- Ministry of Education, Youth and Sport	1.2	1.4	1.8	1.7	1.7	-	1.7
Economic Administration	0.8	1.0	1.0	1.0	0.8	-	0.9
- Ministry of Agriculture, Forestry and Fishery	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	0.9	0.8	1.3	1.0	-	1.0
Capital Expenditure	5.8	7.4	8.7	6.8	6.2	-	7.3

Source: Ministry of Economy and Finance

* Estimated target set by the budget law of 2005.

** GDP calculated by NIS.

Expenditure on defence and security was budgeted to fall to 22.9 percent of current expenditure and 2.35 percent of GDP in 2004. However, the actual expenditure on defence and security rose to 24.2 percent of current expenditure (422.8 billion riels) in 2004, after falling in 2003 to 23.4 percent. As a percentage of GDP, it declined for the third consecutive year, to 2.2 percent in 2004, from 2.4 percent in 2003.

Expenditure on general administration declined to 17.3 percent of current expenditure from 19.1 percent the previous year, and to 1.5 percent of GDP from 1.9 percent.

Resources allocated for the economic sector were relatively low compared to defence and general spending. As a share of current expenditure, economic spending has declined since 2002, dropping to 8.7 percent in 2004, compared to the projection of 10.6 percent in the budget law of 2004.

2.2.4.2. External Debt

Cambodia's total external debt increased at an annual rate of about 9 percent in the two years 2002–03, approximately over 5 percent higher than in 1998–2001, reaching about \$2,960 million at the end of 2003. Of this, external debt from bilateral partners and multilateral institutions¹⁴ accounted for 68 percent¹⁵ and 32 percent, respectively. Most debt to multilateral institutions was on highly concessional terms. Furthermore, the proportion of Cambodia's total external debt owed to multilateral institutions in 2003 was double that in 1998. This implies that debt from multilateral institutions has become more important for Cambodia.

External debt has to be repaid in hard currency (primarily US dollars). There are two ratios to determine sustainability or solvency. One is the debt-to-GDP ratio. As Table 2.8 shows, external debt has been in the range of 65–73 percent of GDP since 1998,¹⁶ and it is expected to fall below 40 percent of GDP over the next several years after debts to Russia and the United States are rescheduled under the Paris Club's Naples terms.¹⁷ The World Bank classifies countries as severely indebted if the present value of future debt service¹⁸ is above 80 percent of GDP. However, in this article the nominal value of the debt is used instead of the present value of future debt service. Another indicator is the ratio of debt to exports. An increase in the debt-to-exports ratio over time, for a given interest rate, implies that total debt is growing faster than the economy's basic source of external income, which means that the country may have problems meeting its debt obligations in the future. According to the World Bank, a country that has a debt-to-export ratio of over 220 percent is considered to have a high debt overhang problem. Cambodia's debt-to-exports ratio has declined to 115 percent in 2003, from 227 percent in 1998. Liquidity problems have also been disappearing as Cambodia's debt service-to-exports ratio¹⁹ has gradually fallen from 12 percent in 1998 to 3 percent in 2003. The World Bank suggests that liquidity problems exist if the debt service-to-exports ratio is greater than 10 percent. Taking these three ratios together, we may conclude that Cambodia will not face difficulties in repaying its debts in the coming years.

In 2004, the World Bank was committed to providing loans for a provincial and rural infrastructure project, and for a rural electrification and transmission project, totalling \$60 million. No grants were provided by the World Bank in 2004. During the same year, projected loan disbursement by the Asian Development Bank was \$103.2 million.

¹⁴ World Bank, Asian Development Bank (ADB), and International Monetary Fund (IMF)

¹⁵ Includes debts owed to the Russian Federation and the United States.

¹⁶ Debt-to-GDP ratio may provide some indication of the ability to service external debt by switching resources from production of domestic goods to the production of exports.

¹⁷ In 1994, the Paris Club agreed to implement a new treatment of the debt of the poorest countries, called "Naples terms", which provide for a reduction of debt by about 67 percent in net present value terms.

¹⁸ The concept of present value of future debt servicing takes into account the level of concessionality of the debt.

¹⁹ This ratio is a possible indicator of debt sustainability because it indicates how much of a country's export revenue will be used up in servicing its debt.

Table 2.8: External Debts (in million USD)

	1998	1999	2000	2001	2002	2003
Multilateral	347	400	469	550	737	942
World Bank	157	180	207	239	308	399
ADB	124	147	189	231	333	439
IMF	66	73	73	80	96	104
Bilateral	1,909	1,915	1,923	1,935	1,983	2,018
Russia and US	1,628	1,628	1,628	1,628	1,628	1,628
Russia (1980? 90)*	1,347	1,347	1,347	1,347	1,347	1,347
US (1970-75)	300	300	300	300	300	300
Bilateral (before 1970 and after 1990)	262	268	276	288	336	371
Total External Debt	2,256	2,315	2,392	2,485	2,720	2,960
Total External Debt/GDP	73%	68%	65%	65%	68%	70%

Source: IMF and CDRI estimates

* Debt to the Russian Federation is converted at a rate of 0.6 roubles per US\$.

2.2.4.3. Money, Interest Rates, Exchange Rates and Inflation

Money

Since 1993, an IMF program has supported the National Bank of Cambodia (NBC) in formulating and implementing a monetary policy framework with the main objectives of price stability, exchange rate stability, promoting the confidence/use of domestic currency and the banking system and developing Cambodian monetary statistics based on international standards.

According to the monetary survey of the NBC, total liquidity in 2004 amounted to 4,329.3 billion riels, up from 1,830.5 billion riels in 2000. The extent of liquidity in Cambodia's nominal GDP expanded to 22.1 percent in 2004, from 13 percent in 2000. During 2000–2004, foreign currency deposits made up an average of 70 percent of total liquidity, compared to around 60 percent during the period 1995–1999. Because of the widespread dollarisation in Cambodia, the central bank has not been able to implement monetary and exchange rate policies effectively and independently. After growing at a slow rate of 15.3 percent in 2003, liquidity of the banking system expanded more rapidly in 2004, recording growth of 30 percent, higher than the target of 20 percent. This accelerated expansion was the result of dual increases in riel and foreign currency deposits. The riel amount was 1,250.2 billion riels, rising by 22.7 percent in 2004 after a 14.8 percent rise in 2003. Local currency in circulation outside banks rose by 22.7 percent to 1,114.8 billion riels in 2004, after rising 18.6 percent in 2003. The recorded growth rate in 2004 was higher than the expected 17 percent. Riels in bank deposits rose by 22 percent to 135.5 billion in 2004, whereas there was a contraction of 8.6 percent in 2003. Foreign currency deposits continued to dominate total liquidity, increasing to \$763.8 million (3,079.1 billion riels) in 2004, an increase of 33.3 percent, compared to 15.4 percent in 2003. The growth in 2004 was higher than the programmed growth of 18 percent.

Net foreign assets and net domestic assets grew simultaneously in 2004. At the end of December 2004, net foreign assets had grown by 19.1 percent, higher than the expected 14 percent, compared to 7.7 percent at the end of December 2003. Net domestic assets increased by 33.1 percent in 2004, compared to 17.7 percent in 2003. The faster growth in net domestic assets was driven by a faster increase in domestic credit to the private sector, by 35.9 percent in 2004, compared to 26.2 percent in 2003.

Interest Rates

Since 2002, the interest rates on loans and deposit released by the National Bank of Cambodia have been the average rates of 17 commercial banks; it covered 21 commercial banks in 2001 and 32 in 2000.

In December 2004, the average interest rate on a 12-month dollar loan was 16.65 percent, down from 17.33 percent in December 2003 and 18.85 percent in December 2000. Although the lending interest rate on US dollar loans remained high, the demand for credit increased during this period. At the end of December 2004, more than 90 percent of credit provided by commercial banks to the private sector in foreign currency was in US dollars. This represented a 38 percent increase to \$421 million, from \$305 million at the end of December 2003 and \$219.7 million at the end of December 2000.

The average 12-month lending interest rate in riels was 18.7 percent in December 2004, a decline from 21.1 percent in December 2003, but still higher than the 16.67 percent rate in December 2000. Credit in riels provided by commercial banks to the private sector is relatively small compared with credit in dollars. In 2004, riels accounted for 6.4 percent of total credit, declining by 5.3 percent to 116.5 billion riels, compared to 2003.

The average interest rate on a 12-month dollar deposit was 3.66 percent in December 2004, down from 4 percent in December 2003 and 5.97 percent in December 2000. The average interest rate on 12-month riel deposits was 6.6 percent in December 2004, compared with 7 percent in December 2003 and 7.2 percent in December 2000.

Table 2.9: Cambodian Interest Rates 2000-2004 (percent per annum, as of December)

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

Source: National Bank of Cambodia

Exchange Rate

The National Bank of Cambodia continues to intervene to stabilise exchange rates. The average official exchange rate reported by the International Monetary Fund and the National Bank of Cambodia was equal to 4,016.3 riels/dollar in 2004. The riel depreciated against the US dollar by

1.08 percent in 2004, compared with 1.56 percent in 2003. This slower depreciation was related to the falling value of the dollar against most Asian currencies over October–December 2004.

Against the Thai baht, the riel has depreciated since 2002. In 2004, the riel traded at 99.8 riels/baht, a depreciation of 4.2 percent, compared with 5.2 percent in 2003 and 3.2 percent in 2002. However, the riel appreciated slightly against the Vietnamese dong, by 0.78 percent to 25.4 riels per 100 dong in 2004, after remaining unchanged in 2003.

Inflation

According to the National Institute of Statistics, the inflation rate for the riel in Phnom Penh stood at 3.87 percent in 2004, rising from 1.15 percent in 2003. Sharp increases in the prices of food, gasoline and diesel were the main factors behind the increase in overall consumer prices. General food prices rose by 6.35 percent in 2004, compared to 1.49 percent in 2003. Among major items, the prices of fish and vegetables rose markedly, mainly due to a decrease in rice output, lower fish catch and drought in 2004. Diesel and gasoline prices surged by 23.5 percent and by 18.7 percent, respectively.

Although inflation in 2004 did not seem to harm economic growth, the sharp increase in food prices, gasoline and diesel is of concern to the person on the street (in both urban and rural areas). The apparently low overall rate of inflation does not adequately reflect these concerns.

2.2.5. Employment and the Situation of Vulnerable Workers

2.2.5.1 Employment

According to the National Institute of Statistics, the Cambodian population grew at an annual rate of 2.5 percent during 1995–1999²⁰ and was projected to grow at a rate of 2.4 percent in the period 2000–2006. Similarly to other low-income countries, a large proportion of the labour force in Cambodia is employed in agriculture. As Table 2.10 shows, agriculture accounted for more than 71 percent of total employment during 1990–2003, and is projected to stay close to 70 percent for 2004 and 2005. These estimates are based on total job creation in other sectors reported by CDC and the current status of the labour force in the garment sector. According to the CDC, if the total of CDC-approved projects had been fully implemented, they would have created 66,152 jobs in 2004. Of these, almost 95 percent were in the industrial sector. The actual project implementation was around 50 percent of the total projects²¹ (Hing Thoraxy, page 28). If this is correct, total job creation dropped sharply to about 33,000 for 2004. In line with an increase of temporarily and permanently closed factories, the current preference of factory owners is to hire experienced workers. But the labour force has been increasing by about 200,000 persons per year since 2001. Consequently, the industrial sector is expected to absorb only a small proportion of the total labour force.

In 2004, Cambodia had a population of 14.4 million,²² of which the labour force²³ amounted to 7.3 million, 50.4 percent of the total population. Of these, the total labour force in agriculture is estimated at around 5 million persons.

²⁰ During 1980–95, the population grew slightly faster than 2.5 percent per year.

²¹ Hing (2003), *Cambodia's Investment Potential*, (Phnom Penh: JICA)

²² Estimated using government and international organisation data.

²³ This refers to the number of all employed and unemployed persons (including those seeking work for the first time). The labour force is also called the economically active population.

Table 2.10: Distribution of Labour Force (percent)

	1990	1995	2000	2001	2002	2003	2004*
Agriculture	78.0	73.1	71.3	72.0	71.5	71.4	70
Industry	4.9	6.8	9.3	9.4	9.9	10.0	11
Services	17.2	20.1	19.4	18.6	18.7	18.6	19
Total	100	100	100	100	100	100	100

Sources: CDRI, data compiled from ministries

* Estimated by CDRI.

According to the National Institute of Statistics, unemployment in Cambodia as a whole has never exceeded 6 percent in the past 10 years. Unemployment rates in rural areas are relatively high compared to urban areas. Female unemployment rates are higher than those of males. Although unemployment does not constitute a serious issue in Cambodia's labour market, the country is believed to suffer from a high level of labour surplus in rural areas in the face of the inability of urban industry to absorb more labourers and the relatively low job creation rate.

According to the Asian Development Bank, the underemployment rate²⁴ in Cambodia was around 28 percent in 2000 and reached 38 percent in 2001. Separate data for urban and rural areas are not available. However, underemployment in rural areas is likely to be much higher than in urban areas. In addition, the United Nations Development Programme in 2004 stated that, of the 5.3 million employed persons aged 10 and over, 1.66 million (31 percent) were available for extra work and more than half a million were employed for fewer than 30 hours during the survey week. Although these figures do not fully reflect a labour surplus, they at least tell us how serious the problem is in Cambodia's labour market.

Moreover, a recent study by CDRI has found that there is an abundant labour surplus in rural areas, although a precise quantification of this could not be made due to the limitations of the methodology used.²⁵

2.2.5.2 Vulnerable Workers

Since 1998, CDRI has conducted quarterly surveys of selected vulnerable workers in Phnom Penh, Kompong Speu and Kandal province, to observe incomes and expenditures as an indicator of the poverty situation in urban and rural areas. Although the survey results cannot be applied to the country as a whole, to some extent the survey can tell the current poverty situation, particularly in urban areas. Vulnerable workers were categorised into 10 groups: waitresses, garment workers, moto taxi drivers, small traders, cyclo drivers, unskilled construction workers, skilled construction workers, porters, scavengers and rice field workers. Among the 10 groups, only rice field workers were selected in Kompong Speu and Kandal, and the rest were randomly selected in Phnom Penh.

²⁴ The underemployed are employed persons who express the desire to have additional working hours in their present job or in an additional job, or to have a new job with longer working hours.

²⁵ Tong Kimsun, (2005) Labour Surplus and Productivity in Cambodian Agriculture, The Case of Takeo Province, CDRI (memo).

The survey results for 2004 showed that the real daily incomes of most vulnerable workers declined compared to 2003. The worst-off group in 2004 was moto taxi drivers, whose real daily incomes fell by 11 percent to 9,024 riels from 10,092 riels in the previous year. Scavengers, strangely enough, did much better, as their real daily income rose by 11 percent to 4,363 riels, from 3,944 riels in 2003. The average real daily income of the 10 groups in 2004 amounted to 7,100 riels, a decline of 4 percent compared to 2003. Except for rice field workers, all spend approximately six to eight months per year working in Phnom Penh.

Table 2.11: Real Daily Earnings of Vulnerable Workers (in riels)

	2001	2002	2003	2004	Average 2001?2004
Rice field workers	4064	4304	4177	4059	4182
Scavengers	3211	3685	3944	4363	3613
Waitresses	2800	4365	4932	4449	4032
Unskilled construction workers	6672	6453	6558	6259	6561
Porters	6746	7044	6676	6789	6822
Small traders	6493	6566	6532	6806	6530
Cyclo drivers	8408	8975	8572	7496	8652
Garment workers	8608	8904	9577	9084	9030
Moto taxi drivers	10768	12184	10092	9024	11015
Skilled construction workers	11105	12605	13111	12429	12274
	<i>Percentage Change Over Previous Year</i>				
Rice field workers	-2.7	5.9	-3.0	-2.8	-0.6
Scavengers	-25.5	14.8	7.0	10.6	1.7
Waitresses	21.4	55.9	13.0	-9.8	20.1
Unskilled construction workers	-31.7	-3.3	1.6	-4.6	-9.5
Porters	-15.2	4.4	-5.2	1.7	-3.6
Small traders	-7.5	1.1	-0.5	4.2	-0.7
Cyclo drivers	-11.4	6.7	-4.5	-12.6	-5.4
Garment workers	7.5	3.4	7.6	-5.1	3.3
Motor taxi drivers	25.3	13.2	-17.2	-10.6	2.7
Skilled construction workers	-28.3	13.5	4.0	-5.2	-4.0

Note: The data are to May 2005. Source: CDRI survey

Our past data indicated that, holding other factors constant, an increase of 1 percent in gasoline prices leads to a fall of moto taxi drivers' real daily income by 0.63 percent (the correlation is statistically significant at the 1 percent level, the observation number is 17). According to the NIS, gasoline prices in Phnom Penh city increased by 20 percent, from an average of 2,362 riels in 2003 to 2,832 riels in 2004. This would imply a fall in daily earnings of moto taxi drivers of 12.6 percent between 2003 and 2004. The real daily income of moto taxi drivers decreased for three consecutive years, to 9,000 riels in 2004, from 10,092 riels in 2003 and from 10,768 riels in 2001.

The real daily income of garment workers declined by 5 percent in 2004, falling for the first time in five years. According to the surveys, most garment workers said that the decline in their daily income was mainly due to overtime reduction. This was confirmed by their working hours. Garment workers normally worked 60 hours per week in 2003 but only 57 hours per week in 2004, the survey showed. However, this contrasted with the total value of garment exports, which

increased from \$1,628 million to \$2,026 million in 2004 according to the Customs and Excise Department. Even in terms of volume, the export of all kinds of clothing and shoes amounted to 42.5 million dozens and 14.1 million pairs in 2004, up from 34.4 million dozens and 13.5 million pairs in 2003 respectively, while other textile products declined to 1.4 million dozens in 2004 from 2.2 million dozens in 2003. Thus, the shift from hiring inexperienced to more experienced workers is likely to lie behind the decline of garment workers' real daily earnings, as they were hired at wage rates of mobile workers, who are typically paid a third less than permanent workers.

Garment workers spent an average of 2,000 riels per day on food in 2004, slightly more than the "redefined" poverty line of 1,712 riels published by the World Food Programme and Ministry of Planning in 2002.²⁶ In other words, garment workers spent less than half a dollar per day (nominal exchange rate) on food while they worked more than eight hours per day. Their total expenditures amounted to an average of 3,600 riels per day in 2004, a decline of 5 percent from the previous year, but an increase of 13 percent from 2002.

Investment in the construction sector in Phnom Penh increased by 32.5 percent, from \$198.9 million in 2003 to \$263.4 million in 2004, according to the Department of Cadastre and Geography of the municipality. CDRI data for 2004 also indicate that about 80 percent of the interviewed construction workers reported an increase of activity in 2004 compared to 2003. However, the real daily income of both unskilled and skilled construction workers declined, by 4.6 percent and 5.2 percent respectively, from a year earlier. The decline appears to be related to the influx of new labourers into the construction market as well as the seasonal movement of labour from other provinces. The survey also found that skilled construction workers who have permanent residence in Phnom Penh were more active. Skilled construction workers permanently resident in Phnom Penh increased from 13 percent of the total in 2003 to 19 percent in 2004. Unskilled construction workers who are permanent residents in other provinces dominated the labour market in Phnom Penh in 2004, suggesting large-scale seasonal migration from rural areas.

The real daily income gap between skilled and unskilled construction workers has gradually widened. This gap is expected to continue to expand. The average real daily income of skilled construction workers was 12,400 riels, approximately twice that of unskilled construction workers. In 2001, skilled construction workers earned around 1.6 times the wages of unskilled workers. Skilled construction workers spent an average of 3,500 riels per day in 2004, about 3 percent more than the amount spent by unskilled construction workers.

In 2004, rice field workers' real daily income dropped by 2.3 percent to 4,100 riels, from 4,200 riels in 2003. For 2004 as a whole, the real daily income of rice field workers was not affected by the serious drought that started in the second half of the year and which damaged more than 247,336 hectares of paddy land, or 12 percent of the country's planted area (the Ministry of Agriculture, Forestry and Fisheries). Nonetheless, the result of a survey conducted by CDRI during 1–15 February 2005 showed that real daily earnings of rice field workers in Kandal and Kompong Speu province dropped by 30 percent from the same period last year. Droughts and floods are key factors for the migration of workers from other provinces to Phnom Penh.

²⁶ In Phnom Penh, the poverty line published by World Food Programme and Ministry of Planning in 2002 was 1,629 riels; it was redefined to 1,712 riels as the inflation rate increased by 5.04 percent between 2002 and 2004.

2.3. Conclusion and Outlook for 2005

GDP growth is expected to be around 6.0 percent in 2005.²⁷ The growth is driven by all sectors, but heavy reliance is placed on industry, led by textile exports, and the service sector, led by tourism. Given the regular rainfall and the increase in the fish catch,²⁸ the agricultural sector is anticipated to grow by 2.9 percent. Crops and livestock are expected to be the leading sub-sectors. Industrial growth is projected to slow to 9 percent as a result of the phasing out of the quota system and stiff competition from other textile exporters. Textile manufacturing is expected to grow by 10 percent, while other sub-sectors are anticipated to expand by the average growth rate of the last four years.

The service sector is projected to decelerate to growth of 5.2 percent. Major contributions to growth are projected to come from trade, hotels and restaurants and transport and telecommunications, which are closely linked to the tourism industry.

To boost growth in all sectors requires more development of infrastructure. The construction of irrigation canals, the repair and maintenance of railways and national roads, the acceleration of energy supply, including rural electrification, improved water supply and sanitation and improved health and education services are integral to promoting economic growth and reducing poverty in Cambodia. Enhancing good governance by improving efficiency and effectiveness of the public sector is a necessary condition for these requirements to be met.

Exports for 2005 will be mostly garment exports. The elimination of quotas in 2005 made Cambodia's garment exports vulnerable to direct competition from China as well as from Vietnam and India, so garment exports are likely to decline. The pause of orders from several buyers during January–March 2005 caused garment exports in the first quarter 2005 to decline sharply, raising great concern for the future of this sector. However, the situation is much better due to the imposition of temporary safeguard measures by the EU and US on garment imports from China. Most factories regained orders, and garment exports during April–July rebounded to normal levels. Garment exports for all of 2005 will decline slightly from the previous year, making total exports decline, assuming that exports of other goods such as rubber, forest products and fish products remain stable.

Total imports in 2005 will rise, but not significantly. The growth of the construction sector will stimulate increased imports of construction materials, while the rising prices of petroleum and other energy products will cause their import value to rise. The rate of growth in imports of textiles will decline due to an expected decline in the growth of garment exports.

In 2005, government revenue will continue to increase and meet the target of 2,298.6 billion riels (about 8 percent higher than the targeted and recorded revenue in 2004) in spite of a gradual contraction of tariff rates, if the announced and planned reform measures are implemented. The fiscal reform agenda developed by the Ministry of Economy and Finance and IMF and other

²⁷ The Economic Institute of Cambodia projected that GDP will grow at 3.2 percent while the International Monetary Fund (IMF) predicted it will expand around 5 to 6 percent in 2005. The differences may arise from the different projection techniques used.

²⁸ Recent figures released by Mekong River Commission show that the Tonle Sap's fish soared to more than 16,000 tonnes, nearly three times the previous year's haul.

donors is expected to lead not only to improved revenue collection, but also to a better system of taxes, customs and non-tax administration. For example, in February 2005, the Ministry of Economy and Finance started automating customs systems and procedures and cracked down on vehicle import tax avoidance, as ordered on 13 January 2005.

Government spending is likely to increase in 2005. The target is at 3,078.6 billion riels, 5.6 percent higher than the target of the 2004 budget and about 3 percent more than the actual total cash expenditure in 2004. The government planned wage increases for civil servants and the military of an average of 15 percent in 2005 as part of civil service reform measures, while continuing to raise social spending, with defence spending continuing its declining trend.

For 2005, the monetary authorities projected money growth (total liquidity) at 10 percent and an expansion of riels in circulation outside banks at 18 percent, along with growth of foreign currency deposits of 7.3 percent.²⁹ The money growth will probably exceed its target. Interest rates on loans (in both riels and dollars) will be on a slightly declining trend as of December 2005. Only competition among commercial banks can lead to a decline in interest rates as long as operating costs, and costs of financing deposit interest rates remain basically unchanged. But such competition can be offset by a higher inflation rate (e.g., due to higher prices for petroleum products and depreciation of the riel). Appreciation of the dollar against the riel would also cause price increases in both imported and locally produced products, as most goods and inputs are imported.

²⁹ NBC (2004), 2004 Year Book Report (Phnom Penh: NBC)

Statistical Appendix

Table 1: GDP by Sectors at Current Prices

	2000	2001	2002	2003	2004	2005
Agriculture	5,064,969	5,045,720	5,155,672	5,749,971	6,097,173	6,392,345
Crops	2,327,784	2,275,509	2,184,549	2,772,751	2,844,101	3,009,455
Livestock and Poultry	757,006	816,270	846,069	855,167	911,659	955,329
Fisheries	1,515,910	1,506,349	1,703,884	1,722,286	1,924,419	2,046,134
Forestry & Logging	464,269	447,592	421,170	399,767	416,994	406,290
Industry	3,077,993	3,500,177	4,004,497	4,562,333	5,402,343	6,218,998
Mining	33,544	35,755	42,143	46,622	52,265	58,431
Manufacturing	2,254,750	2,617,564	2,955,593	3,360,706	3,979,201	4,587,177
Food, Beverages & Tobacco	449,413	455,257	456,226	488,041	513,376	530,931
Textile, Wearing Apparel & Footwear	1,297,079	1,680,868	1,970,936	2,293,656	2,847,476	3,469,403
Wood, Paper & Publishing	132,406	103,046	111,872	104,867	112,984	109,558
Rubber Manufacturing	69,165	61,658	73,613	110,521	119,104	138,887
Other Manufacturing	306,688	316,735	342,946	363,621	386,260	409,248
Non-Metallic Manufacturing	62,185	64,125	70,067	75,242	82,670	88,797
Basic Metal and Metal Products	24,325	25,843	30,632	35,157	42,099	48,339
Other Manufacturing	220,179	226,766	242,247	253,222	261,490	273,005
Electricity, Gas & Water	58,103	69,595	85,471	103,622	120,374	144,447
Construction	731,596	777,263	921,290	1,051,383	1,250,503	1,431,300
Services	5,230,891	5,521,306	5,930,766	6,087,612	7,027,953	7,573,662
Trade	1,512,026	1,521,567	1,562,085	1,634,697	1,902,696	2,018,460
Hotels & Restaurants	520,933	687,075	836,425	750,877	933,541	1,120,249
Transport & Communications	930,059	1,001,969	1,083,249	1,163,009	1,368,901	1,508,906
Finance	175,065	138,815	150,566	154,059	173,115	174,174
Public Administration	376,603	359,180	390,477	405,660	419,148	430,989
Real Estate & Business	855,031	877,202	900,475	925,107	950,698	976,243
Other Services	861,174	935,498	1,007,489	1,054,203	1,279,854	1,415,415
Taxes on Products Less Subsidies	870,232	920,702	1,040,437	1,065,160	1,279,944	1,412,242
Less Subsidies	31,182	31,744	51,000	60,067	63,807	77,600
Less Finance Service Charge	154,780	127,986	137,125	154,554	177,846	185,676
Gross Domestic Product	14,089,305	14,859,919	15,994,247	17,310,522	19,629,567	21,411,571
	<i>Percentage change over previous year</i>					
Agriculture	-8.0	-0.4	2.2	11.5	6.0	4.8
Crops	-8.4	-2.2	-4.0	26.9	2.6	5.8
Livestock and Poultry	-10.3	7.8	3.7	1.1	6.6	4.8
Fisheries	-3.8	-0.6	13.1	1.1	11.7	6.3
Forestry & Logging	-14.3	-3.6	-5.9	-5.1	4.3	-2.6
Industry	27.6	13.7	14.4	13.9	18.4	15.1
Mining	27.0	6.6	17.9	10.6	12.1	11.8
Manufacturing	27.7	16.1	12.9	13.7	18.4	15.3
Food, Beverages & Tobacco	-6.7	1.3	0.2	7.0	5.2	3.4
Textile, Wearing Apparel & Footwear	64.1	29.6	17.3	16.4	24.1	21.8
Wood, Paper & Publishing	-12.5	-22.2	8.6	-6.3	7.7	-3.0
Rubber Manufacturing	24.1	-10.9	19.4	50.1	7.8	16.6
Other Manufacturing	7.1	3.3	8.3	6.0	6.2	6.0
Non-Metallic Manufacturing	20.9	3.1	9.3	7.4	9.9	7.4
Basic Metal and Metal Products	30.8	6.2	18.5	14.8	19.7	14.8
Other Manufacturing	1.8	3.0	6.8	4.5	3.3	4.4
Electricity, Gas & Water	2.3	19.8	22.8	21.2	16.2	20.0
Construction	29.6	6.2	18.5	14.1	18.9	14.5
Services	10.3	5.6	7.4	2.6	15.4	7.8
Trade	2.4	0.6	2.7	4.6	16.4	6.1
Hotels & Restaurants	24.3	31.9	21.7	-10.2	24.3	20.0
Transport & Communications	14.7	7.7	8.1	7.4	17.7	10.2
Finance	35.2	-20.7	8.5	2.3	12.4	0.6

	2000	2001	2002	2003	2004	2005
Public Administration	-3.1	-4.6	8.7	3.9	3.3	2.8
Real Estate & Business	11.8	2.6	2.7	2.7	2.8	2.7
Other Services	14.5	8.6	7.7	4.6	21.4	10.6
Taxes on Products less Subsidies	0.6	5.8	13.0	2.4	20.2	10.3
Less Subsidies	162.0	1.8	60.7	17.8	6.2	21.6
Less Finance Service Charge	35.4	-17.3	7.1	12.7	15.1	4.4
Gross Domestic Product	5.1	5.5	7.6	8.2	13.4	9.1
	<i>Percentage of GDP</i>					
Agriculture	35.9	34.0	32.2	33.2	31.1	29.9
Crops	16.5	15.3	13.7	16.0	14.5	14.1
Livestock and Poultry	5.4	5.5	5.3	4.9	4.6	4.5
Fisheries	10.8	10.1	10.7	9.9	9.8	9.6
Forestry & Logging	3.3	3.0	2.6	2.3	2.1	1.9
Industry	21.8	23.6	25.0	26.4	27.5	29.0
Mining	0.2	0.2	0.3	0.3	0.3	0.3
Manufacturing	16.0	17.6	18.5	19.4	20.3	21.4
Food, Beverages & Tobacco	3.2	3.1	2.9	2.8	2.6	2.5
Textile, Wearing Apparel & Footwear	9.2	11.3	12.3	13.3	14.5	16.2
Wood, Paper & Publishing	0.9	0.7	0.7	0.6	0.6	0.5
Rubber Manufacturing	0.5	0.4	0.5	0.6	0.6	0.6
Other Manufacturing	2.2	2.1	2.1	2.1	2.0	1.9
Non-Metallic Manufacturing	0.4	0.4	0.4	0.4	0.4	0.4
Basic Metal and Metal Products	0.2	0.2	0.2	0.2	0.2	0.2
Other Manufacturing	1.6	1.5	1.5	1.5	1.3	1.3
Electricity, Gas & Water	0.4	0.5	0.5	0.6	0.6	0.7
Construction	5.2	5.2	5.8	6.1	6.4	6.7
Services	37.1	37.2	37.1	35.2	35.8	35.4
Trade	10.7	10.2	9.8	9.4	9.7	9.4
Hotels & Restaurants	3.7	4.6	5.2	4.3	4.8	5.2
Transport & Communications	6.6	6.7	6.8	6.7	7.0	7.0
Finance	1.2	0.9	0.9	0.9	0.9	0.8
Public Administration	2.7	2.4	2.4	2.3	2.1	2.0
Real Estate & Business	6.1	5.9	5.6	5.3	4.8	4.6
Other Services	6.1	6.3	6.3	6.1	6.5	6.6
Taxes on Products less Subsidies	6.2	6.2	6.5	6.2	6.5	6.6
Less Subsidies	0.2	0.2	0.3	0.3	0.3	0.4
Less Finance Service Charge	1.1	0.9	0.9	0.9	0.9	0.9
Gross Domestic Product	100.0	100.0	100.0	100.0	100.0	100.0

Source: NIS for 2000-2004, CDRI projection for 2005.

Table 2: GDP by Sector at Constant 2000 Prices

	2000	2001	2002	2003	2004	2005
Agriculture	5,064,969	5,203,776	5,058,001	5,677,276	5,565,918	5,728,613
Crops	2,327,784	2,337,411	2,228,352	2,795,421	2,700,576	2,820,771
Livestock & Poultry	757,006	841,063	830,855	873,299	910,552	954,405
Fisheries	1,515,910	1,605,199	1,614,933	1,641,916	1,587,484	1,606,741
Forestry & Logging	464,269	420,103	383,860	366,640	367,306	346,696
Industry	3,077,994	3,423,932	4,015,401	4,494,603	5,218,601	5,695,171
Mining	33,544	33,597	41,601	44,800	48,870	53,849
Manufacturing	2,254,750	2,610,999	2,989,806	3,352,804	3,935,393	4,255,630
Food, Beverages & Tobacco	449,413	467,775	462,103	487,628	477,238	484,714
Textile, Wearing Apparel & Footwear	1,297,079	1,665,692	2,019,158	2,360,238	2,946,789	3,250,308
Wood, Paper & Publishing	132,406	93,046	93,645	80,543	76,649	67,469
Rubber Manufacturing	69,165	69,697	69,191	62,427	55,255	52,324
Other Manufacturing	306,688	314,789	345,708	361,969	379,461	400,815
Non-Metallic Manufacturing	62,185	64,241	70,465	74,654	77,158	81,458
Basic Metal and Metal Products	24,325	26,066	31,168	36,107	38,964	43,882
Other Manufacturing	220,179	224,482	244,075	251,207	263,339	275,475
Electricity, Gas & Water	58,103	61,050	71,229	82,584	86,390	95,525
Construction	731,596	718,286	912,756	1,014,415	1,147,948	1,290,167
Services	5,230,891	5,428,756	5,667,627	5,676,447	6,200,668	6,542,154
Trade	1,512,026	1,534,930	1,544,759	1,579,286	1,677,867	1,722,466
Hotels & Restaurants	520,933	638,582	758,574	680,415	840,915	985,552
Transport & Communications	930,059	1,019,680	1,096,550	1,121,906	1,191,590	1,268,144
Finance	175,065	138,350	145,265	146,594	156,304	153,008
Public Administration	376,603	358,578	357,172	341,836	318,934	306,040
Real Estate & Business	855,031	851,197	831,540	827,557	854,656	854,737
Other Services	861,174	887,438	933,766	978,852	1,160,402	1,252,207
Taxes on Products less Subsidies	870,232	933,640	1,033,773	1,044,021	1,207,546	1,312,197
Less: Subsidies	31,182	31,638	49,204	57,157	57,611	68,261
Less: Imputed Bank Charges	154,780	127,557	132,298	147,065	160,575	163,175
GDP (Million Riels)	14,089,307	14,862,546	15,642,505	16,745,282	18,032,157	19,114,960
	<i>Percentage change over previous year</i>					
Agriculture	-1.2	2.7	-2.8	12.2	-2.0	2.9
Crops	0.6	0.4	-4.7	25.4	-3.4	4.5
Livestock	-9.1	11.1	-1.2	5.1	4.3	4.8
Fisheries	5.0	5.9	0.6	1.7	-3.3	1.2
Forestry	-13.2	-9.5	-8.6	-4.5	0.2	-5.6
Industry	31.2	11.2	17.3	11.9	16.1	9.1
Mining	26.0	0.2	23.8	7.7	9.1	10.2
Manufacturing	30.3	15.8	14.5	12.1	17.4	8.1
Food, Beverages & Tobacco	-3.9	4.1	-1.2	5.5	-2.1	1.6
Textile, Wearing Apparel & Footwear	68.2	28.4	21.2	16.9	24.9	10.3
Wood, Paper & Publishing	-9.7	-29.7	0.6	-14.0	-4.8	-12.0
Rubber Manufacturing	10.0	0.8	-0.7	-9.8	-11.5	-5.3
Other Manufacturing	8.6	2.6	9.8	4.7	4.8	5.6
Non-Metallic Manufacturing	19.9	3.3	9.7	5.9	3.4	5.6
Basic Metal and Metal Products	34.3	7.2	19.6	15.8	7.9	12.6
Other Manufacturing	3.7	2.0	8.7	2.9	4.8	4.6
Electricity, Gas & Water	6.9	5.1	16.7	15.9	4.6	10.6
Construction	36.8	-1.8	27.1	11.1	13.2	12.4
Services	8.9	3.8	4.4	0.2	9.2	5.5
Trade	4.5	1.5	0.6	2.2	6.2	2.7
Hotels & Restaurants	19.0	22.6	18.8	-10.3	23.6	17.2
Transport & Communications	6.1	9.6	7.5	2.3	6.2	6.4
Finance	36.3	-21.0	5.0	0.9	6.6	-2.1
Public Administration	-0.8	-4.8	-0.4	-4.3	-6.7	-4.0
Real Estate & Business	7.3	-0.4	-2.3	-0.5	3.3	0.0
Other Services	16.7	3.0	5.2	4.8	18.5	7.9
Taxes on Products less Subsidies	4.5	7.3	10.7	1.0	15.7	8.7
Less Subsidies	171.6	1.5	55.5	16.2	0.8	18.5
Less Imputed Bank Charges	36.5	-17.6	3.7	11.2	9.2	1.6
GDP	8.4	5.5	5.2	7.0	7.7	6.0
	<i>Percentage of GDP</i>					
Agriculture	35.9	35.0	32.3	33.9	30.9	30.0
Crops	16.5	15.7	14.2	16.7	15.0	14.8
Livestock & Poultry	5.4	5.7	5.3	5.2	5.0	5.0
Fisheries	10.8	10.8	10.3	9.8	8.8	8.4
Forestry & Logging	3.3	2.8	2.5	2.2	2.0	1.8
Industry	21.8	23.0	25.7	26.8	28.9	29.8
Mining	0.2	0.2	0.3	0.3	0.3	0.3
Manufacturing	16.0	17.6	19.1	20.0	21.8	22.3
Food, Beverages & Tobacco	3.2	3.1	3.0	2.9	2.6	2.5
Textile, Wearing Apparel & Footwear	9.2	11.2	12.9	14.1	16.3	17.0

	2000	2001	2002	2003	2004	2005
Wood, Paper & Publishing	0.9	0.6	0.6	0.5	0.4	0.4
Rubber Manufacturing	0.5	0.5	0.4	0.4	0.3	0.3
Other Manufacturing	2.2	2.1	2.2	2.2	2.1	2.1
Non-Metallic Manufacturing	0.4	0.4	0.5	0.4	0.4	0.4
Basic Metal and Metal Products	0.2	0.2	0.2	0.2	0.2	0.2
Other Manufacturing	1.6	1.5	1.6	1.5	1.5	1.4
Electricity, Gas & Water	0.4	0.4	0.5	0.5	0.5	0.5
Construction	5.2	4.8	5.8	6.1	6.4	6.7
Services	37.1	36.5	36.2	33.9	34.4	34.2
Trade	10.7	10.3	9.9	9.4	9.3	9.0
Hotels & Restaurants	3.7	4.3	4.8	4.1	4.7	5.2
Transport & Communications	6.6	6.9	7.0	6.7	6.6	6.6
Finance	1.2	0.9	0.9	0.9	0.9	0.8
Public Administration	2.7	2.4	2.3	2.0	1.8	1.6
Real Estate & Business	6.1	5.7	5.3	4.9	4.7	4.5
Other services	6.1	6.0	6.0	5.8	6.4	6.6
Taxes on Products less Subsidies	6.2	6.3	6.6	6.2	6.7	6.9
Less Subsidies	0.2	0.2	0.3	0.3	0.3	0.4
Less Imputed Bank Charges	1.1	0.9	0.8	0.9	0.9	0.9
GDP	100.0	100.0	100.0	100.0	100.0	100.0

Source: NIS for 2000-2004, CDRI projection for 2005.

Table 3: Implicit Price Deflators (Base Year = 2000)

	2000	2001	2002	2003	2004	2005
Agriculture	100	97	102	101	110	112
Crops	100	97	98	99	105	107
Livestock and Poultry	100	97	102	98	100	100
Fisheries	100	94	106	105	121	127
Forestry & Logging	100	107	110	109	114	117
Industry	100	102	100	102	104	109
Mining	100	106	101	104	107	109
Manufacturing	100	100	99	100	101	108
Food, Beverages & Tobacco	100	97	99	100	108	110
Textile, Wearing Apparel & Footwear	100	101	98	97	97	97
Wood, Paper & Publishing	100	111	119	130	147	162
Rubber Manufacturing	100	88	106	177	216	265
Other Manufacturing	100	101	99	100	102	102
Non-Metallic Manufacturing	100	100	99	101	107	109
Basic Metal and Metal Products	100	99	98	97	108	110
Other Manufacturing	100	101	99	101	99	99
Electricity, Gas & Water	100	114	120	125	139	151
Construction	100	108	101	104	109	111
Services	100	102	105	107	113	116
Trade	100	99	101	104	113	117
Hotels & Restaurants	100	108	110	110	111	114
Transport & Communications	100	98	99	104	115	119
Finance	100	100	104	105	111	114
Public Administration	100	100	109	119	131	141
Real Estate & Business	100	103	108	112	111	114
Other Services	100	105	108	108	110	113
Taxes on Products less Subsidies	100	99	101	102	106	108
Less Subsidies	100	100	104	105	111	114
Less Finance Service Charge	100	100	104	105	111	114
Gross Domestic Product	100	100	102	103	109	112

Source: NIS for 2000-2004, CDRI projection for 2005.

Table 4: Balance of Payments: 2000-2004 (\$ million)

	2000	2001	2002	2003	2004
Balance of trade	-538	-523	-563	-531	-665
Exports	1401	1571	1750	2046	2375
Of which: Domestic exports	1283	1462	1639	1929	2240
Re-exports	118	109	111	117	134
Imports	-1939	-2094	-2577	-2577	-3040
Of which: Retained imports	-1763	-1934	-2168	-2426	-2880
Net Services	101	177	230	134	180
Receipts from travel services	304	380	453	389	472
Private transfers, net	144	137	149	163	142
Balance of current account (excluding official transfers)	-417	-344	-353	-417	-568
Financial account	183	149	248	167	377
Official sector loans (excluding IMF)	75	78	124	149	139
Non-official sector investment	108	71	124	19	238
Of which: Foreign direct investment	142	142	139	77	126
Net errors and omissions	12	-42	-41	-26	50
Overall balance	96	67	165	31	127
	<i>Annual percentage change</i>				
Trade deficit	14	-3	8	-6	25
Exports	38	12	11	17	16
Imports	30	8	23	0	18
Balance of current account (deficit)	-10	-17	3	18	36
Balance of capital account (surplus)	-6	-19	66	-33	125
Foreign direct investment	-36	-8	2	5	15
Overall balance	99	-30	148	-81	317
	<i>Percent of GDP (current prices)</i>				
Trade balance	(15)	(14)	(14)	(12)	(14)
Exports	38	41	43	47	49
Imports	(53)	(55)	(63)	(59)	(62)
Current account balance	(11)	(9)	(9)	(10)	(12)
Capital account balance	5	4	6	4	8
Overall balance	5	3	8	2	6

Source: National Bank of Cambodia

Table 5: Government Budget Operations

	2000	2001	2002	2003	2004	2005*
	Billion Riels					
Total Domestic Revenue	1,422.8	1,529.4	1,743.9	1,764.6	2,126.7	2,298.6
Current Revenue	1,393.5	1,520.4	1,727.6	1,733.2	2,107.3	2,282.6
Tax Revenue	1,040.2	1,096.4	1,227.1	1,220.1	1,577.5	1,741.6
- VAT	385.7	412.0	449.4	449.4	590.6	652.7
- Excise Duties	112.6	154.8	210.3	197.6	304.4	347.1
- Customs Duties	390.5	375.7	423.8	395.2	513.3	563.1
- Profit Tax	115.1	112.8	102.6	109.9	117.3	123.0
Non-Tax Revenue	353.3	423.9	500.5	513.1	529.8	541.0
- Forest Exploitation	41.0	29.3	14.9	6.7	1.8	33.4
- Tourism Income	-	14.4	19.5	20.2	28.8	51.0
- Civil Aviation	24.8	40.5	33.5	21.7	26.9	40.0
- Posts and Telecommunications	92.0	122.3	122.6	119.8	94.2	135.8
- Visa Fees	-	27.9	40.5	41.1	62.2	83.6
- Quota and Export Licences	-	71.6	106.1	145.8	122.9	50.0
Capital Revenue	29.3	9.1	16.3	31.4	19.5	16.0
Total Budget Expenditure (cash basis)	2,029.5	2,461.8	2,948.3	2,756.6	2,991.3	3,078.6
Current Expenditure	1,215.5	1,415.6	1,574.9	1,758.1	1,745.7	1,983.6
General Administration	283.4	269.0	298.2	336.4	302.2	290.4
Defence and Security	450.7	417.3	406.8	411.0	422.8	452.2
Social Administration	368.8	449.5	583.0	615.9	672.3	750.3
- Ministry of Public Health	101.8	129.7	164.4	173.0	192.1	238.8
- Ministry of Education, Youth and Sport	165.8	209.2	289.7	300.5	325.9	366.8
Economic Administration	112.5	150.7	159.5	170.5	151.3	200.0
- Ministry of Agriculture, Forestry and Fisheries	23.4	30.5	39.7	39.0	38.6	50.1
- Ministry of Rural Development	7.6	12.4	18.4	16.9	16.6	24.6
Miscellaneous	0.0	129.2	126.7	224.3	197.1	290.8
Capital Expenditure	824.2	1,101.3	1,388.3	1,170.7	1,224.5	1,095.0
Overall Budget Balance (cash basis)	-606.7	-932.4	-1,204.4	-992.0	-864.6	-780.0
Financing	606.7	932.4	1,204.4	992.0	864.6	780.0
Foreign Financing	635.7	889.4	1,249.4	886.1	925.1	835.3
Budget Support	113.0	54.3	178.2	139.0	44.5	120.0
Project Aid	522.7	839.4	1,079.1	806.3	905.3	750.0
Amortisation of External Debts	0.0	-4.3	-8.0	-59.3	-24.8	-34.8
Domestic Financing	-19.5	10.7	-160.2	100.4	-110.0	-55.3
Net Bank Financing (Monetary Survey)	-114.6	-63.6	-104.7	-5.3	24.1	-8.2
Other MEF Accounts	-1.4	4.0	-7.0	2.1	-6.3	-
Treasury Bills (From Bidding)	-	-	-	49.9	-	-
Private Sector	103.4	72.7	-46.0	51.8	-125.8	-47.0
\$Acc.-gap between NBC &MEF	-	-2.4	-2.5	2.0	-2.0	-
Outstanding Operations	-9.5	32.3	115.3	5.5	49.5	-
	<i>Annual Percentage Change</i>					
Total Domestic Revenue	-	7.5	14.0	1.2	20.5	8.1
Current Revenue	-	9.1	13.6	0.3	21.6	8.3
Tax Revenue	-	5.4	11.9	-0.6	29.3	10.4
- VAT	-	6.8	9.1	0.0	31.4	10.5
- Excise Duties	-	37.4	35.9	-6.0	54.0	14.0
- Customs Duties	-	-3.8	12.8	-6.7	29.9	9.7
- Profit Tax	-	-2.0	-9.1	7.1	6.7	4.8
Non-Tax Revenue	-	20.0	18.1	2.5	3.2	2.1
- Forest Exploitation	-	-28.5	-49.2	-55.2	-72.8	1743.9
- Tourism Income	-	-	35.6	3.8	42.5	77.0
- Civil Aviation	-	63.4	-17.2	-35.3	24.0	48.7
- Posts and Telecommunications	-	32.9	0.2	-2.2	-21.4	44.0

	2000	2001	2002	2003	2004	2005*
- Visa Fees	-	-	45.1	1.6	51.3	34.4
- Quota and Export Licences	-	-	48.1	37.4	-15.7	-59.3
Capital Revenue	-	-69.1	79.5	93.0	-38.0	-17.8
Total Budget Expenditure (cash basis)	-	21.3	19.8	-6.5	8.5	2.9
Current Expenditure	-	16.5	11.3	11.6	-0.7	13.6
General Administration	-	-5.1	10.9	12.8	-10.2	-3.9
Defence and Security	-	-7.4	-2.5	1.0	2.9	6.9
Social Administration	-	21.9	29.7	5.6	9.2	11.6
- Ministry of Public Health	-	27.4	26.7	5.2	11.0	24.3
- Ministry of Education, Youth and Sport	-	26.2	38.4	3.7	8.5	12.5
Economic Administration	-	34.0	5.8	6.9	-11.3	32.2
- Ministry of Agriculture, Forestry and Fisheries	-	30.1	30.1	-1.6	-1.2	30.0
- Ministry of Rural Development	-	64.8	47.8	-8.1	-1.6	48.2
Miscellaneous	-	-	-1.9	77.1	-12.1	47.5
Capital Expenditure	-	33.6	26.1	-15.7	4.6	-10.6
Overall Budget Balance (cash basis)	-	53.7	29.2	-17.6	-12.8	-9.8
	<i>Percentage of GDP ** (at current prices)</i>					
Total Domestic Revenue	10.1	10.3	10.9	10.2	10.8	-
Current Revenue	9.9	10.2	10.8	10.0	10.7	-
Tax Revenue	7.4	7.4	7.7	7.0	8.0	-
- VAT	2.7	2.8	2.8	2.6	3.0	-
- Excise Duties	0.8	1.0	1.3	1.1	1.6	-
- Customs Duties	2.8	2.5	2.6	2.3	2.6	-
- Profit Tax	0.8	0.8	0.6	0.6	0.6	-
Non-Tax Revenue	2.5	2.9	3.1	3.0	2.7	-
- Forest Exploitation	0.3	0.2	0.1	0.0	0.0	-
- Tourism Income	0.0	0.1	0.1	0.1	0.1	-
- Civil Aviation	0.2	0.3	0.2	0.1	0.1	-
- Posts and Telecommunications	0.7	0.8	0.8	0.7	0.5	-
- Visa Fees	0.0	0.2	0.3	0.2	0.3	-
- Quota and Export Licences	-	0.5	0.7	0.8	0.6	-
Capital Revenue	0.2	0.1	0.1	0.2	0.1	-
Total Budget Expenditure (on cash basis)	14.4	16.6	18.4	15.9	15.2	-
Current Expenditure	8.6	9.5	9.8	10.2	8.9	-
General Administration	2.0	1.8	1.9	1.9	1.5	-
Defence and Security	3.2	2.8	2.5	2.4	2.2	-
Social Administration	2.6	3.0	3.6	3.6	3.4	-
- Ministry of Public Health	0.7	0.9	1.0	1.0	1.0	-
- Ministry of Education, Youth and Sport	1.2	1.4	1.8	1.7	1.7	-
Economic Administration	0.8	1.0	1.0	1.0	0.8	-
- Ministry of Agriculture, Forestry and Fisheries	0.2	0.2	0.2	0.2	0.2	-
- Ministry of Rural Development	0.1	0.1	0.1	0.1	0.1	-
Miscellaneous	0.0	0.9	0.8	1.3	1.0	-
Capital Expenditure	5.8	7.4	8.7	6.8	6.2	-
Overall Budget Balance (cash basis)	-4.3	-6.3	-7.5	-5.7	-4.4	-
GDP? at current prices (billion riels)	14,089.3	14,859.9	15,994.2	17,310.5	19,629.6	-

Source: Ministry of Economy and Finance

* Estimated target set by the budget law of 2005.

** GDP calculated by NIS.

Table 6: Monetary Survey

	2000	2001	2002	2003	2004	May 2005
	<i>Billion Riels</i>					
Net Foreign Assets	2,589.4	3,076.6	3,737.1	4,026.7	4,796.5	5,036.8
Foreign Assets	3,047.2	3,583.1	4,279.3	4,740.2	5,481.5	5,690.3
Foreign Liabilities	-457.8	-506.5	-542.2	-713.6	-685.0	-653.5
Net Domestic Assets	-757.9	-878.9	-848.7	-698.3	-467.2	-359.3
Domestic Credit	905.4	865.4	941.8	1,208.7	1,607.8	1,828.3
<i>Net Claim on Govt.</i>	<i>3.3</i>	<i>-75.0</i>	<i>-119.1</i>	<i>-127.9</i>	<i>-208.7</i>	<i>-299.6</i>
<i>Claim on Govt.</i>	<i>272.1</i>	<i>271.2</i>	<i>310.0</i>	<i>360.2</i>	<i>360.0</i>	<i>351.8</i>
Deposits of Govt.	-268.8	-346.2	-429.1	-488.1	-568.7	-651.3
<i>Non Govt.</i>	<i>902.1</i>	<i>943.0</i>	<i>1,060.9</i>	<i>1,336.6</i>	<i>1,816.5</i>	<i>2,127.8</i>
State Enterprises	3.6	6.9	2.0	0.0	0.0	0.0
Private Sector	898.5	936.1	1,058.9	1,336.6	1,816.5	2,127.8
Others	-1,663.4	-1,744.3	-1,790.5	-1,907.0	-2,075.0	-2,187.5
Restricted Deposits	-86.3	-99.7	-95.5	-108.9	-101.6	-110.3
Capital & Reserves	-1,791.1	-1,958.7	-1,943.1	-2,089.1	-2,191.9	-2,261.5
Others	214.0	314.1	248.1	291.0	218.5	184.3
Liquidity	1,830.5	2,203.9	2,888.4	3,329.0	4,329.3	4,677.5
Money	539.6	609.7	813.3	937.5	1,152.9	1,200.1
Currency outside Banks	494.6	577.8	766.0	908.2	1,114.8	1,157.1
Demand Deposits	45.0	31.9	47.3	29.2	38.1	43.0
Quasi-Money	1,290.9	1,594.2	2,075.1	2,391.5	3,176.4	3,477.4
Time and Savings Deposits	45.9	55.5	74.3	81.9	97.3	120.4
Foreign Currency Deposits	1,245.0	1,538.6	2,000.8	2,309.6	3,079.1	3,357.0
	<i>Percentage Change over Previous Year</i>					
Net Foreign Assets	28.3	18.8	21.5	7.7	19.1	5.0
Foreign Assets	21.5	17.6	19.4	10.8	15.6	3.8
Foreign Liabilities	6.5	-10.6	-7.1	-31.6	4.0	4.6
Net Domestic Assets	31.5	16.0	-3.4	-17.7	-33.1	-23.1
Domestic Credit	3.3	-4.4	8.8	28.3	33.0	13.7
<i>Net Claim on Govt.</i>	<i>-96.8</i>	<i>-2346.2</i>	<i>-58.8</i>	<i>-7.4</i>	<i>-63.1</i>	<i>-43.5</i>
<i>Claim on Govt.</i>	<i>-4.0</i>	<i>-0.4</i>	<i>14.3</i>	<i>16.2</i>	<i>-0.1</i>	<i>-2.3</i>
Deposits of Govt.	49.0	28.8	24.0	13.8	16.5	14.5
<i>Non Govt.</i>	<i>16.6</i>	<i>4.5</i>	<i>12.5</i>	<i>26.0</i>	<i>35.9</i>	<i>17.1</i>
State Enterprises	-64.0	88.8	-70.5	-99.3	-100.0	-
Private Sector	17.7	4.2	13.1	26.2	35.9	17.1
Others	-14.5	-4.9	-2.7	-6.5	-8.8	-5.4
Restricted Deposits	-8.4	-15.6	4.2	-14.0	6.7	-8.6
Capital & Reserves	-9.4	-9.4	0.8	-7.5	-4.9	-3.2
Others	-19.1	46.8	-21.0	17.3	-24.9	-15.7
Liquidity	26.9	20.4	31.1	15.3	30.0	8.0
Money	1.4	13.0	33.4	15.3	23.0	4.1
Currency outside Banks	1.0	16.8	32.6	18.6	22.7	3.8
Demand Deposits	7.0	-29.1	48.1	-38.2	30.4	12.9
Quasi-Money	41.8	23.5	30.2	15.2	32.8	9.5
Time and Savings Deposits	44.7	20.9	33.9	10.1	18.9	23.7
Foreign Currency Deposits	41.7	23.6	30.0	15.4	33.3	9.0

Source: National Bank of Cambodia

**Cambodia's Garment
Industry Post-2005:
Situational Analysis and
Strategic Responses
at Factory and
Association Level**

C H A P T E R (3)

By:
Hing Vutha

Cambodia's Garment Industry Post-2005: Situational Analysis and Strategic Responses at Factory and Association Level

C H A P T E R (3)

3.1. Introduction

3.1.1. Background

Global trade in textiles and clothing has been governed by quantitative restrictions known as quotas under the Multi-Fibre Agreement (MFA) for more than three decades. The MFA was introduced by major industrialised countries to protect their domestic, high-cost textiles and clothing industries by restricting imports from low-cost countries such as China, Egypt, India, South Korea, Pakistan, Taiwan and Thailand. This quota regime distorted global production, shifting production to less competitive zones through enhanced market access. Thus, countries like Bangladesh, Cambodia, Sri Lanka, Laos and Nepal benefited greatly as their garment industries rapidly expanded, becoming a major source of economic growth, industrial development and employment. The MFA was replaced by the Agreement on Textiles and Clothing (ATC) in the Uruguay Round in 1995 as a transitional mechanism toward fully integrating the sector into GATT rules. The ATC ended on 31 December 2004. This is likely to bring about fundamental changes in the global textiles and clothing (T&C) industry, further growth in global textiles and clothing trade, improvement in global consumer welfare, especially in developed countries, and tougher competition among exporting countries. There will obviously be winners and losers. The countries that have a strong and diversified capacity to produce high-quality, high value-added products are likely to gain, whereas, countries whose T&C industry heavily depends on preferential market access will probably suffer.

Cambodia's garment sector has developed very rapidly in its recent history. The sector has become a major source of employment, foreign exchange earnings and the backbone of Cambodia's economy (MOC, 2004). In 2003, the sector had an estimated gross value added of \$500 million, or about 12 percent of GDP. It exports about \$2 billion or 80 per cent of total exports, and employs 230,000 employees, or about 65 percent of the total manufacturing labour force. High economic growth in Cambodia for a decade was mainly attributed to the sustained and rapid growth of the garment sector. The dependence of the economy on garment exports translates into vulnerability to sudden changes in the trading environment. Given the threat of the elimination of quotas for Cambodia's garment sector and the overall economy, it is imperative that government, donors, the Garment Manufacturers' Association of Cambodia (CMAC) and garment factories take timely and appropriate measures in response to changes in the global trading environment. This article attempts to address two key questions: (1) Which way is the global textiles and clothing industry headed, and what are the likely impacts on the Cambodian garment sector, especially after elimination of quotas? (2) What are the responses and future strategies of garment factories and the GMAC?

3.1.2. Objectives

This article is designed to give an overview of the global textiles and the clothing industry and Cambodia's garment sector before and after the elimination of quotas in 2005. The specific objectives are (1) to understand the implications of the MFA phase-out for the global textiles and clothing industry and on Cambodia's garment sector and economy, (2) to identify intervention measures undertaken by various stakeholders to improve the competitiveness of Cambodia's garment sector, (3) to understand strategic responses and future plans of garment factories and the GMAC to the changing trade system and (4) to identify areas for further research.

3.1.3. Methodology

This study was primarily based on reviewing the existing literature and collecting primary data through in-depth interviews with managers of a few selected factories and the general manager of the GMAC. Two different methods were used in this study:

- Desk research: This was a review of existing studies and literature concerning the global T&C industry, WTO rules and regulations governing these sectors, Cambodia's garment industry, the implications and impacts of MFA phase-out on Cambodia's economy and the intervention measures being undertaken in the garment industry.
- Semi-structured interviews: The semi-structured interviews were planned with managers of garment factories of different categories and with the general director of GMAC in order to understand the implications of the end of quotas on their production and operations, as well as their current and future strategies in response to changes in the global trading system.

3.1.4. Scope and Limitations

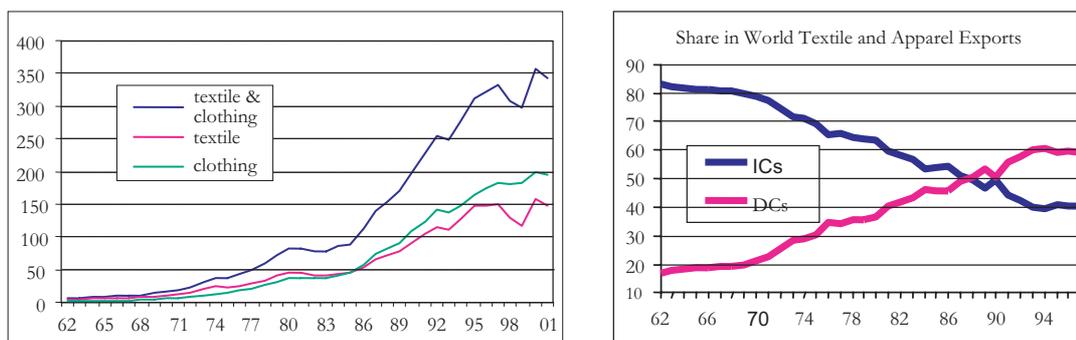
This article is descriptive and exploratory in nature and could serve as reference for further research concerning the crucial issue of adjustment mechanisms in the garment sector in Cambodia following MFA phase-out. It basically sets out to consolidate the Cambodia-specific literature on the subject to date. It was hoped that discussions with factory managers would enable us to provide additional insights, but only one of the many factory managers approached agreed to an interview.

3.2. Global Textiles and Clothing Industry

The global T&C industry has undergone dramatic development during the past four decades, emerging as a major source of foreign exchange earnings and employment in many developing and less developed countries (Appelbaum, 2004). Trade in T&C represents 5.7 percent of world exports and has increased 60-fold, from under \$6 billion in 1962 to \$357 billion in 2002. Forty years ago, the industry was dominated by industrialised countries. Only in the late 1980s did developing countries overtake industrialised countries in T&C exports. Today, textile exports of developing countries account for 50 percent of world exports of textiles, and their clothing exports account for 70 percent of world clothing exports.¹

¹ The difference between the export share of textiles and clothing of developing countries is explained by the fact that the clothing industry is more labour-intensive than the textile industry. Thus labour-abundant developing countries have a comparative advantage in clothing.

Figure 3.1: World Textile and Clothing Exports (in Billions US Dollars)



Source: Richard P. Appelbaum, 2004

Leading Exporters and Importers of textiles, 2002 (billion dollars and percentage)

	value 2002	Share in world exports/imports			
		1980	1990	2000	2002
Exporters					
European Union (15)	52.05	49.4	48.7	34.3	34.2
China	20.56	4.6	6.9	10.5	13.5
United States	10.7	6.8	4.8	7.1	7
Korea, Republic of	10.59	4	5.8	8.2	7
Taipei, Chinese	9.53	3.2	5.9	7.7	6.3
Importers					
European Union (15)	46.21	46.5	46.7	29.9	28.8
United States	17	4.5	6.2	9.8	10.6
China	13.06	1.9	4.9	7.9	8.1
Mexico	6.37	0.2	0.9	3.8	4
Japan	4.54	2.9	3.8	3	2.8

Source: WTO international trade statistics 2003

Leading Exporters and Importers of clothing, 2002 (billion dollars and percentage)

	value 2002	Share in world exports/imports			
		1980	1990	2000	2002
Exporters					
European Union (15)	50.45	42	37.7	24.1	25.1
China	41.3	10.4	10.5	7.4	8.3
Turkey	8.06	0.3	3.1	3.3	4
Mexico	7.75	0	0.5	4.4	3.9
United States	6.03	3.1	2.4	4.4	3
India	5.48	1.7	2.3	3.1	2.8
Bangladesh	4.13	0	0.6	2.1	2.1
Importers					
European Union (15)	84.88	54.3	50.6	38.8	40.3
United States	66.73	16.4	24	32.5	31.7
Japan	17.6	3.6	7.8	9.5	8.4

Today, the T&C industry is dominated by the US, the EU, China, South Korea, Taiwan, Mexico, Japan, Turkey and India. A few of them are greatly involved in both exports and imports, while others are mainly exporters or importers. The three largest exporters and importers of T&C are the European Union, the United States and China, with a combined share in 2002 of 55 percent of world textile exports, 47 percent of world textile imports and 73 percent of world clothing imports. The EU exported \$52.05 billion worth of textiles and \$50.45 billion of clothing, while importing enormous amounts of textiles and clothing at the same time—\$46.21 billion and \$84.88 billion respectively. The United States exported \$10.7 billion of textiles and \$6.03 billion of clothing, and imported \$17 billion of textiles and \$66.73 billion of clothing. China exported \$20.56 billion of textiles and \$41.3 billion of clothing, and imported \$13.06 billion of textiles and \$1.36 billion of clothing.

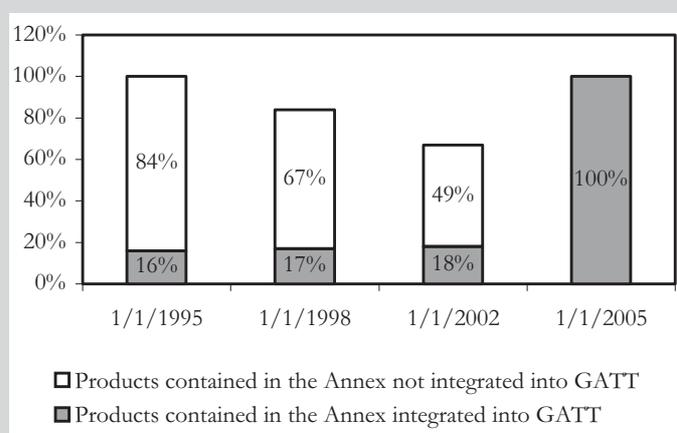
The global trade in textiles and clothing has been governed by quantitative restrictions under the Multi-Fibre Agreement (MFA)² for more than 30 years. The imposition of quantitative restrictions, known as quotas, was primarily based on bilateral negotiations or was done unilaterally if negotiations failed. The MFA was replaced by the WTO Agreement on Textiles and Clothing (ATC) in the Uruguay Round in 1995. The ATC served as a transitional mechanism for integrating the textile and clothing sector gradually into normal GATT rules within a 10-year timeframe, 1995–2005.

² The Multifibre Arrangement (MFA), more formally the Arrangement Regarding International Trade in Textiles, entered into force in 1974. Its objectives were to achieve the expansion of trade, the reduction of barriers to such trade and the progressive liberalisation of world trade in textile products, while at the same time ensuring the orderly and equitable development of this trade and avoidance of disruptive effects in individual markets and on individual lines of production in both importing and exporting countries. An additional aim was to further the economic and social development of developing countries and secure a substantial increase in their export earnings from textile products and to provide them a greater share in world trade in these products.

The WTO Agreement on Textiles and Clothing

The completion of the Uruguay Round negotiations resulted in an Agreement on Textiles and Clothing (ATC), which took over from the Multi-Fibre Agreement (MFA) in 1995. The ATC is a transitional instrument to gradually integrate the garment sector fully into normal GATT rules over a 10-year period. This means by January 2005 global trade in textiles and clothing is no longer under quota restrictions unless otherwise qualifying for safeguard measures provided in the agreement. The integration process was scheduled to be carried out in four stages. The first stage began on 1 January 1995 and required developed countries to integrate no less than 16 percent of total 1990 imports of all products covered by this agreement. Stage two began on 1 January 1998 and required no less than an additional 17 percent. At stage 3, on 1 January 2002, a further 18 percent was to be integrated. Finally, all remaining products were to be fully integrated and the agreement would end.

The integration had to cover products from four groupings: tops and yarns, fabrics, made-up textile products and clothing. The agreement also required liberalising the existing restrictions during the integration process by enlarging bilateral quotas. According to calculations based on actual formulae for import growth under quotas, the annual quota growth rate was 6.95 percent for stage 1, 8.7 percent for stage two and 11.05 percent for stage three. Another feature of ATC was that it allowed signatories to use special transitional safeguards to protect against damaging surges in imports during the transition period. The safeguard restrictions can be implemented either by mutual agreement or unilaterally and are subject to review by the Textiles Monitoring Body.



Source: World Trade Organization (WTO)

The MFA quota system caused an international fragmentation of production, especially in the clothing sector, by which companies from countries like Hong Kong, China, Taiwan and South Korea made significant investments in T&C in less developed countries that were well endowed with large pools of low-wage workers and which received preferential trade agreements. As a result, textiles and especially the clothing industry of LDCs, have developed very quickly and played a vital role in foreign exchange earnings and economic development. For example, the garment sectors of Cambodia and Bangladesh have emerged rapidly as major sources of foreign exchange and employment, as well as engines of growth.

The ATC ended on 31 December 2004, eliminating quotas on trade in textiles and clothing. The sector became fully integrated into the WTO General Agreement on Tariffs and Trade (GATT).

This means trade in global T&C will undergo fundamental changes. First, the total world T&C trade will increase, according to Xinshen Diao (2001), by 25 percent annually for the next 25 years. Of this, developing countries will take 60 percent and industrial countries 40 percent. Second, prices of T&C products will fall further due to elimination of quota rent paid to gain market access. The world price of textiles could decline by 2 percent, and the world price of clothing could decline 5–10 percent. The decline in prices will substantially benefit consumers and thus lead to an increase in overall welfare. Third, the quota-free trade regime tends to change sourcing patterns. In its report in September 2002 to the Congressional textile caucus, the US Department of Commerce estimated that major garment buyers will reduce the number of countries from which they buy to half of current levels by late 2005 or early 2006, and further reduce the number of countries from which they buy to a third or a quarter of the current level by 2010. Suppliers with higher levels of personal service, consistent quality, delivery lead times, production innovation, price competitiveness and reliability will prosper because they are able to meet buyers' demands in the global market. Finally, the removal of quotas will create winners and losers. The T&C trade regime post-MFA immediately benefits a small handful of developing countries that have a strong and diversified capacity to produce high-quality, high value-added products and that can secure diverse markets outside the US and EU (Appelbaun, 2004). China and India will gain a greater share, while Pakistan, Vietnam, South Korea, HK, Taiwan and some other countries with preferential access to US and EU markets are also likely to gain. Most of the rest of the developing countries and LDCs will experience significant declines in T&C exports. This will cause a number of factories to close, with a substantial loss of jobs, especially among women, and could disrupt social and economic development and poverty reduction in those countries.

3.3. The Garment Industry in Cambodia

3.3.1. Development of the Garment Industry

The Cambodian garment industry has developed very rapidly since the early 1990s and now dominates the country's manufacturing sector.³ The industry has also become the country's leading export earner and second largest employer, after agriculture. The garment sector has an estimated value added of \$500 million, or 12 percent of nominal GDP, and total exports of about \$2 billion. It currently has at least 206 factories that employ an estimated 230,000 workers and creates as many as an additional 150,000 indirectly associated jobs.

Table 3.1: Evolution of Cambodia's garment Industry

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
New Investment (US\$ millions)	30	46	97	123.6	66.5	37.2	19.5	36.5	25	-
Number of Factories	20	24	67	129	152	190	186	188	197	206
Total employment (thousands)	18.7	24	51.6	79.2	96.6	122.6	188.1	210.4	234	245.6
Garment Exports (US\$ millions)	26.2	106.4	223.9	355.3	653	965	1,119.8	1,338.4	1,581.5	1,987
Monthly Income for Cambodian workers (US\$ millions)	-	-	-	-	-	-	12.6	15.1	15.9	15.4

Source: U.S. Embassy in Cambodia, "Economic Significance of the Garment Sector in Cambodia"

³ The share of the garment sector in manufacturing in 2003 was 77 percent, rising from 26 percent in 1995 (Kang Chandararot, Dannel Liv, Brett Ballard & So Sovannarith, 2004).

The rapid development of Cambodia's garment sector can be explained by internal and external factors. Internal factors include political stability and economic liberalisation. In the early 1990s, Cambodia restored stability and peace, and its economy was liberalised and integrated through a wide range of economic reforms. This significant improvement in political and economic conditions makes it more conducive to private sector development, as well as foreign direct investment, especially in the garment sector. According to the Council for the Development of Cambodia (CDC), new investment in the garment sector during 1995–2003 amounted to \$481 million. The availability of a low-wage labour force was also a major driving force for rapid growth. The abundance of unskilled workers, especially women, was perhaps a major determinant for foreign investment.

Externally, the most significant determinant of growth in the garment sector is preferential access to foreign markets, especially in the United States and European Union. The US established normal trade relations with Cambodia in October 1996, and reached a three-year bilateral trade agreement on textiles and apparel in January 1999. The agreement, later extended until 31 December 2004, set an export quota for garments from Cambodia to the US in exchange for a commitment by Cambodia to improve working conditions consistent with international labour standards. Under the agreement, Cambodia was granted more favourable quota allocations than countries such as China, and hence garment exports to the US were subject to normal applied MFN tariff rates. As a result, Cambodia's garment exports to the US increased quickly, from \$1.6 million in 1996 to nearly \$2 billion in 2004. Furthermore, bilateral agreements on trade in textile products between the European Union and Cambodia in 1999, and the Everything but Arms programme were also opportunities for increasing Cambodian garment exports to the EU. Under the agreement, Cambodia has tariff-free and quota-free access to EU markets, provided that rules of origin are satisfied. Cambodia's garment exports to the EU reached \$407 million in 2003, increasing from \$25.7 million in 1996. Besides these two major markets, Cambodia has also been granted preferential access by other developed countries such as Canada, Australia, New Zealand and Norway, thus diversifying its garment export markets.

3.3.2. Main Features of the Garment Industry in Cambodia

The Cambodian garment industry is in a unique position (Ministry of Commerce, 2004). First, it has been the engine of growth and the backbone of the Cambodian economy since the mid-1990s.

Second, export performance is remarkable, growing at an annual average rate of 76 percent during 1995–2004. Garment exports are also unique in the sense that they are concentrated in two major markets, the US and EU. These two markets absorb 95 percent of all of Cambodia's garment exports, of which around 60 percent are woven, cut and sewn garments, a single transformation product type with minimal domestic value addition.

Third, the industry is almost 100 percent foreign owned, with headquarters mostly in east Asia, where all business, strategy, marketing/sales, materials procurement and financial decisions are made. Local management in Cambodia is responsible only for managing the manufacturing units on approved budgets, receiving production orders and pre-ordered materials and overseeing production quality and the shipment of completed orders.

Fourth, the sector is characterised by a lack of backward linkages. That is, the sector is almost 100 percent dependent on imported yarns, finished woven and circular knitted fabrics, all accessories and even almost all packaging and presentation materials. This causes the local content of garment production to be relatively low, below the requirements of the rules of origin under the Generalised System of Preferences (GSP). The total domestic value-added content in 2003 was about \$442 million, or 28.6 percent of total garment exports. Chea Huot and Sok Hach (2001) indicated that imported materials account for 63 percent of production costs.

Fifth, the industry is widely recognised as having low productivity. The labour productivity of the sector in Cambodia is as low as in Bangladesh and Pakistan, and lower than in China and Vietnam. The reasons include methods of training, culture/communication gaps between workers and supervisors and other management, low motivation of workers, a low level of technology, a lack of engineered workplaces and a high number of national and personal holidays.

Sixth, the industry faces a number of operational problems including the complexity of import-export procedures, corruption and bribery and the high cost of transport/logistics. All garment companies see corruption and bribery as a major problem that increases production costs. These additional payments are quite large, accounting for up to 7 percent of the total value of sales (Ministry of Commerce, 2004). Garment companies are also faced with bureaucratic red tape associated with importing raw materials and exporting the finished products, which often results in significant time wastage or unacceptable delays. The Ministry of Commerce (2004) indicates that garment companies pay between 200 percent and 1,400 percent in extra unofficial charges to obtain export documents and that the time taken for clearance is invariably longer than the official clearance time. Another serious problem facing garment companies is costly and poorly developed infrastructure. Having no deep-sea port, poor telecommunications, underdeveloped railways and roads and unreliable electric power are considered major obstacles to effective production and delivery of services.

Table 3.2: Cambodia's Garment Exports, 1995-2003 (in \$US millions)

	1995	1996	1997	1998	1999	2000	2001	2002	2003
US									
Quota					433.3	524.5	501.4	626.5	710.7
Non-quota					82.8	226.8	327.2	327.1	410.4
Total	0.5	1.6	109.9	291.8	516.1	751.3	828.6	953.5	1,121.1
Share of quota (%)					83.9%	69.8%	60.5%	65.7%	63.4%
US share of total (%)	1.8%	2%	48.4%	81.2%	78.2%	76.2%	71.7%	71.3%	69.8%
EU									
GSP							143	186.4	239
MFN							166.1	169.2	168.4
Total	25.7	74.8	112.4	63.1	136.7	220.8	309.1	355.7	407.4
Share of quota (%)							46.30%	52.40%	58.70%
EU share of total (%)	96%	93.2%	49.5%	17.6%	20.7%	22.4%	26.8%	26.6%	25.3%
Other markets	0.6	3.9	4.8	4.5	7.3	14.3	17.9	28.1	78.7
Total Garment Export	26.7	80.3	227.1	359.4	660.1	986.4	1,155.6	1,337.2	1,607.1
Garment Share of Export (%)	3.1%	11.2%	27.1%	45.2%	58.7%	70.8%	73.9%	76.8%	78.2%

Source: Ministry of Commerce, 2004.

3.4. Implications of the Removal of Garment Industry Quotas for Cambodia

Given that Cambodia's current and medium-term economic growth depends on the garment sector and that many people, in particular women and people from rural areas, rely on jobs created by this sector, the removal of the quota in 2005 may have huge implications for the overall economy and poverty reduction. Projections about the future of the garment sector after the end of quotas vary considerably. While some studies have made gloomy forecasts, the government and the GMAC foresee further growth in the industry if certain proposed reforms are implemented to cut costs and increase productivity.

- The IMF's (2004) preliminary estimate suggests that Cambodia is among the most vulnerable countries in Asia to the removal of the quota system and that Cambodia's GDP growth could decrease by about 2 percent in 2005. But this impact could be mitigated through such measures as the special temporary safeguard mechanism imposed by the US and EU on Chinese garment exports in particular, and changes in trade policy in developed countries, e.g., to relax the rules of origin in the GSP schemes and to continue the favourable treatment on garment exports provided by the US. However, recently the IMF predicted strong economic growth in Cambodia in 2005 because the end of the quota system will apparently have almost no impact on Cambodia this year. Cambodia's GDP will grow at 6 percent in 2005, rather than the 2.3 percent predicted late last year. Recent developments in global T&C markets have given Cambodia's garment industry some breathing space for stabilisation and improvement.
- The ADB estimates the impacts of MFA phase-out of garment quotas and the impact on gender and poverty by using a simple macroeconomic model of the Cambodian economy. The model sets two scenarios for analysis: (a) a baseline scenario which assumes the absence of any systematic policy to improve the garment industry and (b) a growth scenario which assumes that government and industry improve productivity, maintain and gain market access, reduce lead times and develop backward linkage, reduce transaction costs and address impediments to investment. In the baseline scenario, the projection indicates a decline in exports by \$110 million in 2007 and \$296 million in 2010, as well as a decline in employment of 32,000 jobs accompanied by a decline in payroll of around \$33 million in 2010. Overall, the decline in the garment industry will slow the economy by 1.5 percent in 2010. On the other hand, if the improvements are made, garment exports will increase to about \$2.6 billion and employment created by the sector will increase to 294,000 jobs in 2010. As to impacts on gender and poverty, the study suggests that a decline in jobs and incomes would translate directly into lower incomes for women and for poor rural households. The decline in labour costs by more than \$30 million in 2010 in the baseline scenario would translate into reductions in remittances of around \$15 million. The social impacts of increasing joblessness, especially among young women, pose concerns for those women being pushed into unsuitable or exploitative employment. On the other hand, if the growth scenario is achieved, it is estimated that around \$90 million of the increased wages bill of around \$175 million would be remitted to rural areas.

Table 3.3: Analysis of Scenarios: The Garment Industry

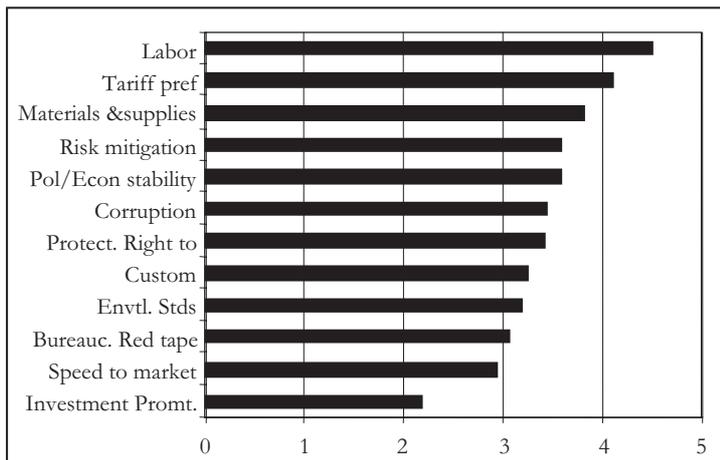
	Scenario	Actual			Changes		Growth-Baseline	
		2003	2007	2010	(2)-(1)	(3)-(1)	2007	2010
		(1)	(2)	(3)				
Macroeconomic Variables								
Nominal GDP (mn US\$)	Baseline	4,000	4,680	5,350	680	1,350	340	1,000
	Growth	4,000	5,020	6,350	1,020	2,350		
Real GDP Growth (%)	Baseline	5%	4%	3.5%	-1%	-1.5%	1%	1.5%
	Growth	5%	5%	5%	0%	0%		
Gov't Income (mn US\$)	Baseline	430	540	610	110	180	50	174
	Growth	430	590	784	160	354		
Total Employment ('000)	Baseline	5,480	5,686	5,787	206	307	101	252
	Growth	5,480	5,787	6,039	307	559		
Garment Industry Variables								
Exports (mn US\$)	Baseline	1,608	1,497	1,312	-110	-296	618	2010
	Growth	1,608	2,115	2,599	508	991		
Value Added (mn US\$)	Baseline	482	449	394	-33	-89	185	386
	Growth	482	635	780	152	297		
Labor Costs (mn US\$)	Baseline	235	224	202	-11	-33	87	175
	Growth	235	311	377	77	142		
Employment ('000)	Baseline	230	219	198	-11	-32	45	96
	Growth	230	265	294	35	64		

Source: ADB TA Project Team's Estimate from macroeconomic model

- The government anticipated that around 30 percent of Cambodia's exports might be at risk due to competition from China and other countries. Significant short-term decline was predicted for 2005, with up to one-third of firms closing, larger firms taking some of the lost market share and some factories relocating overseas.
- The GMAC took the view that there will be no significant job losses. While some smaller factories may close, up to 10 larger factories are likely to expand, absorbing the displaced workers. The short-term future of Cambodia's garment industry would be stable, provided that temporary safeguard measures are imposed on Chinese garment exports, the US continues to provide favorable market access and government reform programmes and productivity improvement interventions are successful.
- The UNDP suggests that Cambodia will be very vulnerable to international competition in the aftermath of WTO accession, with factories likely to relocate to China once access restrictions on Chinese clothing exports are lifted in 2008
- A survey⁴ conducted by the Foreign Investment Advisory Services (FIAS) to determine current buyers' sourcing plans post-2004 found that no company in Europe or the US planned to decrease its buying from Cambodia. Most European companies (83 percent) planned to increase their buying from Cambodia, while US companies tended to wait to see the post-quota world before making changes. This positive stance of buyers derived from the fact that Cambodia can best respond to important country-specific factors that influence buyers' sourcing decisions. Those factors include labour standards and practices, tariff preferences, such as the GSP or free trade agreements, and political and economic stability.

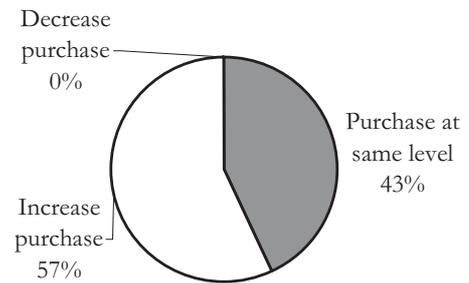
⁴ The survey was co-financed by the French Development Agency as part of a project for the promotion of the garment sector's exports. The objectives of this study were to assist the Ministry of Commerce and the garment industry to move away from current dependence on a quota-focused strategy towards a more market-led and sustainable strategy, to explore options for improved Corporate Social Responsibilities (CSR) sustainability in the garment sector and to explore implications for other industry sectors under consideration in the government's private sector growth strategy.

Figure 3.2: Importance of country-specific factors influence buyers' sourcing decision



Source: FIAS

Post-2004 Buying Plan in Cambodia



3.5. Current Intervention Measures

A number of strategic responses and initiatives are currently in place with the aim of strengthening the competitiveness of Cambodia's garment sector post-2005. The government, international and bilateral development agencies, the GMAC, garment factories and NGOs have undertaken, either jointly or separately, measures to address major obstacles or problems facing the garment sector. These objectives range from improving the business climate, trade facilitation and securing employment and labour conditions to strengthening labour skills and productivity and protecting the interests of women. The combination of responses is necessary to keep the industry competitive. Below are current interventions and initiatives introduced in the garment sector before the MFA phase-out:

- The government, with consultation and advice from the World Bank and Asian Development Bank, adopted a 12-point plan to improve the investment climate and facilitate trade (World Bank Group, 2004). The plan is focused on facilitating business operations, reducing costs and improving productivity, which could immediately improve the competitiveness of the garment sector.
- The Asian Development Bank, in partnership with the Ministry of Commerce and the Ministry of Women's Affairs, funded technical assistance to the government for poverty reduction and empowering female garment workers affected by the changing international trade environment. The overall objective of the assistance was to help Cambodia achieve sustainable poverty reduction and gender development through addressing promptly the risks caused by the phasing out of the quota restrictions on textiles and clothing. It produced three major outputs: (1) a comprehensive situation analysis of the garment industry and workers in the sector, identifying likely scenarios and options, (2) introduction of pilot schemes to build formal and informal safety nets and establish links with alternative employment opportunities for the workers, and to develop and test effective short-term social protection measures for those retrenched, (3) strengthened capacity of concerned government, private sector and civil society organisations to address risks caused by the end of MFA quotas.

Twelve Point Plan: Government Commitments to Improve the Investment Climate and Facilitate Trade

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

Source: Ministry of Commerce, 2004

- The International Labour Organisation (ILO), in addition to monitoring working conditions in garment factories to assess compliance with labour standards, is carrying out a pilot project in 14 factories to improve industrial practice, working conditions, occupational health and safety and the systems for achieving compliance. The ILO is also carrying out a “Better Factories Cambodia” project co-funded by the US Department of Labor, the Agence Francaise du Development, the government and GMAC. This programme is designed to help industry improve working conditions, while at the same time improving product quality and productivity.
- The US Agency for International Development (USAID) carried out an assessment of skills needs of current garment workers and of training provisions, to develop strategies to upgrade skills. USAID also funded a study on measuring competitiveness and labour productivity in Cambodia's garment industry in an attempt to identify strategies for improving the competitiveness of the garment industry while maintaining its strong record on labour standards.
- The French government has recently developed several project proposals. These include: (1) support to develop the capacity for fashion design within Cambodia, (2) support to develop labelling of Cambodian products and (3) support for extending the ILO garment sector

project's remediation program and for the development of a management information system to add value to the monitoring system.

- The FIAS conducts research on the global market premium of corporate social responsibility that is embodied in “made in Cambodia” labels. The objective is to assist the Ministry of Commerce and the industry to move away from a quota-focused strategy towards a more market-led and sustainable strategy by seeking views of buyers in the US and EU on labour compliance and corporate social responsibility.
- The Ministry of Women's Affairs has focussed on preventing female garment workers from slipping into poverty in its five year plan. The ministry has received support from the ADB to implement a technical assistance pilot project on garment employee development in cooperation with Ministry of Commerce and Ministry of Labour. The objectives are to assist the Cambodian garment industry in attaining a niche international market position by achieving higher labour productivity, and to improve the personal situation of garment industry employees. The pilot has four components: (1) skill development programmes to improve the productivity of employees, (2) empowering employees to ensure social security and skill development for alternative employment in non-garment industries, (3) improvement of human resource conditions of employees; and (4) improving management knowledge.
- Eight organisations—the Ministry of Commerce, the Cambodian Chamber of Commerce, the GMAC and five Japanese organisations (JETRO, Marubeni, JUKI, JODC and AOTS)—have been providing support to the Cambodia Garment Training Centre (CGTC) to train garment workers and supervisors; its main course is for the latter. It also provides courses on labour law and workers' rights and skill development at entry level. CGTC is the only formal training institute that develops necessary skills for garment workers.

3.6. Case Studies on King First Industrial Co., Ltd. and the GMAC

Strategic Responses of King First Industrial Co., Ltd. to the MFA Phase-Out

King First Industrial Co., Ltd. was established in 2000 by a Taiwanese investor located in Sangkat Tuol Sangkae, Khan Russey Keo, Phnom Penh. The factory currently employs 1,236 workers and produces product categories No. 4 (T-shirts, knits), 5 (jerseys, jumpers, pullovers, sweaters), 6 (woven trousers, shorts), 8 (woven shirts), 21 (woven parkas etc.), 28 (knitted trousers), 68 (baby-wear), 73 (tracksuits) for the EU market and 342 (skirts), 651 (nightwear and pyjamas) for the US market. The major buyer of King First is Reebok from the USA, which accounts for around 70 percent of its total sales. The rest are Wal-Mart, AME and PVH.

King First, like most garment factories in Cambodia, is facing several operational and structural problems, including red tape in imports and exports, corruption and unofficial payments, high transportation costs and low labour productivity. This makes production costs high and the industry less competitive than Vietnam and China. The phase-out of the ATC will bring about fundamental changes in the global T&C industry and Cambodia's garment industry. King First will no longer have a quota allocation in the US market. This will have an adverse effect on its production and future. Reebok withdrew orders in early 2005, making King First's production decline sharply. The factory is currently producing for small buyers but hasn't received any major orders.

King First Industrial has responded promptly, aiming to sustain its business in Cambodia by seeking new international buyers and national partners. Headquarters in Taiwan is responsible for finding international buyers and has recently received orders from a few, including PVH. However, the volumes and prices of orders are relatively low compared to orders from Reebok. King First is also looking for local partners, especially larger garment factories, from which to subcontract. In the current circumstances, the possibility of this kind of production seems very low. The factory has no exact plans or strategies in response to the end of quotas except to wait and see how Cambodia will be treated by developed countries and to what extent Cambodia can benefit from any responses by major countries, such as the US and EU, to the threat of Chinese garment exports. The future of King First is uncertain and depends very much on external factors, such as changes in trade policies of developed countries, especially the imposition of safeguard measures and continuation of duty-free access, and the effectiveness of government responses to major problems facing the garment industry.

Source: Interview with the general manager of King First Industrial Co., Ltd.

Strategic Responses of the GMAC to the MFA Phase-Out

GMAC has undertaken a wide range of measures in response to the elimination of quotas, some before the end of quotas and others more recently:

- **Response to government:** The most urgent measure for the GMAC is to engage the government in negotiations and discussions to address several major operational and structural obstacles for garment companies. The GMAC has strongly recommended that the government reduce bureaucracy in import-export procedures through a trade facilitation programme and by fighting corruption, which costs up to 7 percent of the value of total sales. The GMAC is also encouraging the government to amend certain laws and regulations so that garment exports can become more responsive and competitive. An increase in labour productivity and competitiveness depends greatly on how well the government can tackle major problems and the effectiveness of government reform programmes.
- **Response to buyers:** The GMAC has been dealing more actively with buyers from the US, EU and other countries, such as Canada and Japan, by trying to understand buyers' needs and to explain to buyers more about what garment factories have been doing in Cambodia. Most factories have attained good practices in labour standards, health and safety and respect for union rights, which are recognised by certain international organisations and international buyers. The GMAC uses these strengths to influence buyers' sourcing decisions. It hopes the Cambodian garment sector will be able to attain a niche market among buyers who value such social responsibility.
- **Response to US:** The GMAC and the Ministry of Commerce have initiated a lobbying campaign in the US in order that US policy makers continue to provide favourable market access to Cambodian garment exports.
- **Response to donors:** GMAC is also working hard to seek financial assistance for its training centre, which is aimed at upgrading the skills of garment workers. Recently, the centre

received financial support from the Asian Development Bank through its comprehensive garment employee development pilot project to develop capacity and skills, both training at the entry level and upgrading skills i.e. new product development/modernization. Through this skill development programme, a higher level of productivity is expected. GMAC has also persuaded USAID, which has just completed its study on measuring competitiveness and labour productivity in Cambodia's garment industry, to provide financial assistance for the training centre when the ADB support ends.

Source: Interview with the general manager of GMAC

3.7. Conclusion

The changing trading system in textiles and clothing as a result of the end of quotas has brought about dramatic shifts in the global textiles and clothing industry's structure of trade, prices, welfare and sourcing. The countries that have a strong and diversified capacity to produce high-quality, high value-added products i.e. China and India, are likely to win, whereas countries, especially LDCs that rely on preferential market access for their garment sector and quota allocations from US, are likely to lose.

The Cambodian garment sector has developed rapidly during its short history, becoming a major manufacturing activity and source of employment and foreign exchange earnings, as well as an engine of economic growth. It will be more or less affected by many global developments in the garment industry. The health and prospects of the garment sector significantly depend on three factors: (1) improvement in productivity and competitiveness by the industry itself, (2) the effectiveness of government responses in addressing widespread problems and obstacles, as well as the success of government reform programmes and (3) changes in trade policies of developed countries i.e. imposition of temporary safeguard measures on Chinese garment exports, the provision of duty-free access and the relaxation of rules of origin in certain GSP schemes.

Given current global developments, including the imposition of safeguard measures by the US and EU on garment imports from China, and given the relaxation of rules of origin in the Canadian GSP scheme and the EU's consideration of doing the same in its GSP, as well as notable progress in reforms, the near future of Cambodia's garment sector looks secure. However, its prospects after 2008 are uncertain. The additional breathing space that the industry has been given should motivate the government into putting all necessary reforms on a fast track to improve competitiveness, if this vital sector is to achieve sustainability in the medium term.

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Linking Tourism to Poverty Reduction: A Siem Reap Case Study

C H A P T E R (4)



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Linking Tourism to Poverty Reduction: A Siem Reap Case Study ¹

C H A P T E R (4)

4.1. Introduction

The travel and tourism industry has emerged as one of the most vibrant sectors of the Cambodian economy. The hotel and restaurant sector grew by an average of 14.7 percent per annum between 2000 and 2004, and is expected to grow by 15.0 percent in 2005.² In terms of direct industry impacts, the hotel and restaurant sector's share of GDP grew by an average of 4.3 percent per annum between 2000 and 2004, and is expected to reach 5.2 percent in 2005.³ Overall, the tourism sector was expected to generate \$640.3 million of both direct and indirect economic activity in 2004, representing approximately 10.5 percent of GDP. The total demand for goods and services from travel and tourism is projected to grow by 6.8 percent per annum between 2005 and 2014.⁴

This growth is fuelled by a rapid increase in international and domestic travel and tourism. Since 2000, international arrivals have increased by 127 percent, from around 466,000 to over a million in 2004. Domestic travel is increasing even more rapidly, as the number of Cambodian visitors to all parts of the country has increased by more than 200 percent since 2002. Based on 2004 figures, international arrivals are forecast to double by 2007 and triple by 2010. Assuming current levels of economic growth and increasing incomes among a newly emerging class of more affluent Cambodians, the trend in domestic travel is also likely to increase in a similar fashion.⁵

Such projections represent optimistic forecasts in terms of direct and indirect economic impacts, but do not provide specific information concerning potential impacts on poverty reduction in rural and urban areas. One reason for this is that the numbers of tourist arrivals or hotel rooms, for example, are not necessarily reliable indicators of tourism impacts on poverty reduction. Little is known about the actual distribution of benefits at the local level. Over time one should expect to see poverty rates decline in villages around tourist destinations, provided domestic linkages with the agricultural sector, SMEs and labour-intensive services are well developed. The absence of an observable decline in poverty rates would suggest that such linkages are weak or that there are leakages that direct benefits away from the poor. The question then is, What should be done to strengthen domestic linkages with the rural-agricultural sector?

Using Siem Reap as a case study, this article considers the employment and agricultural linkages between the tourism industry and local communities, and makes several recommendations for

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² This figure includes negative growth of 10.3 percent in 2003 due to SARS and other factors. The projection for 2005 is from CDRI.

³ National Institute of Statistics for 2000–2004; CDRI projection for 2005.

⁴ These estimates are derived from the Travel and Tourism Satellite Accounting System by the World Travel and Tourism Council.

⁵ These projections also assume the absence of significant shocks similar to those that earlier disrupted international and regional travel, such as the SARS outbreak in 2003. For example, any outbreaks of avian flu or acts of terrorism in the region could adversely affect travel and tourism in Cambodia.

strengthening such linkages through policy and research. Siem Reap was chosen for study because it has one of the highest poverty rates in Cambodia, while attracting by far the largest number of the country's international tourists, as well as a growing number of domestic tourists. Observations drawn from the Siem Reap case can also inform development planning in other locations in Cambodia (e.g., Sihanoukville, Kampot/Kep and Ratanakiri) where tourism is likely to affect significant numbers of local people in the near future.

The article is structured as follows. Section 2 looks at the international literature that links tourism impacts with pro-poor growth and poverty reduction strategies. Section 3 briefly discusses the case study approach used in Siem Reap. Section 4 provides an overview of the tourism industry in Siem Reap in the context of recent poverty and employment data for the province. Sections 5 and 6 then discuss six village cases, focusing on employment and agricultural linkages. Section 7 identifies several policy and research recommendations that emerge from the study. Section 8 concludes with a summary of the more salient points.

4.2. Literature and Methodology

There is a variety of perspectives in the literature concerning the relationship of tourism and local communities, as well as the impact that tourism can have on development and poverty reduction. Sustainable tourism (World Tourism Organisation, 2002) refers to managing tourism resources in ways that maintain cultural, ecological and social integrity of the local area. Eco-tourism (Weaver, 2002) is of course primarily concerned with local cultures and the environment, while community-based tourism aims to increase local people's involvement (e.g., planning, decision-making) in tourism. Another approach concerns fair, just and equitable tourism that generally targets change among consumers and companies in the more developed countries of the North. Pro-poor tourism embraces many aspects of all these approaches, but is primarily concerned with tourism that generates net benefits for the poor, including economic, social, environmental or cultural benefits (Ashley et al., 2001). Examples of pro-poor tourism (PPT) span the globe, including Namibia (Ashley, 2000), South Africa (Spenceley and Sheif, 2003) and other locations in Asia (Shah and Gupta, 2000). Regardless of the type of tourism, there is a general consensus in the recent literature that tourism can and should play a significant role in pro-poor economic growth and poverty reduction efforts in developing countries.

One important question concerns how to measure and analyse the distribution of tourism impacts at the national and local level. Quantitative accounting approaches are used to assess tourism's contribution to the macro-economy in terms of total demand for services, GDP, employment and investments. A good example of such an approach is the Travel and Tourism Satellite Accounting (TTSA) system used by the World Travel and Tourism Council (WTTC) to estimate short and long-term impacts in various countries. Using input/output modelling for consumption and demand, the TTSA estimates direct industry and indirect economy-wide impacts on GDP and employment.⁶ In Cambodia, for example, the WTTC estimates that the direct impacts in the tourism industry will generate about 206,400 jobs in 2004, representing 3.0 percent of total employment. In general, direct and indirect impacts were expected to account for about 566,400 jobs, representing 8.3 percent of total employment.

⁶ Such models must make certain assumptions based on estimates of expected arrivals over time, taking into account recent trends. Such models cannot take into account unexpected shocks or other such disruptions.

Other methods are more appropriate for quantitative and qualitative assessments of tourism impacts at the local level. One approach is to examine people's participation in the formal and informal sectors, as well as so-called secondary enterprises with linkages to tourism (e.g., food supply). Shah and Gupta (2000), for example, divide the formal sector into accommodation, transport and employment in direct services. They divide the informal sector into vending and other tourism-related activities, including casual and self-employed labour. Their treatment of linkages with the local economy also includes agricultural and handicraft production. In terms of actual measurements, such approaches can employ (1) systematic structured household surveys to identify changes in employment and income over time, as well as the distribution of benefits, and/or (2) qualitative techniques using focus group discussions and key informant interviews to gauge changes over time. Such approaches can also be used to assess both negative and positive socio-cultural impacts of tourism at the local level.

In terms of the distribution of benefits, Ashley et al. (2001) observe, "... the tourism industry is controlled by well-established operators that often benefit from economies of scale and regulations and incentives that favour large operators". They argue that vertical linkages between hotels, tour operators and airlines can limit local opportunities for entry into the tourism sector. Such linkages often account for so-called "leakages" in terms of the amount spent on importing goods and services to meet the needs of tourists. Such leakages occur when the local economy is unable to provide a reliable, continuous and competitively priced product or service of a consistent quality to meet market demand. When local economic linkages are weak, revenue from tourism in a particular area often leaks out. PPT approaches try to promote economic linkages between tourism and local economies while minimising leakages (World Tourism Organisation, 2002).

Many studies emphasise that collaboration between government, private sector and non-governmental (NGO) participants is required in order to direct tourism benefits toward the poor in a particular locale. For example, in their review of six country case studies, Ashley et al. (2001) observed a variety of actors in PPT strategies, including national and provincial government agencies, large and small commercial companies and domestic and international organisations. In addition to national and provincial governments, other researchers have identified the crucial role that local government can play in directing a greater share of tourism benefits to the poor (Vourc'h and Denman, 2003).

4.3. Methodology

This study employs a PPT approach to assess tourism impacts at the local level by focusing on the employment and agricultural linkages between the tourism industry and local communities in and around Siem Reap town. Qualitative data were gathered from eight villages⁷ located near Siem Reap town (see Table 4.1 below) using focal group discussions and key informant interviews. Several village sites were identified in the course of a participatory poverty assessment in the Tonle Sap region conducted by CDRI,⁸ while other villages were identified as supply sources based on references by vegetable and handicraft vendors in Siem Reap. Additional key informants were also interviewed in Siem Reap town, including vegetable and meat vendors, as well as several hotel and restaurant managers.

⁷ Only six cases will be presented due to space limitations.

⁸ CDRI is conducting the assessment in conjunction with the Asian Development Bank.

The study was constrained in terms of time and resources available. For this reason, one of the research recommendations concerns the need for a more comprehensive and systematic “baseline linkages survey” involving a larger sample of villages and households around Siem Reap town. Another limitation of this study concerns the fact that the social and environmental costs associated with tourism in Siem Reap are not included. A more complete accounting of tourism impacts on local communities in and around Siem Reap, as well as other destinations, would need to include the costs, and their distribution, of adverse affects associated with tourism, including increases in crime, prostitution and HIV/AIDs and water pollution and other impacts on the environment.

Table 4.1: Survey Villages

Village	Commune	District	Kms/Direction from Siem Reap	Households	Commune Poverty Rate	Linkage
Kok Thlok	Kandaek	Pr. Bakong	8 - East	245	0.74	Agriculture
Sret	Kangchrang	Pr. Bakong	30 - East	140	0.80	Labour
Kok Snuol	Knaat	Puok	15 - West	176	0.70	Agriculture
Kok Trach	Knaat	Puok	16 - West	149	0.70	Labour/ Handicrafts
Snau	Lvea	Puok	18 - West	139	0.66	Handicrafts
Trameng	Khnaat	Puok	25- Northwest	83	0.70	Agriculture
Rohal	NokorThom	Siem Reap	15 - North	218	0.70	Handicrafts
BosKralanh	Chreav	Siem Reap	6 - Southeast	182	0.35	Agriculture

Source: Ministry of Planning and WFP (October 2002)

4.4. Poverty and Tourism in Siem Reap

Siem Reap province currently has the seventh largest population in Cambodia. The population was estimated at 734,000 in 1998 and 841,000 in 2004, an increase of 14.6 percent. Siem Reap’s recent annual population growth rate of 2.3 percent is higher than the national growth rate of 1.85 percent. Migration from other parts of the country is one of the key factors of Siem Reap’s growth rate (JICA, 2005a). There is general agreement that much of this migration is associated with the rapidly expanding tourism industry in Siem Reap town. For example, Siem Reap district has recorded the largest increase in population in the province, from 117,500 in 2001 to 126,600. Most of the increase has come from the “temporary population” made up of migrants seeking employment opportunities (JICA, 2005a).

Table 2 suggests that the significant population growth in Siem Reap has been accompanied by a significant shift in employment patterns. The fact that such shifts can be observed in Siem Reap district and two adjacent districts along National Route 6, Puok to the west and Prasat Bakong to the east, further suggests that much of this change may be attributed to the growth in the tourism sector between 1998 and 2004. According to the 1998 NIS population census, 89.5 percent of working people were employed in the primary sector (agriculture), while 1.5 and 9.0 percent were employed in the secondary (manufacturing) and tertiary (services) sectors respectively. According to the Cambodia Socio-Economic Survey (CSES) of 2004, the percentage of people employed in the primary sector has now declined to 76.4 percent, while the percentage of people employed in the secondary and tertiary sectors has increased to 10.4 and 13.2 percent respectively. The direction of the shifts in Puok is similar to those observed in both Siem Reap and Prasat Bakong

districts, although in Siem Reap district the distribution of employment is much more heavily weighted to the secondary and tertiary sectors, as would be expected.

Table 4.2: Employment in Siem Reap

District	Employment by Sector in 1998 *				Employment by Sector in 2004 **			
	Primary	Secondary	Tertiary	Total	Primary	Secondary	Tertiary	Total
Angkor Chum	96.4	0.3	3.3	100	70.6	6.2	23.2	100
Angkor Thom	89.9	0.9	9.2	100	47.0	45.2	7.8	100
Banteay Srei	77.3	0.5	22.2	100	85.1	8.6	6.2	100
Chi Kraeng	93.5	0.9	5.6	100	76.6	11.5	11.9	100
Kralanh	87.9	2.2	9.9	100	89.0	7.7	3.3	100
Puok	89.5	1.5	9.0	100	76.4	10.4	13.2	100
Prasat Bakong	91.2	1.3	7.5	100	81.9	8.6	9.5	100
Siem Reap	38.1	10.2	51.7	100	24.5	18.7	56.8	100
Sou Nikom	87.7	2.0	10.3	100	51.7	25.0	23.3	100
Srei Snam	96.9	0.0	3.1	100	95.5	3.9	0.6	100
Svay Leu	82.6	2.3	15.1	100	-	-	-	-
Varin	77.9	0.0	22.1	100	96.2	1.1	2.6	100
Total	69.2	4.7	26.1	100	53.2	16.2	30.5	100

Source: * NIS 1998 Population Census; ** 2004 CSES

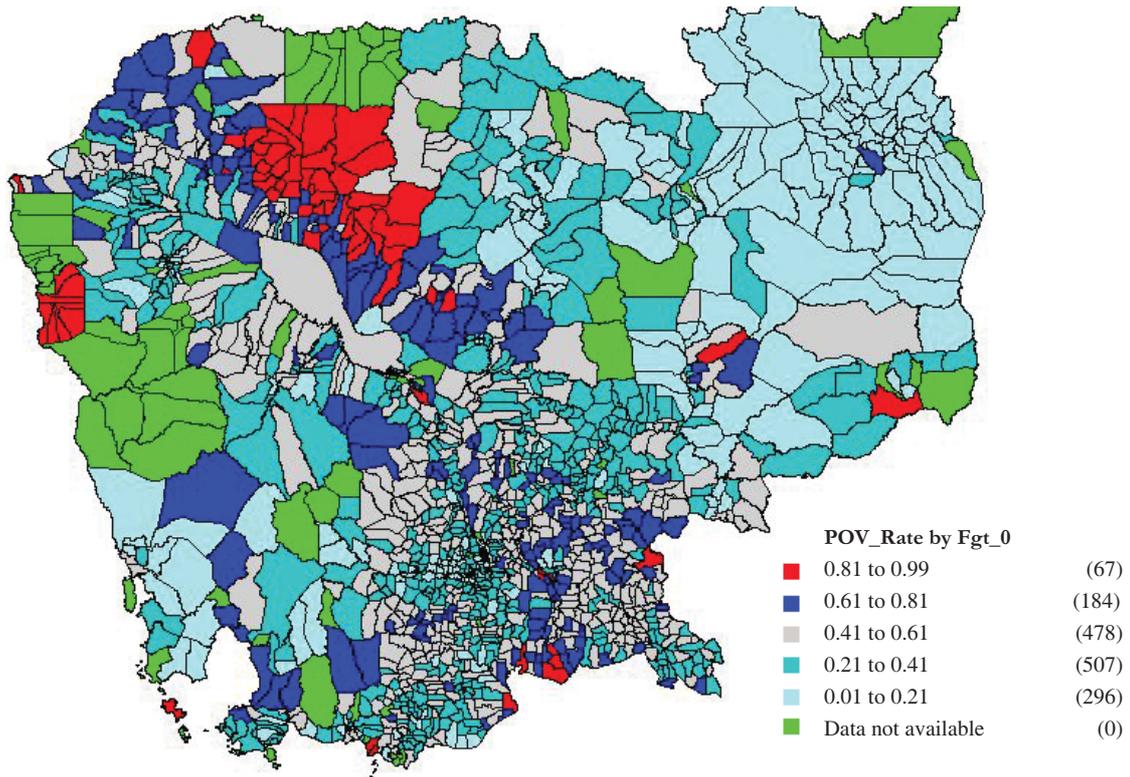
With a poverty headcount index of 51.8, Siem Reap has one of the highest incidences of poverty in the country, following Kompong Speu (57.2) and Kompong Thom (52.4). As one of the poorest provinces, Siem Reap receives the second largest per capita amount of donor disbursements, after Phnom Penh. In 2004, Siem Reap received \$0.042 per capita, following Phnom Penh at \$0.084 per capita.⁹ The most extensive poverty tends to occur in the more remote areas, where subsistence agricultural production is the primary source of employment. Generally speaking, the incidence of poverty tends to decrease with closer proximity to towns and urban centres, especially those located along National Route 6, where the shifts from the primary to the secondary and tertiary sectors are most evident (see maps below). While there can be little doubt that the tourism industry has had a dramatic impact on the distribution of employment in Siem Reap, the actual degree to which these employment pattern shifts have had an impact on poverty reduction is difficult to determine without more reliable and extensive household survey data.

Tourism Industry¹⁰ Of the total visitor arrivals in Cambodia in 2004, 53.2 percent were to the Siem Reap Angkor complex, while the other 46.8 percent were to Phnom Penh and other locations. The number of arrivals at Siem Reap international airport was 309,373, an astounding 66.06 percent increase over the year before, and a 52.6 percent increase over 2002. This upsurge of international arrivals by air is due in large part to the government's open sky policy. There are currently about 135 direct flights per week from Thailand, Vietnam, Laos, Singapore, China and Japan.

⁹ Royal Government of Cambodia, 2004. Development Cooperation Report 2002 and 2003: Main Report. CDC, October 2004.

¹⁰ Unless otherwise referenced, the source for the statistical information in this section is the Ministry of Tourism's Annual Report of Tourism Statistics for 2004.

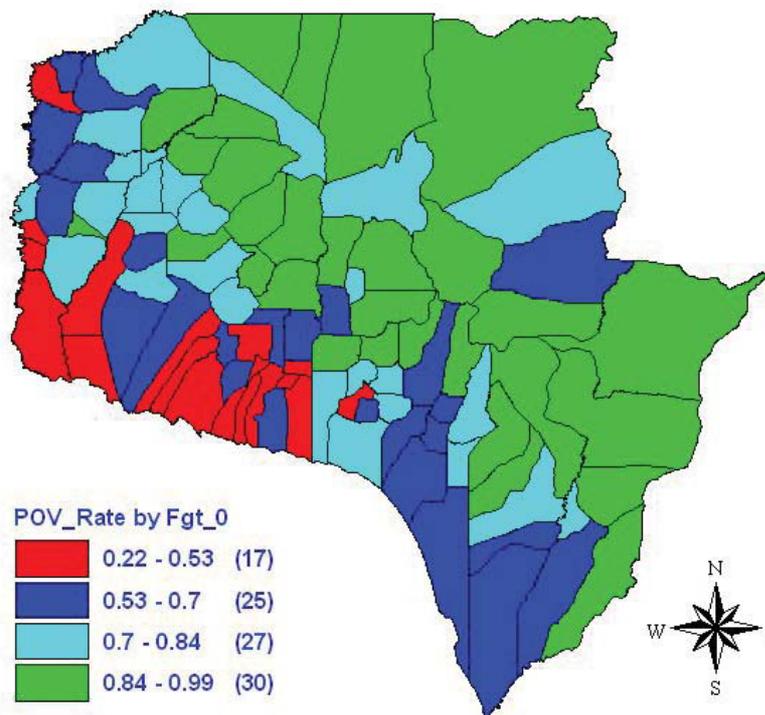
Poverty Rate (Head Count Index) by Commune



Data Source: Ministry of Planning and WFP (October 2002)

Mapped by LENG Vanna / CDRI

Poverty Rate (Head Count Index) by Commune (Siem Reap Province)



Data Source: Ministry of Planning and WFP (October 2002)

Mapped by LENG Vanna / CDRI

The recent increase of Cambodian domestic visitors is even more dramatic than that of foreign visitors. The number of domestic visitors increased from 109,186 in 2003 to 297,348 in 2004, an increase of 172.3 percent. This increase was largely facilitated by improvements in the condition of Route 6, which decreased travel time by road between Phnom Penh and Siem Reap to about five hours. While the number of arrivals by air and boat changed somewhat, overland arrivals of both international and domestic visitors has increased dramatically.

Services in Siem Reap have continued to expand to keep pace with recent and expected increases in international and domestic travellers. For example, the number of hotels has more than doubled from 35 in 2000 to 80 in 2004, while the number of hotel rooms has nearly tripled, from 1,785 to 5,657, over the same period. The number of guesthouses has also more than doubled, from 70 in 2000 to 153 in 2004, while the number of guesthouse rooms has almost tripled, from 710 to 1,965, over the same period. It appears that new construction tends toward larger buildings with more rooms.

This level of expansion suggests that employment opportunities in the formal and informal sectors are increasing. For example, 3,482 staff are employed in 68 hotels, 1,075 staff in 153 guesthouses, and 949 staff in 76 restaurants. Newly created employment opportunities in the tourism sector seem to be filled primarily by workers from Siem Reap province. A small sample survey of 371 hotel and guesthouse workers under the age of 25 conducted by the International Labour Organisation in 2004 suggests that as many as 71 percent are from Siem Reap province. The survey shows that as many as 88 percent have lower secondary or higher education. A JICA report (March 2005) observes that some hotels and guesthouses may be using education as a criterion for hiring employees. However, this may concern only certain employees, such as receptionists, waitresses or others who directly or indirectly interact with tourist clients. Work experience and jobs skills, rather than education, may be more relevant criteria for other jobs, such as those in the construction sector.

In 2004, there were 76 restaurants formally registered and licensed by the Ministry of Tourism, with 4,784 seats. This figure includes seven restaurants with 100 or more seats. There are, of course, many more restaurants in the Siem Reap area that are not similarly registered and licensed. Although there are no figures for food stalls and vendors in and around Siem Reap town or in Angkor Park, such outlets in the informal sector must also require a considerable amount of food supplies and other products for both tourists and those employed in the tourism industry.

Other employment opportunities include trained tour agencies and guides, as well as various retail outlets for handicraft production. The number of tour agencies in Siem Reap in 2003 was 110, including 42 head offices and 68 branch offices, accounting for 39.5 per cent of tour agencies in Cambodia. There were 118 in 2004. Sixty-nine percent of the agencies are Cambodian-owned. Since 1994, the Ministry of Tourism has provided nine three-month training courses for regional tour guides. There are 1,974 trained guides in the Siem Reap region. There have also been three retraining courses for 523 participants offered by the Ministry of Tourism. The Apsara Authority¹¹ has also provided five retraining courses for 319 trained guides. As for retail handicraft outlets, there were 181 registered souvenir shops under the control of the Department of Culture and Fine Arts of Siem Reap province.

¹¹ Authority for the Protection and Management of Angkor and Region of Siem Reap.

4.5. Labour and Employment Linkages

This section presents three case summaries concerning labour and employment linkages, including handicrafts.¹² The information clearly suggests that one of the most significant impacts on the local economy concerns employment in direct (e.g., hotels, restaurants, tour guides) and indirect (e.g., construction) services.

Kork Trach, in Khnat commune of Puok district, is a good example of how the employment profiles of nearby communities have been affected by the recent growth in tourism in Siem Reap. Kork Trach is located 16 km west of Siem Reap town, just off Route 6. Five years ago, only five people from this village were employed in the construction sector in Siem Reap; approximately 50 people are now employed, including 20 women. Ten persons are from medium-income households, while at least 25 are from poor and destitute households. The daily wage for unskilled labour (e.g., digging, carrying bricks and sand) ranges from 4,000 to 5,000 riels for men and women. Skilled labour, such as masonry or carpentry, receives 10,000–12,000 riels per day. However, certain types of construction work (e.g., hospitals) may pay as much \$5 per day for foremen and \$4 for wage labour.

In addition to the 50 construction workers, 10 people from Kork Trach work as gardeners at various hotels in Siem Reap. These people are all from poor households. They receive \$60 per month, as well as Khmer New Year bonuses. Five years ago no one from the village had such jobs. Another 16 people work for a nearby nursery that supplies flowers and trees to hotels and restaurants. Female workers receive 4,000–4,500 riels per day, while male workers are paid 5,000 riels per day for work that is considered more demanding physically.

Sret village is located in Kantreang commune in Prasat Bakong, about 30 km east of Siem Reap, and 4 km off Route 6. Villagers estimate that 70 percent of the households have between one and five members working in construction in Siem Reap, making a total of about 100 people. Most households were farming until about three years ago, when agricultural production began to decline due to a lack of water and insufficient resources with which to obtain pesticides and other inputs. Focal group participants explained that many of the poor families switched to labour more quickly than medium-income or well-off families because of a lack of capital for farming inputs. Of those who continue to produce vegetables, poor families generally do so for home consumption, while medium income and rich families can produce enough for sale. People predicted there would be fewer people growing vegetables in the future because prices are low. The decline in vegetable production has coincided with the construction boom in the city, as a result of which many people are abandoning farming in favour of wage labour. Men generally dig and build foundations for buildings and receive 6,000 riels per day, while women usually carry bricks and other building materials and get 5,000 riels per day. The Sret focal group participants observed that the villagers who have family members working in construction tend to have better living conditions.

¹² Field workers also visited Snau village, but this case is not presented due to space limitations.

4.5.1. Handicraft Production

Handicraft production and marketing are an increasingly important component of labour and employment in the tourism sector. For purposes of this discussion, we can divide handicrafts into two general categories. Capital production refers to handicraft activities that are essentially financed by outside agents, either NGO projects or private investors. In such cases, investors hire and train a labour force to produce and/or market products specifically designed or tailored for the tourist markets. Local artisans (e.g., carvers, weavers) are also sometimes incorporated into capital production. The products are often directed at the high-end tourist markets and tend to be branded by a specific company or organisation. The company or organisation often has specialised agents who manage marketing. They often have one or more retail outlets, depending on size, sometimes located close to the place of production.

A good example of capital handicraft production is a silk-weaving project in **Kork Trach**. Two years ago, an organisation recruited and trained five villagers, including four women, for the project. They initially received a wage of \$40–80 per month. Since then, the organisation has hired about 15 more women for a two-month training course. Their wages are calculated according to actual production, and range from \$35 to \$90 per month.

There is some indication, at least in some cases, that capital handicraft production may benefit people from the higher income households. For example, four women from rich families in nearby Trameng village in Khnat commune got jobs at the weaving workshop in Kork Trach. Villagers suggest this is because the company required a certain level of education. The conclusion one should draw is that educational opportunities must be extended to a broader range of people, especially girls and women, in order to better prepare them to take advantage of a more diverse range of employment opportunities.

Organic production refers to activities that have long-standing roots or traditions in a particular village or area prior to the growth of tourism. In such cases, local artisans may have already developed well-connected supply chains and marketing networks, and have been able to shift or expand their production to incorporate the larger potential markets associated with tourism. These artisans are often self-employed entrepreneurs who invest their own resources. To the extent that such products are branded, they are often associated with a particular place or individual artisan. The products are usually accessible to all levels of international and domestic tourist.

Rohal village is located in Angkor Park, near Banteay Kdei temple, about 15 km north of Siem Reap town. It is a good example of organic production, since villagers have a long tradition of handicraft production along with rice and chamkar farming. Handicraft production emerged as the village's primary livelihood source as tourism began to grow after the UNTAC period. In 2000, the Apsara Authority prohibited villagers from chamkar farming and limited rice farming. In addition to handicrafts, some 20–30 households have family members working in construction in Siem Reap town.

According to focal group participants, one to three members of each household are engaged one way or another in handicraft production using traditional tools such as knives and axes. The villagers produce a wide range of wooden handicrafts, including drums, oxcarts, crossbows, tro (Khmer stringed instruments) and rohat tuek (water wheels). Generally speaking, the men carve

and the women paint. Village artisans purchase large pieces of wood from Phnom Khulen. Price is based on size, and the most expensive piece is around \$15, from which they can produce about 20 tro. The selling price for each tro ranges from \$6 to \$25. In order to finance production, some villagers borrow from ACLEDA and micro-finance institutions, while others borrow from traders, to whom they must sell their product later.

Products are marketed by traders from Siem Reap town, Prey Vihear, Poipet, Ou Smach and Phnom Penh. It therefore appears that the tourist industry in and around Siem Reap represents only a portion of the overall domestic and foreign (i.e., Thai) demand for the village's products. The living standards of Rohal villagers have generally improved because they have many orders. Villagers believe that if the country remains stable, they can expand production and continue to improve their incomes and livelihoods.

4.5.2. Discussion

The distribution of employment benefits to households and communities depends on location (e.g., distance, road access), the type of activity and available resources. As for location, it appears that the distribution of benefits may be fairly widespread. For example, the village of Sret is about 30 kilometres from Siem Reap town, while others such as Kork Trach and Kork Thlok are much closer. In the construction and services sector, it appears that the poor and destitute segments of society tend to benefit most from wage labour in the construction sector, while the non-poor tend to benefit from employment in services and retail occupations. The division of labour according to class concerns both education and access to capital resources. The better paying jobs in services and retail require higher levels of education, which is often a function of household income. Access to better jobs in the service sector, such as guards or groundskeepers, also requires informal payments up front, and families with access to more capital resources are more likely to be able to afford such costs.

In the handicraft sector, there is, as noted earlier, some indication that capital handicraft productions may benefit households that are better off and can acquire higher levels of education. In areas characterised by organic handicraft production, the distribution of benefits appears to be more evenly divided across many households. It is interesting to observe that local artisans have developed long-standing relationships with raw material supply and marketing networks. Marketing networks are quite extensive and can reach as far away as Thailand.

Social networks also play a crucial role in providing villagers with information about employment opportunities in Siem Reap. In this way, the labour markets in and around Siem Reap are mediated by family, friends and community relationships. For example, restaurant owners may tell their staff to bring friends when they need new staff. In one restaurant, the manager has 15 people from her home village in Kralanh district working for her. In villages such as Kork Trach and Sret, these networks have taken several years to develop, and were usually initiated by the first workers from those villages to get jobs in a particular location. As the job market expanded, these labour pioneers had first-hand knowledge about jobs and passed the information on to family and friends.

Another mode of recruitment involves skilled workers who are able to recruit their own support workers. For example, a mason is able to recruit his own crew to carry bricks and sand and mix cement. These skilled workers generally rely on family and friends for this work, largely because

the supervision costs are lower. In many respects, such networks represent efficient management systems built on trust and personal accountability. Workers who have no connections with anyone working somewhere usually have to pay a guard or a supervisor to get a job. In some places, people must pay the foreman or supervisor a portion of their monthly wages in order to retain their jobs.

The role of trust also emerges in terms of labour practices of certain companies. For example, villagers in Kork Trach observed that certain employers sometimes cheat workers in the construction sector. In one particular case, they reported that contractors fled the scene before paying people the agreed wages. Generally speaking, workers do not have the capacity to follow up such cases on their own. However, they are able to share information with one another about various companies or contractors that they perceive to be either unreliable or untrustworthy employers.

In areas with poor water supply, land quality and market access, some people are leaving farming in favour of wage employment in tourism-related activities, including construction, services and handicrafts. For villages close to Siem Reap, this generally involves travelling back and forth daily, while in villages further away, household members are migrating to Siem Reap on a permanent or semi-permanent basis. For this reason, households usually retain some farming activity. In villages closer to Siem Reap, however, some households are completely abandoning farming by selling their land and taking up tourism-related occupations, such as vending and transportation. Other households sell portions of their land, while retaining some activity in agriculture. In either case, there is an observable shift away from the primary sector toward the secondary and tertiary sectors.

4.6. Agricultural Linkages

This section presents three case summaries¹³ concerning agricultural linkages, with a focus on vegetable production. Even though some farmers are benefiting from increased demand in the tourist sector, competition with outside producers and production constraints (e.g. poor soils, lack of water) are pushing some to abandon farming in favour of other employment alternatives. This suggests that poverty reduction impacts may be less than those in the employment sector, and this is troubling because so many people remain in the primary sector.

Kork Snuol village is also located in Khnat commune, about 14 km west of Siem Reap town. About 30 families in the village grow vegetables to sell in Siem Reap markets. The poor and destitute households that cultivate vegetables, however, are not able to market them in Siem Reap because they generally have no means of transport. Instead, they take their produce to Tuek Vil, which is closer to Kork Snuol.

Until recently, families grew only vegetables for home consumption. Vegetable production in Kork Snuol has been encouraged by NGOs and other agencies that have worked with the villagers. For example, villagers explained that the integrated pest management method of growing vegetables using herbal medicines helps make their produce more attractive in city markets. As a result, more villagers have begun to grow vegetables. One of the main constraints, however, is that people generally have only little or no agricultural land, and use their residential plots for growing vegetables. As a result, household production is quite low. Also, only one part of the village is

¹³ Field workers also visited Trameng village, but this case is not presented due to space limitations.

able to cultivate vegetables commercially because there is no irrigation. Another constraint is that people do not have much, if any, information about market trends and so do not know what to grow. For example, one villager observed that he grew cabbages during the previous dry season but believed this was risky. Although he was able to sell his cabbages, he is not sure what he will do in the coming dry season because water is a constraint and he is not sure what will sell best in the market.

Villagers who have grown vegetables are mostly from medium-income households because they have land. The poor and destitute generally do not have enough land on which to cultivate vegetables. About 35 per cent of the households grow vegetables for commercial sale. These include the rich and medium households that have enough land with favourable characteristics (e.g., access to water). The remaining 65 per cent of households include the poor and destitute villagers, who generally do not have enough land. Many individuals from these households work as wage labour in the construction sector in Siem Reap. Because construction jobs are currently easy to find, people are optimistic about employment prospects for the foreseeable future.

Kork Thlok village is located 8 kilometres east of Siem Reap, about 3.5 km off National Route 6. The main income for the village is derived from dry season rice production, since there is ample irrigation. Of the 245 households in the village, 195 also cultivate vegetables. Most of these families are in the medium-income category, along with some poor families. Nearly all vegetable production involves chemical inputs.

In the late 1980s, only 50 families cultivated vegetables to sell in Siem Reap, and many relied on fishing in the nearby Tonle Sap. A decline in fish stocks coincided with increased tourist traffic around 2000, and nearly all families in the village began cultivating vegetables commercially, along with dry season rice farming. However, focal group participants observed that their vegetable produce sometimes exceeds demand, and they are unable to sell everything they produce. This results in a loss of money because they purchase chemical inputs to increase yields.

Villagers observed that they are having increasing difficulty competing with vegetables produced in Thailand and Vietnam, and were discouraged about future prospects. Farmers take their produce directly to the Phsar Leu and Phsar Kraom markets. They are allowed to stay at the market until around 6:00 a.m., when the space is used for parking and other activities. As the time gets closer to 6:00 a.m., they must sell their produce at lower prices in order to avoid returning home with it or having it confiscated by security personnel if they stay too long. As a result, focal group participants observed that vendors often make more money from vegetables than those who produce them. Many people are also increasingly in debt because they must borrow money from local lenders or suppliers for seeds and chemical inputs.

Bos Kralanh village is located in Chreav commune in Siem Reap district, 6 km south-east of Siem Reap town. Of the 182 households in the village, about 120 are engaged in rice cultivation, and of these about 80 percent are engaged in commercial vegetable cultivation. They have extensive high land areas where they get good dry season yields, and some families use water from wells for cultivation on residential plots.

As in Kork Thlok, people in Bos Kralanh use chemical inputs in order to obtain higher yields, even though such inputs degrade land quality over time. When yields get too low from one type of plant,

people simply switch to something else. People borrow money from each other within the village in order to obtain chemical inputs. The marketing patterns in Bos Kralanh generally resemble those described above in Kork Thlok. Producers sometimes sell to middlemen, even though they get a better price if they take the produce to markets themselves. Focal group participants observed that five years ago there were not many vendors in the market, but now there are many more and vegetable prices are falling. In Bos Kralanh, the amount of land devoted to vegetable cultivation is decreasing because of land sales in response to escalating land values in the area. Those who sell land are moving into tourist-related or other occupations.

4.6.1. Discussion

Farmers in Siem Reap are caught in a difficult and complex production and marketing environment. On the one hand, farmers face a number of production constraints, including poor soils and a lack of sufficient water resources. As a result, they have used chemical fertilisers and pesticides in order to achieve higher yields. Such practices, however, conflict with increasing consumer preferences for organically grown produce. In areas where farmers have begun organic cultivation, they tend to have adequate water supplies and crop extension support from outside agents. On the other hand, farmers confront a very competitive market in terms of price and quality. At this point, the fairly low prices of outside products do not provide sufficient incentive for farmers to increase their production, especially if such increases entail substantial investments in production inputs or if the costs associated with marketing remain high.

As a result, an increasing number of households are switching out of farming altogether, or are relying less on farming for their livelihoods. In areas further from the city, one or more individual household members may migrate to work in the city while other household members continue rice farming and, when feasible, vegetable production. In this way, farming households further from town are increasingly diversifying their income sources. In areas near the city, some families are selling land in order to enter the labour market, thus withdrawing some land from agricultural production. With expanding land markets in Siem Reap, it may make sense for some families to sell land now, rather than engage in farming with its unpredictable results.

Selling one's land is not, however, always possible in areas that fall within Apsara Authority protection zones 1 and 2, where land transactions with outsiders are not permitted. In villages such as Kork Trach, people generally continue to rely on rice farming while supplementing household incomes with employment in the tourism sector. Depending on the resources available (e.g., water), people in some villages are actually taking up vegetable cultivation as a way to supplement household incomes.

4.6.1.1 Production Factors

Better irrigation may enable farmers in certain areas to manage water resources more efficiently, thus enabling them to grow vegetables year round and take advantage of higher prices during the rainy season. Irrigation, however, requires initial capital investments and ongoing management requires a considerable degree of social capital in terms of operations and maintenance. This suggests that outside capital and organisational support will be required for quite some time. Farmers also need more and better market information about trends in demand and technical information about how to adjust cultivation practices to suit consumer demand. Farmers therefore desperately need effective extension services from either government or NGO agencies.

These observations assume that farmers have some sense of tenure security upon which to base their investment and production decisions. They also assume that affordable capital is available involving minimal transaction costs. In areas where tenure is insecure and credit is not easily available, it is not realistic to expect many farmers to take the risk of moving into, or expanding, vegetable cultivation to meet the growing demand in the tourist markets.

4.6.1.2 Marketing Factors

Hotel managers and restaurant owners observe that local farmers are not able to provide sufficient quantities of good quality vegetables and other products on a consistent basis. As a result, some hotels and restaurants have reorganised their purchasing arrangements. For example, one restaurant chain used to place orders with a wholesaler in Phsar Leu for vegetables, fruits and meat. These products were brought in from various locations, including nearby villages, Phnom Penh, Kompong Cham and Vietnam and Thailand. Since expanding their business, however, the owners have set up an office on the border with Thailand, which does all the purchasing. The only products purchased locally are fresh water fish.

Vendors in Phsar Leu and other areas have responded to local production shortages by purchasing produce from a variety of domestic and regional producers. As a result of recent improvements in National Route 6, outside suppliers are able to move produce to Siem Reap more efficiently. For example, travel time from Phnom Penh to Siem Reap has been reduced from 14–15 hours to four to five hours. Moreover, suppliers can make the trip at night, when it is cooler, which ensures that fruit and vegetables arrive fresh.

The recent road improvements have also made it more cost efficient to import vegetables and fruit from Vietnam than from Thailand. Until 2003, the vegetable trade from Vietnam circulated up to Phnom Penh but no further because of poor road conditions, although small amounts of produce were shipped to Siem Reap by boat. Vendors now estimate that 50–60 percent of produce comes from Vietnam. Meanwhile, vegetable imports from Thailand have fallen due to lower Vietnamese prices. Thai traders also tend to pack produce in cardboard boxes, which prevents people from observing the quality of the product. Some vendors also observed that Thai growers use more chemicals than Vietnamese.

It is interesting to consider that the section of Route 6 connecting Siem Reap with Banteay Meanchey and the Thai border has yet to be similarly improved. Once such improvements occur, the costs associated with transporting goods and produce from Thailand will certainly decrease. Under such a scenario, the competition for market share in Siem Reap will probably feature Vietnam and Thailand, as well as more efficient producers in places like Kien Svay (Kandal) and Chamkar Leu (Kompong Cham). Without more support from government and the private sector (e.g., NGOs, investors), local farmers in Siem Reap may end up merely observing from the sidelines.

Wholesale and Retail Trade

Vegetables from Phnom Penh and Thailand are collected by wholesale traders, who may supply local and imported vegetables directly to hotel restaurants and other restaurants. About 50 percent of the wholesalers play such a role, with each having two to four restaurants as clients. These vendors receive orders from their clients every day for vegetables, fruits and meat. They act as purchasing agents, and will go to other vendors to obtain items that they cannot provide from their own supply networks.

Some restaurants purchase products on credit for 7 to 10 days, and some even have arrangements with suppliers for a month. If prices change in the market, the vendors are expected to inform their clients at least one week in advance. This method of finance may actually prohibit area farmers from supplying produce directly to restaurants and hotels, since they can afford neither to sell their produce on credit nor the transaction costs associated with such contracts. The vendors themselves experience occasional difficulties because they must pay wholesalers in Phnom Penh or elsewhere, and sometimes must borrow from moneylenders or other sources.¹⁴

Some restaurants and hotels, especially the higher end establishments, have different suppliers for different items—for example, one supplier for vegetables, one for fruits and yet another for meat products. Establishments at the other end of the spectrum, such as lower class hotels and guesthouses, send their staff to buy vegetables, meats and fruits every day. They may or may not have credit arrangements with certain vendors, depending on the networks involved and personal relationships.

As observed earlier, many farmers tend to market their produce themselves by going to Phsar Leu during the night, in order to obtain a place to sell before 6:00 a.m., when they are not allowed to sell their produce outside the market. In this way, people try to avoid paying the costs associated with renting space at the market. However, as in Kork Thlok, they are often forced by circumstances to sell their produce cheaply in order to avoid having to return home with produce, although some sell via middlemen.

Observation

It seems that local farmers essentially face the markets alone as individual producers. As long as they continue to operate individually, they will not be able to compete effectively against outside producers who are better organised in terms of marketing and production and, consequently, better able to take advantage of economies of scale provided by better access to capital and transport. Perhaps the only way for local producers to take greater advantage of the opportunities associated with the tourism markets relates to their ability to operate collectively at various points of the production and marketing chain.

It is interesting to note that while people frequently discussed the role that social networks play in the construction and handicraft sector, the role of social networks did not emerge in discussions with agricultural producers and vendors. This contrasts with employment networks in which the relationships are built on location, family and friends. In agricultural marketing, trade networks are built more on trust that has accumulated over years of contractual exchange. While trust plays an important role in both types of networks, there are important differences in how it is constructed. The question that emerges is how location-based networks could be developed and incorporated into local marketing networks. Rather than speaking of “one village, one product” approaches to production and marketing, one might instead speak of “one village, one stall” approaches.

¹⁴ More people work as vegetable vendors, even though some complain it is difficult to earn sufficient income. Many new vendors are people who have sold land recently in response to the area real estate boom. Some observed there will be fewer farmers in the future because of the land transactions in the area.

4.7. Policy and Research

It is apparent that some people in local communities benefit from tourism in Siem Reap, although households of different economic and social rank may in some sectors (e.g., employment) benefit more than in others (e.g., agriculture). It also seems clear that people could benefit even more given a more favourable environment in which the total benefits from tourism were increased and more evenly distributed. This raises questions about the policy environment and the practices associated with implementation.

The policy environment comprises three predominant actors: the public sector (i.e., national and local government), the private sector (e.g. businesses, professional associations) and the donor sector (e.g. NGOs, civil society organisations). Each sector enjoys certain advantages over the others and has a complementary role to play in conjunction with the other two. It is imperative for actors in the three sectors to collaborate actively with one another if the projected growth in the tourism industry is to have any positive and discernible impact on poverty reduction efforts in Siem Reap.

Government

Although the government has few resources with which to provide direct services, such as irrigation and extension services (e.g., crops, livestock), it enjoys a comparative advantage in terms of its key role in planning and policy making. The government is also able to mobilise different ministries and departments at various levels of the administration for specific tasks. For example, the government's inter-ministerial Apsara Authority manages Angkor Park as a living heritage. The government also has a comparative advantage in terms of its legal authority to enforce laws and regulatory arrangements. It also has an advantage in terms of access to a wide range of information that can be used for planning and monitoring policy implementation. These advantages should enable the government to maintain a favourable climate for investment and marketing. For example, the government is improving the transportation infrastructure, which facilitates tourism travel and the transport of agricultural produce. The government also has a key role to play in maintaining a favourable environment in which ecologically and socially sustainable tourism can flourish.

Private Sector

The private sector has a significant comparative advantage in production and marketing (e.g., branding, distribution) derived from its capacity to allocate investment resources efficiently. In this sense, the private sector plays the key mediating role between supply and demand (i.e., tourists) in the tourism industry. For example, some hotel chefs have met with farmer groups to discuss product quality. Hotels and restaurants could contract directly with farmer associations to procure quantities of produce of specified quality. This kind of contractual relationship could be strengthened to the extent that NGOs or other institutions work alongside farmers in support of such contracts. For example, NGOs could provide technical advice in support of contractual agreements between certain farmer associations and their clients (e.g., hotels, restaurants). These contractual agreements would have the benefit of specifying the terms of quality as well as guaranteeing a price that farmers could then predict.

The Donor Sector

NGOs and other donors often have a greater capacity to mobilise resources, target specific segments of a population for services and act quickly in response to various needs and circumstances. These organisations also often have a comparative advantage in terms of their access to technical information and capacity to deploy skilled personnel at the local level, as well as local knowledge derived from their access to the community. For example, NGOs such as AGRISUD, CEDAC and Padek have been working with area farmers on various aspects of agricultural extension. Other NGOs work directly with farmers to establish farmer associations that enable them to market their produce more efficiently.

4.7.1. Policy and Practice

A promotion campaign initiated by the Ministry of Tourism in conjunction with private investors and civil society could encourage businesses and tourists to buy local products and support local development initiatives. Such campaigns, however, can succeed only when implemented along with other policy initiatives.

Tourism Master Plans

Any tourism master plan for Siem Reap and the Angkor Park area should include a strong poverty reduction and rural development focus that promotes economic linkages between the tourism industry and local communities. With this in mind, infrastructure and institutional development planning should target specific areas based on poverty reduction criteria.

For example, current land titling efforts in Siem Reap should target two types of community. One includes communities that are located in or near emerging land markets closer to Siem Reap. Land conflicts in contested markets are often exacerbated by insecure tenure, and land titles could help reduce such conflicts, provided they are objectively enforced. Another type includes communities in which farmers are struggling to compete in agricultural markets with outside producers. In order to be more competitive, farmers in these areas require, among other things, access to lower cost credit. Using land titles as collateral, farmers would be better able to access institutional credit—at least in areas where it is available.

With this in mind, credit facilities should be expanded, primarily in support of agricultural production and small business development. For example, micro-finance institutions should be encouraged to open offices in areas with actual or potential linkages to Siem Reap. NGOs can also play an important role in providing affordable semi-formal credit to poorer households through targeted interventions in specific villages.¹⁵ Farmer associations could manage small credit facilities for members if they had support for capacity building and access to more affordable financial resources.

An inter-ministerial tourism task force could help coordinate the government's efforts to implement a tourism master plan that ensures benefits from tourism are more effectively linked to poverty reduction efforts. Such a body could (1) interact with both the private sector and the

¹⁵ For example, see “Self Help Group Model: More Than Just Economic Development” (Padek, 2005)

donor community in directing resources to areas where such benefits could be optimised and (2) monitor the impact of tourism on poverty reduction and make relevant policy recommendations to the government.

Investment Incentives

Investment incentives are currently designed to attract foreign direct investment and domestic investment in the services sector. The objective of such incentives is to benefit local people through employment, agricultural and other linkages. There is, however, general consensus that there is a great deal of leakage of tourism benefits. Some observers have estimated that perhaps as much as 70 percent of tourism revenues are exported outside Cambodia, with a significant share of the remaining revenue going to investors based in Phnom Penh. Investment incentives should be structured in ways that promote more and stronger economic linkages between tourism and local communities and people. For example, investors should be rewarded for providing agricultural extension services for area farmers, perhaps working in collaboration with NGOs and/or local farmer associations. They could also be rewarded for providing support for vocational training for people seeking employment in the service sector. Investors should also be rewarded for good labour practices, while being penalised for poor practices.

Revenue Sharing

The Apsara Authority should devote a certain portion of its revenue from park entrance fees to provide infrastructure development and extension services in support of agricultural production in villages that are affected by rules and regulations governing villages in zones 1 and 2. Such revenues could also be directed in support of vocational training in hospitality services and skilled labour, perhaps in collaboration with local vocational training institutions¹⁶ and the Cambodian Hotel Association¹⁷ or the Siem Reap Chamber of Commerce.

4.7.2. Research

More systematic research is required to understand how economic linkages between tourism and local communities are structured. For example, a baseline livelihoods survey of local villages would enable policy makers to assess the impact of labour and employment linkages with the tourism sector, as well as better understand why some areas and households benefit more than others. This kind of baseline study would also be useful in terms of monitoring poverty reduction impacts over time.

An agricultural survey could look more closely at marketing chains in order to identify opportunities for making marketing more efficient for local products, including vegetables, fruit and meats. This research could also look more systematically at the factors and circumstances that promote and enable farmer associations and business associations or other types of collective activity to play more effective roles in connecting local agricultural producers with the tourist markets.

There are additional economic linkages between local areas and the tourism industry that have yet to be explored systematically. One of the most important sets of economic linkages concerns

¹⁶ For example, the Paul Dubrule Hospitality and Training School provides quality training for students seeking employment in tourism services. The school provides scholarships to 30 percent of students coming from difficult social environments and poor families.

¹⁷ The CHA is the result of a merger between the Phnom Penh Hotels Associations and the Siem Reap and Hotels and Guest Houses Association.

micro, small, and medium enterprises in and around Angkor Park and in Siem Reap town and outskirts. A study such as this could assess the constraints and limitations (e.g. finance, human resources) that local businesses face and identify ways to improve the business climate in order to benefit local entrepreneurs.

Another important set of linkages concerns land use and land markets in and around Siem Reap town, including the areas outside zones 1 and 2 under the jurisdiction of the Apsara Authority. A better understanding of the scope, scale and direction of land markets in the area around Siem Reap could promote better land use planning and long-term infrastructure development to help sustain the tourism industry. Also, more information is required concerning the extent and nature of land conflicts in the areas where active land markets are emerging.

Finally, given the significant role that the private sector plays in the tourist industry, more attention should be devoted to understanding the role that corporate philanthropy could play in poverty reduction efforts. Interviews with hotel managers and restaurant owners suggest there is some support for this within the business community. Such efforts could entail interesting and useful opportunities for collaboration between civil society organisations and the business community in Siem Reap and other tourist destinations.

4.8. Conclusion

Many people in the area around Siem Reap town benefit from the economic impact of the rapid growth in the tourism industry. The distribution of such benefits is, however, somewhat uneven, and it is difficult to measure the actual impact on poverty reduction. It appears that people benefit more from employment in the construction, services and handicraft sectors than in the agricultural sector. Those with better education and/or financial resources are able to acquire better paying jobs, while those from poorer households tend to end up working in lower income jobs. In either case, it appears that people are increasingly abandoning farming in favour of waged employment in the tourism sector. In areas further from the city, individual household members are migrating to the city to work in the construction and services sector. In areas closer to the city, some entire households are abandoning farming by selling land and moving into secondary and tertiary employment. Thus, we can observe a shift in the structure of employment away from the primary sector in the direction of the secondary and tertiary sectors, accompanied by a shift in the ownership of land resources in and around Siem Reap away from small scale farmers in the direction of developers in the tourism sector and other emerging industries.

Given likely constraints on growth in tourism in Siem Reap, however, it does not appear that employment in the construction and services sectors alone can provide a sustainable long-term approach to poverty reduction in the area. More efforts are required to help agricultural production become more competitive, as the primary sector will continue to be the largest source of employment in Siem Reap. In terms of production, support for infrastructure development and extension services is crucial. The social capital available in the form of relational networks at the local level also provides a good basis upon which to build more efficient production and marketing networks. Therefore, the concept of “one village, one product” should be complemented with a concept of “one village, one stall.”

Government, civil society and donors and the private sector need to collaborate to help workers acquire vocational skills and local farmers produce and market agricultural produce more

efficiently. The government, with donor support, can play an important role in setting the tone and direction of policy by including pro-poor measures in tourism master plans for Siem Reap and other tourist destinations. The implementation of such measures can be strengthened through inter-ministerial collaboration coordinated by a tourism task force that also monitors poverty reduction and advises on policy. Investment incentives should reward international and domestic investors who implement pro-poor practices, such as training local employees, buying local products and maintaining good labour standards. A portion of entrance fee revenues from Angkor Park and other tourist attractions should be set aside for vocational training, infrastructure development and agricultural extension services. Such efforts need to be complemented by analysis of how the distribution of economic benefits is structured according to employment, agriculture, small business and land linkages in and around Siem Reap. The lessons from such studies can also inform policy and practices in other tourist destinations elsewhere in the country.

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Natural Resources and Environment: Issues, Constraints and Challenges

C H A P T E R (5)

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Natural Resources and Environment: Issues, Constraints and Challenges

C H A P T E R (5)

5.1. Introduction

The natural resources of Cambodia provide and preserve a wide range of values and uses for large parts of the population. Not only do these resources represent a considerable direct use value in the form of fresh water, fish, timber, minerals and arable land, but they also perform functions such as ecosystem preservation, biodiversity conservation and protection of soil and water resources. A large part of the population is directly dependent on these resources for sustaining their daily livelihoods.

The importance of environmental resources can be viewed from different perspectives, such as economic contribution to GDP, importance to rural livelihoods or ecological functions such as biodiversity and watershed protection. There is no doubt that the natural resources of Cambodia contain important ecological functions and unique flora and fauna, as well as supporting the livelihood of millions of Cambodians. It is, however, interesting to note the economic contribution of forests and fisheries to gross domestic product (GDP) compared to other sectors. Agriculture, forests and fisheries accounted for 34 percent of GDP in 2003 (NIS, 2004a). Agriculture is the largest of these sectors, providing 21.5 percent of GDP, while fisheries provide 10.7 percent. The contribution of forest resources has declined from 3.4 percent in 2000 to 1.8 percent in 2003, presumably due to the suspension of logging concessions from January 2002 (MAFF, 2001).

Almost 11 million Cambodians (86 percent of the total population) live in rural areas, and more than 85 percent of the rural population (8.5 million people) are directly dependent on agriculture, forest resources and fishing for their livelihoods. This seems to be poorly reflected in national accounting statistics. More than 4 million Cambodians live less than five kilometres from forests from which they derive products and materials corresponding to an estimated 10–20 percent of their total incomes (IFSR, 2004). Add to this the importance of other natural resources such as fishing and the use of fresh water resources, and the real importance of natural resources to rural Cambodians will be evident. Obviously, the official methods for estimating national GDP poorly reflect the actual value and importance of natural resources to the population. A good example is the number of households dependent on firewood or charcoal as the main source of cooking fuel, which is reported to be as high as 93.9 percent, both urban and rural (NIS, 2004b)

This inability to value natural resources in accordance with their real importance to the country and the majority of its population has implications for the creation of policies that use these poor quality statistical data as a framework for policy making.

Cambodia has experienced an increasing pressure on natural resources compounded by a growing population, illegal logging and unsustainable fishing by concession companies, the military and other authorities. To make matters worse, there are seemingly endless examples of conflict over land tenure between commercial concession companies and local farmers, worsening the scarcity of arable land for poor households.

Under the forest, fishery and land concession systems, vast areas of land and water have come under private leasehold of large-scale commercial companies. A recent report published by the United Nations Cambodian Office of the High Commission for Human Rights paints a gloomy picture of the impact of land concession on the livelihoods of local populations and the depletion of natural resources (UN, 2004).

Although Cambodia is still endowed with a large and rich resource of forests, fresh water and marine fisheries, these resources are under increased and continued pressure. Natural resources have to be considered by the government as important and requiring investment and protection in order to maintain their productive environmental potential.

This chapter presents recent developments in the natural resources and environment sector. Important issues and key characteristics of the sector are outlined and analysed.

5.2. Natural Resources of Cambodia

Cambodia has a total land area of 181,035 km², and a coastline stretching along the Gulf of Thailand for 435 km, with 64 islands and extensive mangroves and coral reefs. Cambodia is generally divided into different regions with the following features:

- the Mekong River and surrounding areas;
- the Tonle Sap Lake in the centre of Cambodia. During the dry season, water drains from the lake into the Tonle Sap River and eventually into the Mekong. As the monsoon rains flood the lowlands and fill the Mekong River, the rise in the river level causes the Mekong to push water back up the Tonle Sap River into the Great Lake, increasing its area to between four and seven times its normal size;
- the central plains, which include the alluvial plains as well as the wetlands of the Tonle Sap, the Mekong River, the north-west, north-east and eastern plains, occupying most of the country and supporting a majority of the population; and
- forested mountain areas, with sparse populations, including:
 - Cardamom and Elephant Hills, to the south-west, separating the coastal strip from the Tonle Sap and the floodplains
 - Dangrek Mountains, in the north, forming a steep escarpment along the border with Thailand and the edge of the Thai Korat Plateau; and
 - Ratanakiri Plateau and Chhlong Highlands, in the east, part of which forms a transition to the Annamite Ranges in Vietnam (Ashwell et al., 2004).

5.2.1. Forest Types and Land Cover

The forest vegetation of Cambodia is primarily composed of forest formations divided into evergreen, mixed, deciduous and “other” forests. Trees belonging to the families Dipterocarpaceae,

Leguminosae, Lythraceae and Fagaceae dominate. Other forests include regrowth forest, stunted forests, bamboo forests, mangroves, flooded forests and plantations.

The most recent estimates of total forest cover of Cambodia were carried out in 2002 by the Forestry Administration (FA). This national inventory estimates a forest cover of 56.5 percent of the total land area. Map 5.1 below illustrates the forest cover distribution of Cambodia, while Table 5.1 outlines changes in forest cover of the four different forest types between 1996/97 and 2002.

Table 5.1: Forest Cover Changes in Cambodia, 1996/97-2002

Land cover type ^a	1996/1997 ^b		2002 ^c		Annual rate of conversion %
	Ha	% of total land	Ha	% of total land	
Evergreen forest	3,986,719	22.5	3,717,000	21.1	-1.1
Semi-evergreen forest	1,505,326	8.5	1,455,000	8.3	-0.6
Deciduous forest	4,281,397	24.2	4,109,000	21.0	-0.7
Other forests	864,766	4.8	1,098,000	6.2	4.0
Total	10,638,208	60.2	10,379,000	56.5	-0.4

^a The forest classification used here stems from the 2002 study (DFW 2003b), aggregating the different classifications of the 1996/1997 statistics to suit this simpler system.

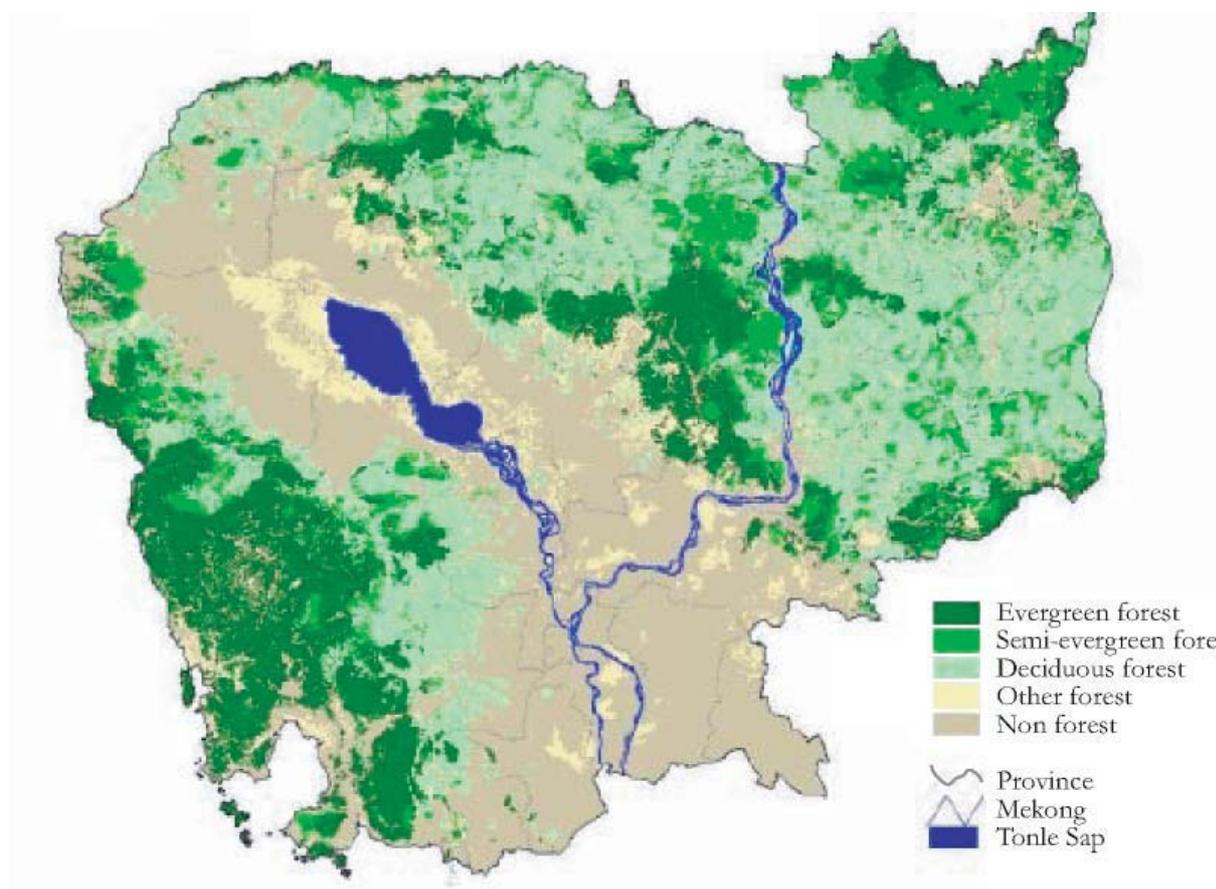
^b Source: DFW, 2003a

^c Source: DFW, 2003b

There are several controversies regarding the land cover classification. An earlier study by FAO (2000) estimated the total forest cover at only 52 percent, as opposed to the 56.5 percent reported in 2003 by FA, whereas a World Bank estimate from 2003 reports a forest cover of less than 50 percent (WB, 2003). Similar studies (Blasco et al., 1996; Stibig and Buechle, 2003) use different systems of classification, adding to the difficulty of comparing studies and results. Issues such as conflicting forest classification systems and varying figures of total land area have contributed to this lack of consistency in the existing forest cover and land boundary statistics (McKenney et al., 2004).

In addition to inconsistencies in forest classification, little is known about the quality and dynamics of the different types of forest formations in Cambodia. Very few contemporary studies have examined the structure of the different forest types, and none of these have been carried out at a national level (Top et al., 2004; Ashwell et al., 2004; Zimmermann et al., 2004). Therefore, there is a need for additional work in both classification and estimation of the productivity of the forests of Cambodia.

Figure 5.1: Forest Cover Map of Cambodia (Forest Administration 2003, adopted from Ashwell et al., 2004)



5.2.2. *Inland Water Resources*

The Mekong River and Tonle Sap Lake together create a vast fresh water system covering around 1.8 million hectares, or 10 percent of Cambodia's surface area. The rivers and lakes, flooded forests, grasslands, rice fields and swamps form the backbone of what is thought to be the world's fourth largest inland fisheries resource. The Tonle Sap Lake alone provides around 60 percent of the annual commercial fish production of the country. Approximately 90 percent of Cambodia's population lives within the Mekong River catchment (FACT, 2000).

5.2.3. *Marine Resources*

The marine resources of Cambodia consist of the Cambodian Sea, also known as the Gulf of Thailand, which is considered to be one of the most diversified coastal ecosystems in the climatic sub-equatorial region. The offshore areas of Cambodia have an average depth of 50 meters and possess a number of different habitats. The inland waters consist of three major estuarine bays, of which Kompong Som is the largest, covering two-fifths of the overall coastline. Koh Kong

bay, which is dominated by the large fresh water river Dong Tong, forms a large estuary covered by mangrove forest and sea grass beds in the coastal waters. The south-eastern edge of the coastline formed by Kampot bay is an important sea grass habitat. Offshore, the sea forms a large shelter and habitat for a number of marine species.

Scientific work has identified 474 fish species from 105 families in Cambodian waters. About 30 of these from mackerel, scads, anchovy and snappers are commercially important.

5.3. Environmental Management and Legislation

The natural resources of Cambodia are officially under the protection of the state, as expressed in Article 59 of the constitution:

“The State shall protect the environment and balance of abundant natural resources and establish a precise plan of management of land, water, air, wind, geology, ecologic systems, mines, energy, petrol and gas, rocks and sand, gems, forests and forest products, wildlife, fish and aquatic resources.”

The legal framework surrounding natural resource management has been widely discussed and has undergone some important changes in recent years in relation to the many controversies in connection with the allocation of forest concessions in the late 1990s, and the debate over conflicting claims to land and resources arising from the abolition of forest concessions in 2001.

The management and authority over natural resources of Cambodia are mainly placed with the following four ministries:

The Ministry of Agriculture, Forestry and Fisheries (MAFF) is the main government institution for management of Cambodia’s natural resources, having jurisdiction over the major productive resources in the rural economy, including forests and fisheries. Major new developments in the legal framework have been the 2001 Land Law, the 2001 prakas on suspension of forest concessions, the 2002 Forestry Law and the 2003 community forestry sub-decree (RGC, 2001; MAFF, 2001; RGC, 2002; RGC, 2003).

The Ministry of Environment (MoE) was created with the mandate to protect natural resources and prevent environmental degradation, and also to advise relevant ministries on the conservation, development and management of natural resources. The Department of Nature Conservation and Protection is the implementing department responsible for the management and protection of protected areas and wildlife sanctuaries. The ministry operates under a number of policy documents and strategic plans, including National Environmental Action Plans and a National Biodiversity Strategy and Action Plan. These plans are important guiding documents for the natural resources sector.

The Ministry of Land Management, Urban Planning and Construction (MLMUPC) was established in 1999 to lead and manage issues of land management, urban planning, construction, cadastre and geography, except in areas in which the government has authorised other institutions.

The Ministry of Industry, Mines and Energy (MIME) was also created in 1999 and is authorised to direct and manage the industry, mines and energy sectors of Cambodia. MIME has subject jurisdiction over permits for mineral and soil extraction within the permanent forest reserve, along with MAFF and MoE. Thus, MIME has a lead role on issues related to mineral and soil extraction from areas within the permanent forest reserve. The actual provisions controlling mineral and soil extraction in the country are outlined in a sub-decree (Oberndorf, 2004).

5.4. Land Classification

Land classification in Cambodia is a relatively recent innovation and is basically governed by the Land Law. The Land Law classifies the various types of property within the kingdom and the ownership rights available with the different classifications.

The Forestry Law creates a classification for forest lands. There are still ambiguities in the classification systems and some areas where the classifications overlap in ways not defined in the laws.

5.4.1. Land Law

The Land Law (2001) sets out a comprehensive system of land classification and land ownership rights. It includes important provisions on social and economic land concessions, indigenous land rights and registration of land and land dispute resolution, all of which can have an impact on the forestry sector (Oberndorf, 2004). The Land Law classifies property into three different categories:

State public property (Articles 15 & 16) is land held by the state, which carries a public interest use. State public property includes forests, rivers, lakes and seashores, as well as any natural reserve protected by the law. It is important to note that state public property may not be sold or transferred to other legal entities, although it may be subject to rights of temporary occupancy or use, such as logging concessions within the permanent forest reserve (see below for definition).

State private property (Article 17) is land that is owned by the state or public legal entities that does not have a public interest use, as opposed to the above definition of state public property. State private property can be described as excess or idle land held by the state. The main difference between state private property and state public property is that state private property may be sold or transferred to other legal entities, such as the permanent transfer of properties under the social land concession framework to the target land recipients. Land concessions (Land Law, Chapter 5), whether for a social or an economic purpose, may occur only on state private property.

Private property is property owned by natural persons or legal entities other than public legal entities. Private property may be used by its owner or owners in any way, as long as the use does not create a nuisance and is not otherwise prohibited by law. Private property may be leased, used as collateral, inherited or transferred to other individuals or legal entities. Ownership of private property takes various forms based on the number of people or legal entities that own the property and the rights of use they have, such as individual ownership, collective ownership, undivided ownership, co-ownership and joint ownership.

In reality, it is questionable to what extent these classifications have any real meaning at the local level, where land officially under state management is often inhabited and de facto managed by local rural smallholders. This problem is found in all kinds of government-managed land such as forest land and protected areas, and is generally encouraged by the lack of clear land demarcation, boundaries and responsibilities of different land classifications (Oberndorf, 2004).

5.4.2. Forestry Law

The Forestry Law sets up a classification system for forest land that is separate from the classification system of the Land Law.

The permanent forest estate is all forested land within the kingdom, including forests on private land and flooded forests. All categories of forests fall within the definition of the permanent forest estate.

Private forests are those forested areas located on private property. The Forestry Law defines private forest as follows: “Forest plantation or trees, whether planted or naturally grown on private land under registration and legal title with the State pursuant to authorised legislation and procedures”.

The permanent forest reserve comprises forests that are located on state public property. There are three sub-categories of forest within the permanent forest reserve: production forest, protection forest and conversion forest. Protected areas, under the jurisdiction of MoE, are not included within the permanent forest reserve.

- **Production forest** is defined as: “Forest area having the primary function of sustainable production of timber and non-timber forest products. Production forest includes forest concessions, forest permitted for harvesting, degraded forest, forest to be rehabilitated, reserved area for forest regeneration or forest plantation, reforested areas and forest areas under agreement between the Forestry Administration and the local community”.
- **Protection forest** is defined as: “Forest area having the primary function of protecting the forest ecosystem including water resources regulation, soil fertility; conservation of biodiversity, land, water, watershed catchment areas, wildlife habitat, and fish; prevention of floods, erosion, sea water intrusion; as well as safeguarding cultural heritage sites which serve the public interest. Protection forest under this law does not include the protected areas under the jurisdiction of the MoE, pursuant to the Environmental Protection and Natural Resources Management Law”.
- **Conversion forest** is defined as: “Idle State forest land, covered mainly by secondary vegetation, not yet designated for any use that shall be classified temporarily as permanent forest reserve.”
- **Protected areas** (excluding protection forests) are officially owned by the MoE and are classified as state public land under the Land Law.

There are several conflicts emerging from the classification of land ownership and forest land. For instance, there are areas classified as permanent forest estate with little or no forest cover, and areas of land classified as forest that are cultivated as agricultural land. This ambiguous classification of resources makes it difficult to demarcate clearly and control conversion of forests to other land uses (Oberndorf, 2004).

5.4.3. Protected Areas

The protected areas of Cambodia are under the jurisdiction of the MoE as outlined above. There are 23 protected areas and national parks covering 3.3 million hectares—more than 18 percent of the country—created through a royal decree in 1993 and managed by MoE. In addition to these, there are a growing number of fish sanctuaries and protected forest areas set up under the administration and control of the Forestry Administration. The Forestry Law (2002) designates the MoE as responsible for the management of protected areas and the FA for the management of protection forests. The national park system consists of:

- seven national parks (MoE)
- 10 wildlife sanctuaries (MoE)
- three protected landscapes (MoE)
- three multiple-purpose use areas (MoE)
- seven protected forest areas (FA).

This brings the national protected area system to over 21 percent of the country. The system also includes provincial protected areas, which are set to significantly increase in number once the legislative framework and guidelines for protected areas are clearly defined at the national level. Ratanakiri province has established 13 provincial protected areas, and five other provinces have expressed interest in following this development (Miller and Shields 2004).

The current protected area system has given rise to a number of conflicts between authorities and local populations living within the boundaries of parks and protected areas. Also, there seems to be little consensus on the objectives of keeping one-fifth of the country under restriction. Many areas within this demarcated land have little or no protection value and serve more as a basis for local livelihoods and residence.

5.4.4. Legal Classification of Fisheries

The Department of Fisheries (DoF) within MAFF is the key regulatory authority over Cambodia's fisheries. It is within its mandate to manage, protect, conserve and develop these resources, as well as enforcing regulations, granting concessions and issuing licenses. DoF obtains the majority of its revenue from fees paid for concession leases, with the remainder of revenue derived from licences, fines and donor and government funding for various projects. DoF has jurisdiction over marine fisheries and overall bodies of water in the country up to the average high water level during the period of annual inundation.

Even though recent reforms have reduced the number and size of commercial fishing concessions, these are still the primary means by which DoF manages Cambodia's fisheries. Besides reducing

the commercial concessions, more emphasis has been given to allocating fishing resources to local communities through the formulation of the sub-decree on community fisheries, as well as the establishment of a community fisheries office within DoF.

Fisheries management in Cambodia depends on a system of rules that establish access, user rights, boundaries, authorities and enforcement conditions. These rules are defined in the Law on Fishery Management and Administration of 1987 and subsequent sub-decrees, declarations and proclamations (Touch, 1990).

The classification basis of fisheries is the differentiation between commercial and subsistence activities. Under the Law on Fishery Management and Administration, inland fishing is divided into three categories: large and medium-scale fishing for commercial purposes and small-scale fishing for subsistence (FACT, 2000).

Large-scale fisheries include fishing lots on which the concession owner holds exclusive rights to commercial fishing for a two-year period. These lots are often allocated on the most productive fishing grounds in the area.

Medium-scale fishers are characterised as using less heavy fishing gear than the large operators. DoF requires users of this gear to obtain licences and restricts fishing to the open season, but allows fishing anywhere in the public domain (i.e. outside fishing lots and protected sanctuaries).

Small-scale fishers are defined by the use of small-scale fishing gear. These fishers are allowed “open access” to fish anywhere at anytime, except within fishing lots during the open season and within protected sanctuaries. In practice, the notion of open access is erroneous, since most of these fishing areas are under some type of informal ownership and management, often imposed by lot owners and powerful local interests (Degen and Nao, 2000).

5.4.4.1 Fishing Lot Structure

Current lot leasing practices closely resemble historical leasing practices. The government leases out fishing lots for two-year periods to lot “owners”, who may share capital costs, responsibilities and benefits of lots with partners. Leaseholders may also sell conditional fishing rights to fishers, allowing fishing within the lot for a fee or share of the catch (Chheng, 1999; Ly et al., 2000). Lot owners may offer some area of their lots to the military in exchange for protection services (Ly et al., 2000). Conversely, the military or armed groups may assert control over an area and require protection money from lot owners (Gum, 1998).

5.4.4.2 Fishery Policy Reform

Prior to reforms in late 2000, 135 commercial fishing lots covered close to 1 million ha of the most productive fishing areas in Cambodia. In June 2002, a series of fishery reforms with the aim of reducing the number and size of fishing lots became effective. The process involved enacting a series of sub-decrees at the provincial level and varying levels of consultation and negotiation with stakeholders. The reforms resulted in the removal of large areas from the commercial fishing lot system—about 56.23 percent of the total area of 953,740 ha (Thay, 2003). Two characteristics of the fisheries reforms have reduced conflicts over fishery resources:

- The number of people living within fishing lot boundaries has been reduced from about 756,000 to 148,000.
- Because the area of plots allocated on land classified as agricultural has decreased to less than one-third of the previous 440,000 ha, conflicts between lot owners and rice farmers over competing uses of the floodplains should decrease.

Even though these changes are perceived as beneficial, there is still little information available on the implementation and real-life effects of the reforms. A current study carried out by CDRI for the ADB (the Participatory Poverty Assessment project) points to still frequent conflicts. The main reasons for these conflicts are reported to be the poor quality of the resources released for small-scale and community fisheries, as well as continuing exclusion of communities from fishing areas that should have been released from the lot system. The exclusion seems, as also reported earlier, to be carried out by powerful stakeholders such as large operators, armed forces and local authorities (Chheng 2000, Prom and Ballard, in press).

5.5. Natural Resources and Rural Livelihoods

As mentioned in the introduction, there is little doubt that natural resources play an important role in the livelihoods of the population. Approximately 85 percent of all Cambodians live in rural areas and are mainly occupied by agriculture, hunting, fishing or collection of forest products. Agriculture constitutes the largest official source of income, while fisheries and forest products have much less official recognition. This lack of accounting is mainly due to the fact that a majority of households collect these products for subsistence, while only a small share is marketed.

When considering the possible impacts of natural resource management on poverty alleviation (here comprising both elimination and avoidance), it is interesting that 79 percent of households characterised as poor (IFSR, 2004) are employed by a third party in agriculture. This group includes landless labourers and farmers with too little or unproductive land to sustain them. Still, the opportunities for rural employment seem to be very limited due to the low labour intensity of the agricultural system, as well as low productivity of agricultural land.

Although there exist a number of studies describing the importance of forest and fish products to rural livelihoods, there is a lack of data by which to judge the direct contribution of forest product income to the total income of rural households (IFSR, 2004). In fact, existing studies confirm that environmental incomes do make an important contribution to rural livelihood strategies and that their importance has been undervalued in both national and local contexts (WB, 2004). Earlier studies carried out by CDRI support this notion and underline that fisheries and forest resources play a critical role in supporting livelihoods by diversifying subsistence and income-generating activities and insuring against agricultural failures. Natural resources thus provide a foundation for food security, income and employment for most of the population, and therefore constitute an essential “safety net” for the poor (McAndrew, 1998; McKenney and Prom, 2002).

It is apparent that success or failure in the management and conservation of natural resources will fundamentally affect the development and stability of society and the economy. Cambodia’s natural resources play a critical role in rural livelihoods by providing opportunities for households to:

- diversify their livelihood activities and thereby compensate for the risk of agriculture failures;
- optimise their labour resources among different activities during different seasons;
- access an income-generating activity with very little capital investment and no land;
- maintain and improve nutrition, as many forest and fish products represent a significant source of protein and other nutrients (McKenney and Prom, 2002).

Dependency on natural resources has been reported to be relatively more important for the poorest. In a survey of nine villages, CDRI noted a relatively higher dependence on natural resources for the poorest households, although the better off households gain higher incomes from these in absolute terms.

Some of the most current issues of natural resource management are believed to concern quality and access to resources. Given current and projected developments in economic and demographic characteristics of Cambodia, there is no reason to believe that the importance of these issues and the dependency of rural populations on natural resources will diminish.

5.5.1. Forests and Forest Products

Even though forests do not figure as a significant contribution to GDP or in monetary income of households, they do play an essential role in supplying a large number of products for consumption, and to a lesser extent for sale. Forest resources supply subsistence and income-generating activities such as small-scale timber harvesting and collection of non-timber forest products (NTFPs) such as firewood, resin, medicinal plants, herbs and bush meat (Bann, 1997). The contribution to rural household income from natural resources is generally highest (21 percent) among the poorest households, and lowest (6 percent) among the richest (Special Representative, 2004). This relatively high dependence on natural resources for income and subsistence is expected to increase in the future as the development of non-agricultural employment opportunities does not seem to match the general population growth of 2.5 percent per annum. It can be expected that the number of poor rural households, mainly dependent on natural resources, will increase in the near future and thus increase the pressure not only on the natural resource base, but also on its ability to sustain rural livelihoods.

NTFPs encompass all biological materials other than timber that are extracted from forests for human use. These include wild raw materials for foods, medicines, firewood, essential oils, gums, dyes, rattans, bamboo, wooden poles and fibres, grass, ornamental plants and wildlife (products and live animals). The key distinction between NTFPs and timber is that the latter, in terms of management and income, is (or has been) officially monitored, harvested and managed by government institutions on industrial or concession scales. Legal and organised timber harvesting is therefore contributing directly to government revenue and GDP, whereas NTFPs are mainly harvested informally for household consumption or local markets. Thus, timber is considered as a potential contributor to government revenue. NTFPs are managed and used by forest dwellers and rural people using traditional and simple techniques, yet NTFPs receive limited attention in natural resource planning and policy development. Only certain NTFPs such as wildlife, rattan and resins have received some attention from the government and private sector.

NTFPs in general are considered to hold a potential for marketing and cash income, at least on a local scale or in relation to community forestry activities (Dangal et al., 2004). Relatively little is known about the extent and possibilities for marketing of NTFPs in Cambodia. It has been documented that marketing of NTFPs is heavily restricted, mainly by informal fee collection by various authorities at different levels in the market chain (Prom and McKenney, 2003). The following NTFPs are exported as raw materials or semi-processed products to Thailand, Vietnam, Singapore and Taiwan:

- yellow vine (*Cosinium usitatum*); after processing to powder, the semi-processed product is exported to Vietnam;
- aloe wood, also known as eagle wood or agar wood (species of *Aquilaria*); often processed for its oil, which is exported to Thailand;
- malva nuts (fruits of *Scaphium macropodium* or *Sterculia lychnophor*); Vietnam and China are the main destinations;
- resins (extracted mainly from *Dipterocarpus alatus*), mainly to Vietnam;
- rattan (stems of *Calamus* spp.) raw materials are exported to Thailand, Vietnam, Singapore, Taiwan (FAO 2002, Meng and Martin 2002).

The following NTFP sources are believed to have importance for rural livelihoods:

Firewood and charcoal are the most important sources of cooking fuel in Cambodia. In rural areas, approximately 97 percent of all households use firewood or charcoal as cooking fuel, and in urban areas the figure is 78 percent. This large-scale use of fuel wood in rural areas makes firewood and charcoal production an important source of income to rural and peri-urban households with few or no alternatives (FAO, 1998; Heng, 2002).

Resin collection provides a significant income to many communities in the eastern region. In Cambodia, resin is primarily collected from species of *Dipterocarpus* trees. The best quality resin is collected during the dry season, and the product is mostly sold directly to visiting traders who transport and resell the resin for processing. The price of liquid resin depends on the quality, ranging from 8,000 riels (\$2.00) to 23,000 Riels (\$5.75) per 30 litres depending on location, quality and season (Meng and Martin, 2002; Prom and McKenney, 2003; Evans et al., 2003).

Hunting has been reported to supply local households with substantial income. Ongoing research carried out by CDRI further points to the importance of hunting to rural livelihoods, as sources of both protein and cash income (Desai and Lic, 1996; Lic and Martin, 2002).

Fruits and vegetables constitute an important nutritional supplement for a large number of rural Cambodians. Perennial herbs, ferns, palm core, bamboo shoots, nuts and young leaves of woody climbers and trees are collected from forests and prepared as vegetables, sauces, condiments and flavourings. Bamboo shoots are harvested traditionally as a daily food supplement across rural Cambodia (Meng and Martin, 2002).

Medicinal plants are valued among local communities as an important alternative or supplement to the official health care system. The reliance on medicinal plants by local communities may be far more important than generally considered. In Bokor and Ream national parks, 162 types of plants are used for medicinal purposes. They include epiphytes, ferns, herbs, grasses, sedges and vines (Meng and Martin, 2002; Linddal and Outey, 2004).

5.5.2. Importance of Fisheries to Rural Livelihoods

Fish and access to fisheries are vital to a large part of Cambodia's poor. Without fish to provide protein and income, many would starve. The fair and equitable distribution of these resources, along with their effective long-term conservation, is vital to the food security of the rural population. The contribution to the national economy is also substantial: 10.7 percent of GDP in 2004 (FACT, 2000; NIS, 2004a; Thay and Schmidt, 2004).

Despite its vast natural wealth, the Tonle Sap Lake region is classed as the poorest, with 38 percent of the population below the poverty line. Second only to rice, fish is a vital—and generally affordable—food source that accounts for more than 75 percent of the population's animal protein intake. An average of 67 kg of fish per person per annum is consumed in fish-dependent communities. Fresh water fisheries' contribution to food security and the economy is higher in Cambodia than in any other country (FACT 2000).

At least one third of the Cambodian population depends on inland fishing for household consumption and income and employment. For the fishing communities, which have little or no access to cultivable land, it is the main part of their economy. Fishing communities are also among the most vulnerable of the people living around the Great Lake and include ethnic minorities like the Vietnamese and the Cham. An estimated 1.2 million people belong to this group, with around 25 percent living in floating villages or in stilted houses (Thay and Schmidt, 2004).

In addition to communities whose main occupation is fishing, a large part of the rural population living in upland areas surrounding the Great Lake depends on fishing and other natural resources of the lake. During the dry season, large numbers of these “secondary users” migrate to the lake to fish for household consumption and revenue, and to practice temporary cultivation of the dry shoreline. Thus, at least 4 million people derive their primary or secondary income from inland fishing (Acker, 2003), and for almost all rural people with access to water bodies, fishing provides food and income on an occasional basis and can serve as a buffer in times of crisis (Yim and McKenney, 2003; Thay and Schmidt, 2004).

Besides fish, many other aquatic products are harvested from inland waters, rivers, flooded forests, wetlands and rice fields for consumption and sale. These include frogs, prawns, snakes, insects, molluscs, snails, turtles and wetland birds. Rice fields alone yield 25–300 kg of aquatic organisms per hectare per year, worth 40–80 percent of the value of the rice harvest (Gum, 2000; Acker, 2003; McKenney and Prom, 2003).

5.6. Threats and Challenges to Natural Resources and Environment

The natural resources of Cambodia are facing increasing pressure from commercial and non-commercial interests, and future management and sustainable use will require improved governance on the national level as well as sustainable and participatory local management. Below we outline some of the present threats and challenges.

5.6.1. Threats and Challenges to Forest Resources

The principal causes of deforestation in the past decade are reported to be commercial logging, illegal logging, agricultural expansion and fuel wood collection, driven by economic, social and political factors. The most serious threat to forest resources have most likely been the uncontrolled granting of forest concessions and ongoing illegal logging. The reasons and dynamics of deforestation are complex and involve a multitude of stakeholders and social, political and structural issues. Some of the main reasons for the ongoing deforestation and degradation are:

Unsustainable management of forest concessions

- insufficient development of management plans by concession holders
- improper management and harvesting
- imprecise resource inventory and estimation
- insufficient consideration of socio-economic aspects within the concession area
- lack of management by the FA due to insufficient capacity
- lack of comprehensive land use planning

Land conversion (encroachment)

- poverty in rural communes
- insufficient employment opportunities and population growth
- lack of awareness of forest functions
- lack of management of agricultural concessions

Illegal logging

- inadequate law enforcement
- inadequate tools/facilities to stop illegal loggers
- no alternative energy source for local communities
- non-transparent authorisation procedures
- lack of capacity of FA and sub-units

Inadequate management in areas outside forest concessions and former concession areas

- lack of knowledge and technologies
- unclear demarcation and classification of forest lands
- unclear division of responsibilities
- conflicts over land titles or land use rights
- lack of capacity of FA and sub-units

Inadequate restoration

- shortage of budgetary support
- inadequate capacity of communities

- lack of capacity of FA and sub-units
- lack of strategy and planning
- overlapping responsibilities among government agencies
- no clear demarcation of land (e.g., forest estate, private land, economic concessions)

5.6.1.1 Unsustainable Management of Forest Concessions

The forest concession system widely applied in Cambodia has been reported to create severe problems of land grabbing, forest mining and exclusion of rural farmers from access to traditional resources, such as forest products and fish. In the years 1994–97, more than 6.8 million ha of land, covering more than one-third of the country, were allocated to forest concessions. Generally the state of forest management under the concession systems was inadequate. Most companies were foreign owned and used local subcontractors to supply wood to their mills. This arrangement meant a focus on volume and maximum harvest rates, not on sustainable forest management and cooperation with local forest-dependent communities. The concession system resulted in high rates of illegal logging and low levels of management and enforcement of management plans (IFSR, 2004).

In 2002, the government issued a prakas cancelling 16 concessions covering 2,437,970 ha (MAFF, 2001). At that point, 17 concessions were allowed to continue under the condition that logging was suspended until forest management plans were developed. The forest management plans have now been developed, but it is still unclear if and when concessions will be allowed to resume logging. A new management approach is under development in the FA, involving direct control of operational management by the FA (Miller, 2004).

5.6.1.2 Land Conversion

Conversion of forests has taken two main roads in Cambodia: encroachment by small farmers into forest areas and large-scale commercial conversion of forest for agricultural development. Since the moratorium on logging concessions in 2002, logged forest areas under concessions have increasingly been encroached upon by illegal loggers and farmers. Former concession areas have been made accessible by logging roads, which enable local loggers, firewood collectors, charcoal producers and farmers to access areas not previously accessible. The use of forest resources by local people is, as mentioned, a very important livelihood strategy for rural households in times of food shortages or lack of income. In most places, access to state forest resources is considered as open, although people may have to pay unofficial “royalties” to local authorities claiming control over permission to cut trees for timber and to collect other forest products. Although local use of forests is officially illegal, it must be considered a customary practice essential to the livelihoods of rural people. Many rural families have little or no alternative than to collect forest products. In case of food shortages, the activities are often uncontrolled and without any management or planning. For local forest use to become sustainable, there is a need for more local control as well as planning and management of resources.

Under the 2001 Land Law, there is provision for issuing land concessions for economic development on state private property. The law gives the concessionaire use rights to a maximum of 10,000 ha for up to 99 years. Sub-decrees to guide the implementation of the Land Law still

remain to be formulated, and there is an urgent need to formulate sub-decrees on the procedures for granting concessions, to implement management plans and to reduce the size of existing concessions to conform with the 10,000 ha limit. At present, several concessions are reported to be greatly in violation of this limit (Special Representative, 2004). There are several examples of land with existing forest cover being granted for economic concessions. This is the case in Kompong Thom, where the Tumring rubber plantation has replaced existing forest, as well as land formerly cultivated by local households.

Given the reliance of the rural population on natural resources, this continued trend of privatisation of land threatens the livelihoods of rural people in several ways. Local residents are ordered off land on which they may have lived for years, contributing to increased landlessness and internal migration. In addition, privatisation of land precludes rural people from making use of the resources on which they depend, driving them deeper into poverty. Furthermore, conflicts between powerful landowners and local residents can turn violent, and in any event are almost never resolved in favour of the poor. Examples such as those in Kompong Thom and Mondolkiri (Wuzhisian pine plantation) clearly underline the need for improved legal frameworks, governance and accountability among decision makers and managers (Marona et al., 2004; Cambodia Daily, Vol. 32, No. 14).

5.6.1.3 Illegal logging

Illegal logging is not only carried out on a small scale by rural households. Larger scale and organised illegal logging involving large sawmills has also been reported despite the moratorium on logging in forest concessions (Global Witness, 2004). Illegal logging often occurs with the involvement of government, military or police personnel. Despite a prohibition against it, many of the trees cut for timber are resin trees on which local people rely for income generation. At the December 2004 Consultative Group meeting, it was agreed to allow transport of already harvested logs. It is believed that lifting this ban can provide opportunities for cutting timber and using the transport permit as a “window” to transport newly cut timber. There are new proposals for a coupe system based on annual plans, but their sustainable management is viewed as sceptically as that of the former system.

5.6.1.4 Inadequate Management in Areas Outside Forest Concessions and Former Concession Areas

Plantation establishment, illegal logging and land grabbing culminate in conflicts at various levels involving the community as well as military forces. These conflicts arise from a de facto open access situation in which the government lacks sufficient capacity to manage and control the forest estate.

Exacerbating the deforestation, as noted above, is the lack of a clear definition and classification of forests or the delineation of the boundaries of the permanent forest estate. Similarly, there seem to be overlapping definitions and classifications between the protected area system under MoE and the protected forest system and permanent forest estate managed by FA. These deficiencies have several negative implications. First, certain forest types such as dry forests or grasslands with low tree density may be classified as non-forest, allowing them to be labelled as degraded lands

and sold off as concessions. Second, upland areas settled predominantly by non-Khmer ethnic minorities often feature forests at various stages of clearance and regrowth, as is typical in shifting cultivation systems. Such lands may not be considered by the government as truly forested, and thus given away to wealthy outsiders to “develop”. Conversely, such lands may also be considered to be forested but underutilised or mismanaged by the indigenous land use system, and taken away under the guise of a need for better forest management.

5.6.1.5 Inadequate Restoration

As mentioned above, the management and control of forest resources have been largely inadequate, leading to extensive deforestation and degradation. In addition, little has been done to regenerate or reforest areas that have been completely deforested or degraded. In the period 1985–2002, only 11,125 ha of forest plantation were established in Cambodia (DFW, 2003a). It is doubtful if these plantations include those carried out under agricultural concessions for economic development such as the rubber plantation in Kompong Thom and the pine plantations in Mondolkiri. A range of small-scale reforestation projects have been carried out in order to test indigenous species of *Dipterocarpus* and *Aquilaria*, but so far little information is available on plans to expand reforestation activities. As pointed out by Miller (2004), the main obstacles to reforestation by plantations are mainly social and associated with access to land and resources, such as exemplified in Kompong Thom and Mondolkiri.

5.6.2. *Threats and Challenges to Fishery Resources*

According to Thay et al. (2005), Cambodia’s fishery resources have been subjected to pressures from a number of different sources, such as increased fishing intensity, illegal fishing, inadequate management, poor institutional capacity, overlapping claims to fisheries, floodplains and water resources and increasing population pressure and immigration from upland areas. It is not clear yet how well recent fisheries reforms are addressing these management problems.

However, the current management regime is based on the competing interests of the rural population and private commercial interests and revenue generation for the government. Consequently, resource conservation and management practices are limited, and poor governance, reflected in illegal fishing, corruption and conflict, plagues the sector.

5.6.2.1 Illegal Fishing Activities

Illegal activities span a wide range, from use of prohibited fishing gear to illegal use of open access fishing areas. Lot owners, the military and local authorities are reported to expropriate open access areas and lease them to businesses or require small-scale fishers to pay for fishing rights (Gum, 1998; Nao and Srun, 1999; Ly et al., 2000). They take advantage of poorly marked lots and open access boundaries to extend fishing lots beyond their legal boundaries. In some cases, boundaries have been extended to include all seasonally flooded areas (Nao and Srun, 1999; Swift, 1999).

Illegal fishing activities also entail the use of prohibited small-scale fishing gear and the use of electricity, poison, explosives and water pumps. For small and medium-scale fishers, basic subsistence and income can be the driving force in using illegal methods, while large-scale fishing

operations may resort to illegal methods and encroach on open access areas to maximise output and profits (McKenney and Prom, 2003).

5.6.2.2 Competing Uses of Land and Water for Agriculture and Fishing

Conflicts arise over land and water use in lot areas because these resources play important roles in both agriculture and fishing. Whereas lot owners want to protect flooded forests and shrub land vegetation because it provides essential fish habitat and improves fish productivity, farmers often seek to clear these areas in order to cultivate rice (Swift, 1997; Degen et al., 2000). Similarly, lot owners may seek to drain reservoirs and ponds to make it easier to catch fish, but farmers want this water for agriculture and would like to use it more gradually (Ly et al., 2000). Some villagers have claimed that lot owners deny them access to water, destroy their irrigation structures and prevent them from digging ponds for family use or irrigation (Swift, 1999).

Poaching is often carried out using electro-fishing because this allows for rapid catches and thus less risk of being caught. Villagers also frequently cut fuel wood from the flooded forests within fishing lots. This illegal practice can degrade fish habitats and breeding and nursery areas (Swift, 1997; Gum, 1998; Swift, 1999; Ly et al., 2000). Similarly to flooded forests in inland waters, the loss of mangrove forests in coastal areas has been occurring at an increasing rate. The causes of mangrove deforestation and degradation include harvesting for fuel wood and charcoal production, shrimp and salt farming and the use of illegal fishing techniques, such as explosives and poisons (Mastaller, 1999; Marschke, 2000).

5.6.2.3 Increased Population and Migration

One of the main reasons for over-fishing is believed to be population growth and immigration of outsiders, for both permanent and seasonal residence. In 1992, the total population of Cambodia was estimated to be 5 million, compared to a present population of approximately 13 million. The number of people living around Tonle Sap Lake has increased to a current estimate of 1.2 million. As the population increases, the issue of sustainable fishing quotas becomes ever more relevant in Tonle Sap Lake, along the Mekong River and in the coastal zone. People strive for better living conditions for their families through increased production, which in turn can increase the pressure on fish populations.

A number of farmers have also changed their occupation to fishing due to harsh weather conditions such as floods and droughts, which have damaged crops for the last three years. Population pressure is thus caused by both population growth and migration of farmers to fishing areas (Thay et al., 2005).

5.6.2.4 Biodiversity and Habitat Loss

Natural habitats, particularly flooded forests, have the highest productivity of all fisheries, and therefore deforestation or conversion to agricultural land has a marked negative effect on fish stocks. The regeneration of both migratory and non-migratory fish stocks and the future productivity of fisheries depend on flooded plains as spawning grounds, nurseries and feeding grounds. The destruction of flooded forest could also have a global impact in terms of loss

of habitat for threatened species (Thay et al., 2005). Pollution also contributes to the loss of biodiversity and habitats. The use of hazardous pesticides and other agrochemicals (such as DDT) in the catchment areas of the Tonle Sap have been shown to leave high chemical concentrations in fish samples from the lower Mekong basin.

5.6.2.5 Resource Conflicts

Different irregularities and conflicts are occurring between lot operators and local communities situated inside or around fishing lots. The most common conflicts concern unclear demarcation of boundaries of fishing lots and common access areas, and poaching inside the fishing lot. One of the main causes of problems is that lot boundaries are very poorly demarcated and enforced. This means that fishers are sometimes accused of poaching even when they are in open access areas. Common property areas are seized for private gain by powerful people, occasionally with the use of intimidation, weapons and military and police involvement. Rarely do conflicts come to the courts for resolution (Thay, 2005).

5.7. Decentralisation of Cambodia's Natural Resource Management

In the last few years, a number of reforms have been implemented to try to improve the management and productivity of natural resources. One result of these efforts is the ongoing implementation of a new legal framework for community-based natural resource management. There are specific efforts in both forestry and fisheries.

5.7.1. *Community-Based Forest Management*

The Community Forestry Sub-Decree was passed by the Council of Ministers in October 2003. Its approval represents an important step toward decentralisation of natural resources management to the people who depend on them and manage them day to day. This development is seen by many as an important step on the way to sustainable management of forest resources.

As outlined earlier, all Cambodian forests are state property and under the control and management of MAFF, as specified in the Forestry Law (RGC, 2002). However, the Ministry of Environment has authority over protected areas, which include large land areas with forest cover. This has created conflicting interests and overlapping management and decision-making responsibilities. In an effort to decentralise and improve forest management, community forestry was introduced. Community forestry units were established as separate bodies within the Forest Administration and MoE. The sub-decree on community forestry was promulgated in December 2003, and sub-decrees and prakas outlining detailed issues of management and practices are still under preparation.

Although community forestry has been promoted as an important way to manage and control forest resources, a number of problems remain. For instance, the areas allocated for management under the community forestry provisions so far have mostly been degraded and not in productive forest with high-value trees and forest products (Mak, undated; McKenney et al., 2004). If community forests are primarily allocated in degraded or less productive areas, it is first of all questionable how much the involved households will be able to benefit in terms of either cash or

subsistence income. Furthermore, management of degraded forests demands both technical and economic support in order to be successful. It is therefore a priority that communities not only receive adequate support to manage community forests, but also that community forests contain resources of considerable value. An interesting question is, to what extent current community forests are able to create a sustainable flow of income and products and how profitability may be improved in the future.

In relation to legal recognition and decision making, there seems to be a gap in the division of responsibilities and decentralisation of decision-making authorities. Commune councils, which are often mentioned as important institutions in natural resource management, have no formal authority over forests, but if conflicts occur, councils are responsible for resolving them in collaboration with the FA. Although community forestry was initiated in order to decentralise decision making and management, it still seems that real decisive power is maintained at the centre.

The most recent official statistics report a total of 159 communities involved in community forestry, covering approximately 64,901 ha (DFW 2003a). This area is less than 1 percent of Cambodia's total forested area, which indicates the need for improved management, not only of community forests, but of the whole of Cambodia's forest estate.

5.7.2. Community-Based Fishery Management

The most recent law on fisheries was promulgated in 1987, and generally contains a number of similarities with the 1956 decree, which in turn was based on the practices and restrictions from the French protectorate's fisheries policies.

As mentioned, conflicts are common in the sector. Competing claims over resources between commercial interests and small-scale fishers have become ever more frequent. In 2000, the fishing sector underwent a reform in order to reduce the number of conflicts and improve access to fisheries by small-scale fishers. Pursuant to this, the government allocated 56.23 percent of the commercial fishing lot areas to local communities. There are about 360 community fisheries established across Cambodia, most of them in or around Tonle Sap Lake (Thay *et al.*, 2005).

Even though the establishment of community fisheries in the Tonle Sap region is well under way, a number of serious related legal, managerial and structural obstacles remain. An issue which seems to be recurrent in several locations is that areas released to local communities are often degraded and less productive. This naturally affects the income-generating possibilities and capacity of local communities to protect and manage their resources (Mak, undated; FACT 2000).

As the concept of community fisheries is new, the community must have the wish and will to enter a communal management system whose organisation must be well defined, including specific roles and responsibilities of members. Such organisation is generally not available at present but must be created incorporating the following issues: (i) geographical boundaries and secure tenure rights of the specific management regimes; (ii) a management structure with clear roles and responsibilities as well as provisions for accountability; (iii) operating guidelines, systems and procedures, governing fisheries management; (iv) essential technical, managerial and financial support systems.

A number of the current problems in the fishing sector can be traced to weaknesses of the Fisheries Law and related legislation. The current legislation is outdated, provides no clear management guidelines and has no provision for planning and implementation of existing regulations. Currently, a new fisheries law is under formulation and awaits approval from the Council of Ministers (Thay et al., 2005). The new law and related sub-decrees should create the legal framework for improved community management of the newly released resources. A sound legal and administrative framework is an important foundation for community-based fisheries. In order to meet the need for improved management, DoF has developed a set of strategies to establish a sound framework. It is expected that DoF will pursue the following key strategies: (i) establishment and maintenance of community-based management systems and procedures for the management and administration of natural resources and fisheries; (ii) finalisation and introduction of the new Fisheries Law, necessary decrees and administrative provisions into fisheries and the fisheries service; (iii) training and awareness building to support the community-based framework for fisheries and the smooth introduction and application of the new law.

5.8. Conclusion

Forests and fisheries are of vital importance to millions of Cambodians. Natural resources support livelihoods, income, ecosystems and biodiversity. However, the list of potential threats to these resources is long and includes unclear legal frameworks, weak institutions, inadequate land classification and demarcation, increasing population and unsustainable exploitation of the resources due to poverty and poor management. The recent policy reform, which is part of the government's decentralisation process, has created a framework for community-based natural resource management, with specific emphasis on community forestry and fisheries. But there are many challenges ahead to achieve such a goal. The continued commitment and effort of the government are essential. Similarly, the donor community, including international organisations and NGOs, must continue to provide both financial and technical assistance, to help realise the ultimate goal of poverty reduction and sustainable natural resource management.

In order to make community management attractive to local communities, there is a need to address their specific capacities. Therefore, areas with significant resources must be included under communal management in order to make the management of these profitable to the users. If the main objective of community forestry is to regenerate degraded forests, there is little profit to be gained for poor farmers, and their participation will surely be lost. Similarly, there is little incentive to improve fishing techniques and fishery management if the areas released for local use are all very poor in fish stocks. Furthermore, there is a need for secure land titling, transparency in user rights and regulations and enforcement of these rules in order to stop illegal activities.

The challenges facing communal management of natural resources are many, but dealing with them is an important step towards increased public involvement, income generation and improved management. Even with effective community forestry, there will still be large areas of forests that will not be included under this form of management. At present only 1 percent of the forest estate is designated community forest, and because the concession system is still blocked by the 2002 logging moratorium, a large part of the forest estate is presently under de facto open access, managed mainly by unofficial channels. Therefore, there is an urgent need for improvement of the management of the forest estate currently under the direct authority of the FA. This process

has been started, as the FA is currently revising the management structure in order to replace the concession system with development of cantonment plans using annual bidding coupes. It is uncertain how this system, which in many aspects resembles the concession system, will improve the management of forests. An interesting suggestion carried forward in the IFSR is the concept of partnership forestry, in which commune councils are envisaged to play a much more important role in managing forest resources. This approach is not viewed as a substitute for community forestry, but rather as a supporting structure and framework.

In the fishing sector, the problems and possibilities outlined above in many ways resemble those found in forestry, including low productivity of released areas and weak legal recognition and demarcation of fishing lots.

In addition to the threats and challenges outlined in the present chapter, there still seem to be important gaps in knowledge and data pertaining to most parts of the natural resources and environment sector and the effectiveness and profitability of communal management systems, as well as lack of basic data on forest, fish and water resources. Considering the importance of natural resources to Cambodia, it is imperative that the management of these be given high priority by the government, donors and NGOs.

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The Competitiveness of Cambodian Agriculture: A Case Study of Maize, Soybeans and Cassava in Cambodia, Thailand and Vietnam

C H A P T E R (6)

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6.1. Introduction

6.1.1. Background and rationale

South-east Asia is one of the most dynamic regions of the world, achieving major structural shifts in the economy, huge poverty reduction and productivity growth in both industry and agriculture. Although Cambodia is geographically situated at the heart of SE Asia, it has remained somewhat removed and unaffected by the development dynamics of the region. There is, however, now increasing realisation among policy makers that future growth and poverty reduction in Cambodia cannot be realised without much more focused attention on the rural-agricultural sector. The structure of the economy is weak, with a heavy dependence on garments and tourism—both very susceptible to external shocks and poorly linked to the rest of the economy.

There remains considerable potential for Cambodian agriculture to realise productivity gains as well as a much more diversified, high value structure of production. It is relatively more land abundant, although there are big problems related to access to land, land rights and the existence of powerful vested interests involved in land grabs, often in the name of foreign investment. Whatever the constraints, agricultural growth and development must be vigorously pursued in Cambodia for at least four reasons: to alleviate poverty through employment creation and income generation in rural areas, to meet growing food needs driven by rapid population growth and urbanisation, to stimulate overall economic growth and to conserve natural resources (Per, P.A and Rajul P.L., 2001). At the risk of oversimplification, Cambodian agriculture has to find a place for itself within SE Asia, especially in the midst of technologically stronger neighbours—Thailand and Vietnam.

Cambodian agriculture accounts for around 30 percent of GDP, with garments, tourism and services making up most of the rest. At present, the area under cultivation is about 36,000 square km, which accounts for 20 percent of the total land area of the country. The major agricultural products include rice, rubber, maize, soybeans, sugar cane, cassava, bananas, timber and marine products. As much as 36 percent of the Cambodian population live below the basic needs poverty line, and nationally, “56 percent of children under five suffer from chronic malnutrition, which has stunted their growth, and 13 percent suffer from acute malnutrition” (World Food Programme, 2002).

The challenge before the country therefore is to raise productivity, diversify production into high-value crops and raise exports. This paper focuses on the competitiveness of the agricultural sector in Cambodia with particular reference to a number of cash crops produced and exported in small quantities to Vietnam and Thailand. These are maize, cassava and soybeans. The study is based on detailed interviews with a variety of respondents, including farmers, traders, government officials, transport workers and owners, in order to gain an understanding of the trading and marketing

systems of these products, and to identify institutional constraints. The assumption is that there are constraints largely in the marketing systems which reduce the competitiveness of Cambodian agriculture. However, in order to test this assumption, this study begins with an exploration of production conditions and costs. An attempt is also made to provide some comparative estimates of production and trade costs in Cambodia, Vietnam and Thailand.

6.1.2. Methodology

This paper is based on a review of a number of case studies focusing on agricultural competitiveness in Cambodia, Vietnam and Thailand, conducted separately by the Cambodia Development Resource Institute in Cambodia (CDRI); Centre for Ecological Economics, Faculty of Economics, Chulalongkorn University, Bangkok, Thailand; and the School of Economics and Business Administration, Can Tho University, in Vietnam. It also includes data from the progress report on the CDRI's project "Improving Marketing Systems of Maize and Soybeans in Cambodia".

6.2. Production of Maize, Soybeans and Cassava in Cambodia

6.2.1. National Production of Soybeans, Maize and Cassava

Soybeans, maize and cassava are the main cash crops in Cambodia after rice and rubber. Cambodia produces a lot of soybeans, most of which are exported. Not all parts of Cambodia are suitable for growing soybeans, which require more fertile soil than other crops. Nevertheless, Cambodia seems relatively well suited to this crop, reaching an average yield of about one tonne per ha, which is the highest in ASEAN (FAO 1999). However, it is likely that this initial fertility will decline quickly over time as soil nutrients become exhausted. After Vietnam, Cambodia is the largest ASEAN exporter of soybeans. Annual production of soybeans, as documented by the Ministry of Agriculture, Forestry and Fisheries (MAFF), has increased from about 25,000 tonnes in 2001 to 39,000 tonnes in 2002 and 63,000 tonnes in 2003. The total harvested areas increased from 29,000 ha in 2001 to 52,000 ha in 2003. Moreover, the yield increased from 0.8 tonnes per ha in 2001 to 1.3 tonnes per ha in 2002, decreasing slightly to 1.2 tonnes per ha in 2003 (Table 6.1). Kompong Cham province is by far the largest producer of soybeans, followed by Battambang and Pailin. The production area in Battambang more than doubled between 2001 and 2003, and the yield per ha is higher than the national average. Battambang has the advantage of bordering Thailand, which has been one of the main export markets for Cambodia's agricultural products. In this province, soybeans are normally cultivated after maize on new land, which is being cleared of forests at an increasing rate. Moreover, soybean production in Kompong Thom and Preah Vihear has increased for the same reasons as in Battambang. Large areas of forests have been cleared, and most of the new land has been put under soybean cultivation.

Maize, an internationally traded grain, is a very popular crop grown in all provinces of Cambodia. It does not require as good a soil as soybeans, although better soil provides higher yields. Cambodia, Vietnam and Thailand are all net exporters of maize, according to FAO (2000). Two types of maize are grown in Cambodia: white maize for human domestic consumption, and yellow maize mostly for animal feed and export. Many Cambodian farmers grow maize on a small scale as a subsidiary crop. According to MAFF statistics, maize production is significant in all provinces and municipalities. Battambang province, however, stands out, accounting for 74 percent of total maize production in 2001 and 62 percent in 2002. As shown in Annex1, maize production in

Battambang rose dramatically within a short period, climbing almost six-fold from 2001 to 2003. This increase resulted from a doubling of the harvested area and the yield per hectare reaching an average of 4.5 tonnes in 2003. Based on our fieldwork, the average maize yield in Battambang is 4.8 tonnes per hectare. There was also a big jump in Battambang's maize production from 2001 to 2003 in the MAFF statistics, which was not verified in the field. Maize production in Battambang was recorded at 137,152 tonnes in 2001, dropped to 92,778 tonnes in 2002 and suddenly increased to 232,936 tonnes in 2003 (See Annex 1). The explanation for this is that three districts, Kamrieng, Phnom Proek and Sampov Lun, have rich red soil and black soil with adequate moisture, making them ideal for growing maize. In addition, there is direct access to markets in neighbouring Thailand. As in Preah Vihear, rapid land clearing is going on in these districts, and thus the potential for expanding maize production is high—albeit at the cost of deforestation. These are small farms cleared from forests that were already degraded by illegal logging carried out over the past several years.

Cassava is inexpensive, around \$20 per tonne. However, one hectare of good land may yield 20 tonnes of raw cassava, for a gross revenue of \$400. Cassava production in the wet season in Cambodia has increased dramatically, from 120,000 tonnes in 2002 to 314,000 tonnes in 2003. At \$20 per tonne, this represents \$6 million of gross revenue, which is rather small for the Cambodian economy as a whole. However, based on our field inquiries, these figures appear to be grossly underestimated. For example, in certain areas of Kompong Cham and Battambang, cassava production was reported to be twice as high as the amount cited in the official statistics. There are some indications that cassava production in Kompong Cham is increasing. It now has a factory that processes cassava. The factory absorbs about one-third of production in the province. The other two-thirds must find markets in Vietnam, generally through informal exporting (without a licence). Since cassava is a heavy, low-value product, reliance on unprocessed exports to Vietnam may not be viable. Setting up processing factories and improving transportation would provide incentives for cassava production to expand. Because it is the largest producer of cassava in the area, Kompong Cham province was chosen for fieldwork on its growing, marketing, export and processing.

Table 6.1: Harvested Area, Yield and Production of Soybeans, Maize and Cassava

	Harvested Area (ha)			Yield (tonnes/ha)			Production (tonnes)		
	2001	2002	2003	2001	2002	2003	2001	2002	2003
Soybean	28,687	28,935	51,699	0.86	1.34	1.22	24,658	38,801	62,918
Maize	67,213	71,594	63,777	2.76	2.08	4.45	185,589	148,897	283,610
Cassava	13,590	19,284	23,907	10.47	6.33	13.20	142,262	120,014	314,237

Source: *Agricultural Statistics 2001-02, 2002-03 and 2003-04*

6.2.2. Average Land Size and Yield in the Study Areas

Soybeans

Soybeans are planted in July and harvested in October or November in Bos Khnaor commune, Chamkar Leu district, Kompong Cham. The average crop life is 3.5 months. Almost all the farms are big, with an area of 3.6 ha on average. It is common for all cultivation tasks to be performed by hired labour, mostly from other districts, and hired machinery. The yield in the commune is low, about 1.1 tonnes per ha on average, and varies depending on soil fertility (Table 6.2).

Table 6.2: Average Land Size and Soybean Yield of Studied Villages in Bos Khnaor Commune

Village	Average land size (ha)	Average yields per ha (tonnes)
Samaki	2.2	1.1
Saray	2.1	1.2
Bos Khnaor	6.4	1.0
Dab Makara	3.6	1.3
<i>Average</i>	<i>3.6</i>	<i>1.1</i>

Source: CDRI survey, 2004

Maize

In Kamrieng commune, maize is planted twice a year. The first planting is in March–April and the harvest is in July–August. The second planting is in August for harvest in December. The period from planting to harvest is about 120 days. In the dry season, farmers normally cultivate other crops that require less water, such as mung beans, peanuts or soybeans. Farmers also face the challenge of choosing which crops to grow. Our research found that some farmers switched between various crops in search of higher profits in response to “market signals” or relative price changes. In the 2003 dry season, more farmers started growing cassava instead of maize. Most of the farms are on new land cleared from forests. The land is relatively abundant and very fertile. In the study area, an average household holds about 4.7 hectares. Yellow maize is grown for export to Thailand, and the average yield is 4.8 tonnes/ha (Table 6.3). This yield is slightly higher than the national average.

Table 6.3: Average Land Area and Yield of Maize of Studied Villages in Kamrieng

Village	Average land area (ha)	Average yield (tonnes/ha)
Kamrieng	4.3	3.3
Svay Veng	6.7	4.3
Svay Sa	4.5	5.4
Ou Chriey	3.5	6.3
<i>Average</i>	<i>4.7</i>	<i>4.8</i>

Source: CDRI survey, 2004

Cassava

Cassava is planted in April–May and harvested in December–March in Kokir commune. Although the harvest can be delayed, the ideal life span for the plant to yield the maximum amount of flour is 10 months. According to our survey, average farmland for cassava is 1.3 hectares. In certain areas, the yield is as high as 35 tonnes per ha. However, the average yield is only 8.7 tonnes of fresh cassava per ha (Table 6.4). This yield is lower than the national average. It is quite simple to cultivate cassava. The main tasks include land preparation, planting, weeding and harvesting.

Table 6.4: Average Land Size and Yield of Cassava in Villages in Kokir Commune in 2003

Village	Average land size (Ha)	Average yields per ha (tonnes)
Srae Poul	1.2	9.0
Kokir Cheung	1.4	11.2
Kokir Tboung	1.2	6.2
Prek Puoy	1.6	8.5
<i>Average</i>	<i>1.3</i>	<i>8.7</i>

Source: CDRI survey, 2004.

6.2.3. Production Costs and Returns

In this study we used variable costs to calculate the gross margin. These costs apply for only one season and exclude the cost of family labour. They include seeds, fertiliser, herbicides, wage labour, land rent, ploughing and planting. Gross margin is equal to total income less variable costs, and we compare the gross margin of different villages and crops.

Production Costs and Returns of Soybeans

Interviews with individual farmers found that the returns vary from village to village depending on local road conditions and yield. The average variable cost was \$153.9 per ha and the average gross return was \$287.5 per ha per season in 2003. So, the gross margin per month per ha is \$34.0 (Table 6.5).

Soil preparation and threshing are normally done by machines, while planting, weeding and harvesting are performed by hired labour. About 10–15 people are hired to plant, do the weeding and harvest the crop. The average wage rate is 4,000 riels (\$1.00) per day, with about 15 percent variation depending on the demand for labour.

Table 6.5: Gross Margins of Soybeans of Selected Villages in Bos Khnaor Commune (\$/ha)

Village	Variable costs	Return	Gross Margin (\$)	Gross Margin (\$ per month)
Samaki	154.9	275	129.1	32.3
Saray	155.7	300	144.3	36.1
Bos Khnaor	143.2	250	106.8	26.7
Dab Makara	161.7	325	163.3	40.8
<i>Average</i>	<i>153.9</i>	<i>287.5</i>	<i>135.9</i>	<i>34.0</i>

Source: CDRI survey, 2004

Production Costs and Returns of Maize

Table 6.6 shows that the production costs varied from one village to another in 2004. This was due to different distances of villages from the main road and land quality. In Ou Chriey, the village that is more distant and difficult to reach than any other, the ploughing fee was higher, while the price of maize was lower. But this village has the fertile soil, high yield and has the highest return and highest gross margin. In contrast, the village in which maize fields are close to the main road, the ploughing fee was lower, but the price of maize was higher. Table 6.6 shows the average variable cost was \$139 per ha compared to the average gross return of \$209 per ha per season. Or, the gross margin per month per ha was \$17.6.

Table 6.6: Gross Margins of Maize of Selected Villages in Kamrieng Commune (\$/ha)

Village	Variable Costs	Return	Gross Margin	Gross Margin (\$per month)
Kamrieng	124.2	142.1	17.9	4.5
Svay Veng	124.0	189.0	65.0	16.3
Svay Sa	138.7	234.0	95.3	23.8
Ou Chriey	168.9	272.0	103.1	25.8
<i>Average</i>	<i>139.0</i>	<i>209.3</i>	<i>70.3</i>	<i>17.6</i>

Source: CDRI survey, 2004

Production Costs and Returns of Cassava

The return from cassava farming is very low, about \$219.5 per ha per year on average in the commune (Table 6.7). The gross margin per month is \$11.3 per ha.

Table 6.7: Gross Margins of Cassava in Selected Villages in Kokir Commune (\$/ha)

Village	Variable costs	Return	Gross Margin	Gross Margin (per month)
Srae Poul	120.8	247.9	127.1	14.1
Kokir Cheung	146.0	261.3	115.3	12.8
Kokir Tboung	76.9	159.4	79.5	8.8
Prek Puoy	123.6	209.4	85	9.4
<i>Average</i>	<i>116.8</i>	<i>219.5</i>	<i>101.7</i>	<i>11.3</i>

Source: CDRI survey, 2004

6.2.4. Production Constraints

Cambodian agriculture is characterised by rain-fed farming, so the yield is very much conditioned by precipitation. The study found that farmers face many constraints on production, with credit being the biggest problem. More than 80 percent of producers borrow from moneylenders. Credit is in short supply, especially for poor farmers. It is very difficult for the poor to obtain credit from formal organisations such as ACLEDA, and others have to use their land as collateral. There is still opportunity for the poor to obtain credit from informal providers such as middlemen and rich farmers in the village, but the interest rates are very high, from 5 to 10 percent per month. This credit is usually used to increase production, but can put the farmer at risk of default if his crops fail, leading to a spiral of indebtedness and distressed sale of land. This happens when farmers ask middlemen for money to cover production costs. The poor farmers have to sell their harvests to the middlemen at less than the market price. For example, in 2003 the price of soybeans at harvest time was 950–1,000 riels/kg, but only 500 riels/kg was offered to farmers who were in debt. On the other hand, rich farmers benefit from the credit system. They have many plots of land and can access credit easily at a low interest rate from ACLEDA, as they can use the land as collateral security.

Farmers still use traditional farming techniques without irrigation, little fertiliser, small amounts of pesticides and traditional farming tools. Moreover, farmers do not know how to use fertiliser and pesticides properly. Hybrid maize seeds are imported from Thailand and are very expensive at \$2 per kg. Only a few varieties of soybean seeds have been tested, and they have not been put into general use.

Post-harvest loss seems to be a very big problem. Other production constraints are: farmers not being organised, low education, high fuel costs and poor roads.

6.3. Maize, Soybean and Cassava Marketing Systems in Cambodia

6.3.1. Marketing Structure

Marketing plays a crucial role in determining the prices and production prospects of commodities. It is one of the most important elements for a business, and it brings revenue to producers as well as traders. “Marketing transforms products over time, space and form through storage, transportation and processing. Through marketing, goods are exchanged and prices are set. Markets communicate signals to producers, processors, input suppliers and consumers about the costs of buying, selling, storing, processing and transporting.” (Norton and Alwang 1993:251).

Like many other least developed countries, Cambodia has serious marketing deficiencies caused by weak infrastructure, a lack of information among producers and government-induced market distortions. Considerable efforts have been made to develop the marketing system in Cambodia, which has resulted in the reduction of marketing deficiencies and enabled a competitive market structure to develop (MAFF, 1999). Serious constraints remain, however, especially in more remote areas.

Due to geography and poor road conditions, most of the soybeans, maize and cassava produced in Kompong Cham, Kompong Thom and Preah Vihear are exported to southern Vietnam, while those grown in Battambang and Pailin are exported to Thailand. The study on soybeans showed that consumption in Kompong Cham in 2005 was about 350 tonnes per year, which is equal to 0.61 percent of total production in the area; most of these soybeans were exported to Vietnam. During fieldwork, it was not possible to estimate how much soybean was exported to Vietnam, but the inter-provincial wholesalers indicated that between 10 and 15 percent of soybeans were for domestic consumption. Similarly, according to the maize study in Kamrieng commune in Battambang, about 80 percent of maize produced was exported to Thailand and only 20 percent used by animal feed industries in Phnom Penh, especially the CP group. The study of cassava in Kompong Cham province showed that about 65 percent of cassava was exported to Vietnam.

The prices of soybeans, maize and cassava in Cambodia are therefore determined by Vietnamese and Thai traders, who may in turn be regulated by world market prices. Markets for soybeans, maize and cassava in Cambodia are subject to big price variations throughout the year depending on the quantity and total production in the region, and world or border price fluctuations.

There are four levels of traders involved in the export of soybeans to southern Vietnam: collectors, district wholesalers, inter-provincial wholesalers and exporters.

The Collectors

The collector is the first level of trader and is based in his/her own village or commune. Most of them are commissioned by district wholesalers inside and outside the commune, but a few are independent. The independents are more speculative because they can store and sell crops later for a higher price. Generally, the collectors approach producers directly at the farm gate. A collector can work with a few district wholesalers. It was not possible to count the collectors in this study because there were many of them in the commune and they could enter and exit the business seasonally, depending on their time and their relationships with district wholesalers.

District Wholesalers

District wholesalers are the second level of trader in the commune or district. They never buy the product at the farm. They have greater bargaining power than the collectors and can determine the price of soybeans, because the collectors and farmers don't have a relationship with the inter-provincial wholesalers or exporters. They buy from both producers and collectors. Producers who have transportation and are close to district wholesalers sell directly to them. The price offered by district wholesalers is a bit higher than that of collectors. However, the net margin may not be very different after taking into account transportation costs. The district wholesaler has a very close relationship with some inter-provincial wholesalers. A district wholesaler can have a network of as many as 30–50 collectors. This network is driven by trust or credit relations.

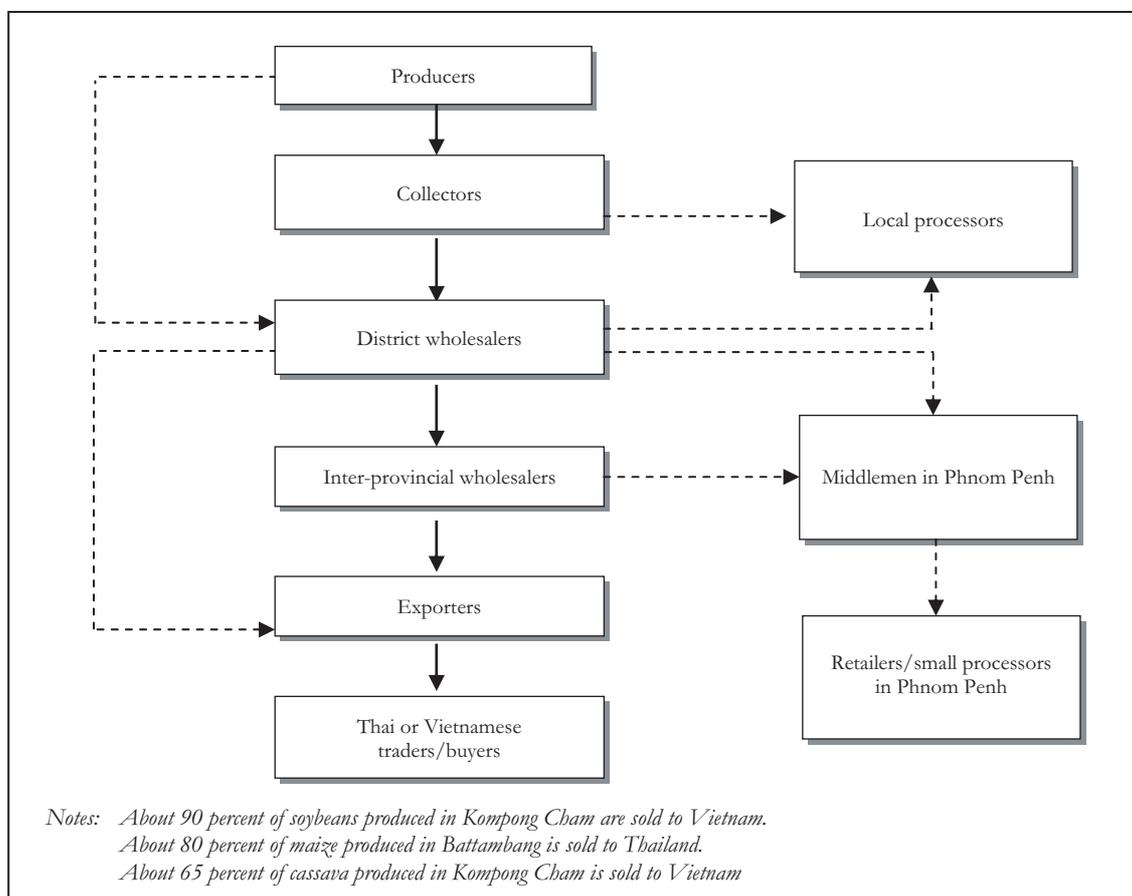
Inter-Provincial Wholesalers

Inter-provincial wholesalers are the third level of trader. They buy their products mainly from district wholesalers. They have five to 10 district wholesalers to assist them in the purchase of soybeans. Normally the trade between the wholesalers is based on oral contracts, so trust plays a very important role. Trust is usually built through repeat transactions, often containing elements of credit, e.g. through part spot payments. However, problems still arise between wholesalers over issues of quality, price fluctuations and delays in delivery or payments.

Exporters

Exporters are the fourth level trader and are mainly located in Neak Loeang or along the Thai-Cambodian border. There are only a few exporters. They buy produce from the district and inter-provincial wholesalers and sell to Taing Chov in Vietnam or to Thailand.

Figure 6.1: Flow Diagram of the Marketing Chain for Soybeans, Maize and Cassava



6.3.2. Transportation Costs and Fees

The road to Bos Khnaor village, which was bad at the beginning of the study, was repaired, making people very happy. It costs 10,000 riels (\$2.50) to transport one tonne of soybeans from the village to Prey Totueng market, about 26 km away. Transportation costs have been reduced because more second-hand trucks from South Korea are now available. Also, better roads enable more middlemen to travel to the village, thus increasing competition at the farm gate and helping to support prices. Within the village, however, horse carts are used to transport soybeans to the wholesaler. The cost of this traditional mode of transport is 2,500 riels per sack in the wet season and 500 riels in the dry season.

The sharp reduction in transport cost has obviously helped soybean marketing. One reason transport costs were so much higher in the past was that there were armed forces along the road illegally demanding money from transporters. Also, there were fewer trucks at that time.

One main trade route was studied in order to measure actual costs of moving soybeans from a production commune to the largest trade town, Neak Loeng. The total length of the route is 120 km. The breakdown of transportation costs is presented in Table 6.10.

Our survey found that transport costs were relatively high mainly because of the cost of fuel, which, at that time, was still only two-thirds of the current price. To transport 14 tonnes over 120 km, diesel fuel alone cost \$60, second only to the truck fee of \$72.50. Next was the road fee of \$46.25, which consisted mainly of the truck weighing charge. The cost of transporting one tonne of soybeans over 100 km was about \$12 (Table 6.8).

Table 6.8: Costs and Fees to Transport Soybeans from Bos Khnaor Commune to Phnom Penh (120 km)

Expenses	\$/truck of 14 tonnes
Driver payment	5.00
Diesel (1,600 riels x 150 litres)	60.00
Labour for loading	14.00
Truck fee *	72.50
Road fee (mainly scale fee)	46.25
Total cost per truckload of 14 tonnes	197.75
Total cost per 1 tonne per trip	14.12
Total cost per 1 tonne per 100 km	11.77

* The seller has her own truck, and the truck fee was paid by the soybean buyer.
Source: Observation

Fees Along the Roads

Observation along the road taken by the truck in January 2004 revealed that unofficial fees were not a big issue, especially at night, when less than one dollar was paid to police and the military positioned along the road. The fees include: official, unofficial and illegal checkpoints, such as mobile police, military police and traffic police. At night the total road fee was \$3.30 per tonne. During daytime, there were more checkpoints and the total road fee was \$3.90 per tonne.

Aside from the financial costs, the need to stop at 17 locations on a 120 km road is burdensome. There is also considerable loss of time from the forced stops to pay fees. Sometimes there is a big delay resulting from difficult negotiations at some checkpoints. This kind of checking can also be a form of harassment.

In the past, fees along the road, especially unofficial ones, were higher. In 2004, there were 23 checkpoints requiring payment. Here again, it was the truck weighing stations that charged the biggest fee. And vehicles had to stop more often to pay police and the military police positioned along the road.

Case Study 1: Transporting Soybeans: Running the Gauntlet

This actual observation was conducted at night in January 2004 by a CDRI researcher. The transport took four and a half hours from Bos Khnaor, Kompong Cham, for a trip of 120 km. The truck owner decided to drive at night to avoid paying high transportation fees. The truck went smoothly from Bos Khnaor to Skoun (although there was one station in Bos Khnaor which charged 3,000 riels/truck). The situation was tense when the truck reached Skoun because there was an authorised station that charged 150,000 riels/truck. This was very high compared to other fees, and the soybean broker ordered the driver to try to escape paying. It was very risky at that moment because the police and other officials tried to catch the truck. Eventually the truck avoided paying, but if it had been caught, there would have been a double fine imposed of 300,000 riels. In this risky situation, asked why she tried to avoid the fee, the soybean broker responded that taking risks is the best way to minimise costs. She added that normally the truck could escape easily if it was not fully loaded, and she would pay the fee if the truck was fully loaded. Another reason was that she was willing to pay if the fee was charged at a standard rate and not based on whim.

From Skoun to Prek Leap, there were no more checkpoints because it was night, the soybean broker said. Before reaching the Chroy Chongva Bridge, there was one more checkpoint under the police, and the traffic police positioned in front of the station to demand a fee of 2,000 riels for a transport permit.

Source: Observation of the transport of soybeans from Bos Khnaor Commune to the Chroy Chongva Bridge, Phnom Penh.

The study of maize in Kamrieng district, Battambang, showed that the maize market is almost totally dependent on the Thai market, because the domestic market can absorb only a small proportion (less than 10 percent) of the total production in the province.

Although there appear to be no major barriers to entry, there were only a few middlemen in this sector. In Kompong Reang commune, a few Cambodians collected maize for Thai traders. They received a payment of 2 baht per sack of 120 kg. These local collectors gathered maize from farms after it was harvested, bagged it and stored it in warehouses on the farm. The Thai traders did business only with those they knew and trusted. There was only one Cambodian who became a trader on his own, after working for a Thai businessman for four years.

There is a clear opportunity for “Cambodianising” the maize trade. The Thai businesses have better bargaining power because they are the sole buyers of maize in the area. There have been efforts to set up markets for maize on the Cambodian side, or to create associations, in order to increase the bargaining power of Cambodian farmers, but so far, for various reasons, there has been very little success.

In the past seven years, the farm-gate price of maize has been quite stable, fluctuating between 2.8 and 3.2 baht per kg, or around \$70 per tonne. Thai wholesalers, who are located about an hour’s journey from the border, offer a price of 3.8–3.9 baht per kg. Transport costs 150 baht per tonne, or 0.15 baht per kg. Thai farmers reportedly receive 3.6 baht per kg even though their maize is of poorer quality. Thai farmers use chemicals for maize production, while Cambodian farmers do not because the new land is very fertile. District and border authorities also demand high fees, which suppresses farm-gate prices (Table 6.9).

Table 6.9: Costs and Fees to Transport Maize from Kamrieng Commune to Thailand (about 30 km from the border)

	\$ per tonne
Farm-gate price	69.05
Fees along road (30?40 baht at each place)	0.24
Fee imposed on truck	0.48
<i>Pheasy (fee)</i> in Cambodia	2.38
<i>Pheasy (fee)</i> in Thailand	4.37
Fee for border police	0.24
Road contribution to transport authority	0.36
Total fees	8.09
Threshing	3.97
Loading and unloading in Cambodia	2.98
Transportation from farm to main road	3.97
Transportation costs in Thailand	3.57
Total marketing costs	22.58
Net benefit for trader	2.38
Price offered in Thailand	93.97
Total fees as a percentage of farm gate price	11.7 percent

Source: CDRI survey, 2004

The fees imposed at the border are distributed to all border authorities. The use of the pheasy on the Cambodian side of the border is not very clear and possibly used to pay for a number of items:

- Administration fee
- Migration fee
- Police at the border
- Soldiers at the border
- Commune/district at the border
- Battambang province
- Ministry of Commerce

The pheasy at the border on Thai side is used in the payment of:

- Administration fee
- Customer tax
- Police at border
- Soldiers at border
- Commune at border

Similarly, the study of cassava shows that although there are no official fees required from cassava traders, they still have to spend a significant amount of money and time to deal with unofficial fees along the road. The traders reported that in the past few years they had paid fees at nine places within a distance of 12 km when sending their produce to Vietnam. Most of the checkpoints are illegal and mobile. They demand small amounts of money, 500–1,000 riels per truck (carrying seven tonnes). This makes the journey slow and bothersome. The situation has improved remarkably at present. Our trip on a truck revealed only four places, charging a total fee of \$10.50 for a truck of eight tonnes. This fee may still be high considering the low price of cassava, which fluctuates around \$20 per tonne.

6.3.3. The Marketing Margin

The margin gained by each trader is difficult to estimate. It can be very high, or it can be negative depending on fluctuating market conditions. Soybean marketing from farm gate to the Taing Chov area in Vietnam shows that traders are happy with a \$5 margin on one tonne of produce, which is a typical gain from trading agricultural products immediately. Based on this estimate and transport costs, the costs in the marketing chain for soybeans along one route are worked out and presented in table 6.10.

Table 6.10: Price of Soybeans in the Marketing Chain (\$/tonne) along a Trade Route from Bos Knaor Commune in Kompong Cham, through Neak Loeang in Cambodia, to Taing Chov in Vietnam

Trade route	US \$ per tonne				Selling Price*
	Average Margin	Transport and fee	Loading, Unloading	Total	
Farmer					260
Collector	5	2	0	7	267
District wholesaler	5	0	2	7	274
Inter-provincial wholesaler (by route)	5	2.5	2	9.5	281
Exporter in Neak Loeang (by road)	5	7	2.5	14.5	305
Importer in Taing Chov (by boat)	12	15	3	23	340
Total	25	26.5	9.5	61	

Source: CDRI survey, 2004

* Selling price updated in May 2005.

Table 6.10 also shows that transport costs by boat from Neak Loeang to Taing Chov (about 90 km) are \$18 per tonne. In the interviews, it was impossible for the respondents to separate the transportation cost from the fees. In the case of Vietnam, the transportation cost by boat from Taing Chov to Ho Chi Minh (about 500 km) is \$3.5 per tonne. This suggests that the fees from Neak Loeang to Taing Chov were about \$14 per tonne for soybeans.

The Cambodian Law on Agricultural Policy states: “Exportations: no restriction or prohibition measures are imposed on agricultural product export except for narcotic drugs. A ten per cent

tax is levied on exports of purebred cattle and swine. The export restriction on rice was lifted in July 2001. However, the government maintains the right to reintroduce restrictive measures in the future if necessary to prevent or relieve critical shortages of foodstuffs, which is allowed under the GATT. Upon its accession, Cambodia will bind its agricultural export subsidies at zero, and not maintain or apply any export subsidies for agricultural products.” This shows that the fees imposed along the trade route are illegal.

6.3.4. Major Issues in Marketing

As mentioned above, transportation costs and fees are a major concern in produce marketing. However, there are many additional issues that can have a negative influence on marketing. We group these issues into three types: physical, human and institutional (Table 6.11).

Table 6.11: Major Issues in Marketing

Trader	Physical	Human	Institutional
Collector	No storage or transport facilities. No money. Poor roads.	Agreement with the wholesaler is on a daily basis. No relationship with end users.	High fuel tax.
District wholesaler	Price fluctuations. Cannot store soybeans more than 5 months. Lack of money. Transfer of money is sometimes late. High fuel costs. Poor roads.	High competition with other wholesalers. Little relationship with farmers and none with inter-provincial wholesalers and exporters.	Fees for legal and illegal checkpoints. High fuel tax.
Interprovincial wholesaler	Size, colour and moisture of produce do not meet standards. Foreign materials in products Price fluctuations. Cannot store soybeans more than 5 months. Lack of money. Transfer of money is sometimes late. High fuel costs. Poor roads.	Heavy competition with other wholesalers. No relationship with producers.	Fees for legal and illegal checkpoints. High fuel tax.
Exporter	Size, colour and moisture of produce do not meet standards. Foreign materials in Products. Price fluctuations. Cannot store soybeans more than 5 months. High fuel costs.	Heavy competition with other wholesalers. No relationship with producer.	High fees for legal and illegal checkpoints at border. High fuel tax.

6.4. Comparative Analysis: Cambodia, Thailand and Vietnam

This section compares production, yield and harvested area of soybeans, maize and cashews for Cambodia, Thailand and Vietnam. It also compares production costs and returns, prices, transportation costs and credit use among the countries. The purpose of this section is to identify the relative competitiveness of each crop among these countries.

6.4.1. National Production

Yields and harvested areas are often used to calculate crop production. Table 6.12 compares the national yields and production of soybeans in Cambodia, Vietnam and Thailand in 2003. Thailand produced 230,516 tons, which was similar to Vietnam’s 225,300 tons. The total production of soybeans in Cambodia was 62,918 tons in 2003, far below the total production in Vietnam and Thailand. The average yield in Cambodia was about 1.22 ton per ha, lower than Vietnam and Thailand whose yields were 1.48 tons and 1.35 tons per ha, respectively.

Table 6.12: National Soybean Production

Country	Harvested area (ha)	Yields (tonnes/ha)	Production (tonnes)
Cambodia	51,699	1.22	62,918
Vietnam	166,500	1.35	225,300
Thailand	149,706	1.48	230,516

Source: *Nou Keosothea et al., 2005; Sitanon, 2005; Mai et al., 2005*

Table 6.13 shows that Thailand produced 4,178,017 tons of maize in 2003, followed by Vietnam with 2,933,700 tons, and Cambodia only 283,610 tons. However, Cambodia's yield of 4.45 tons per ha was higher than Thailand's or Vietnam's. Cambodia's higher yield relied mainly on Cambodian farmers using more fertile soil to grow maize.

Table 6.13: National Maize Production

Country	Harvested area (ha)	Yields (tonnes/ha)	Production (tonnes)
Cambodia	63,777	4.45	283,610
Vietnam	909,800	3.22	2,933,700
Thailand	1,083,844	3.76	4,178,017

Source: *Cambodia: Agricultural statistics, 2003*
Vietnam: Statistical Yearbook, 2003
Thailand: Agricultural statistics, 2003

Thailand produces far more cassava than Vietnam or Cambodia, and has higher yields (Table 6.14).

Table 6.14: National Cassava Production

Country	Harvested area (ha)	Yields (tonnes/ha)	Production (tonnes)
Cambodia	25,039	13.2	330,649
Vietnam	371,900	14.06	5,228,500
Thailand	988,220	19.29	19,717,534

Source: *Cambodia: Agricultural statistics, 2003*
Vietnam: Statistical Yearbook, 2003
Thailand: Agricultural statistics, 2003

The country studies also show that suitable land for soybeans, maize and cassava in Thailand and Vietnam has already been exhausted. Thailand and Vietnam have intensified their production by using fertilisers, pesticides, better seeds and multiple cropping. This implies that Cambodia still has a large potential to increase production by expanding the production area, as well as by deploying more capital inputs to raise productivity and lower unit costs.

6.4.2. Production Costs and Returns

We used total production costs to calculate the net return. These apply to only one season and exclude the cost of family labour. They include seeds, fertiliser, herbicides, labour, land rent, ploughing and planting. Net return is equal to gross income less total production costs. We also compare farm gate prices of crops in the three countries. The detailed production costs of soybeans, maize and cassava are shown in Annex 2.

Table 6.15 shows that the net return of soybeans in Vietnam was \$172 per ha, followed by \$134 in Cambodia and \$97 in Thailand. The table also shows that soybean production in Vietnam is

more capital intensive, costing \$693.70 per ha, Thailand \$276.80 per ha and Cambodia only \$154 per ha. The table also shows that the farm-gate prices of soybeans in the three countries were very different.

Table 6.15: Production Costs and Returns of Soybeans

Items	Cambodia	Vietnam	Thailand
Average yield (MT/ha)	1.1	2.63	1.49
Total production costs (\$/ha)	154	693.7	276.8
Gross income (\$/ha)	288	866	374
Net return (\$/ha)	134	172	97
Farm gate price (\$/tonnes)	262	329	251
Costs per unit of output (\$/tonnes)	140.0	263.8	185.8
Net returns per unit of output (\$/tonnes)	121.8	65.4	65.1

Source: Nou Keosothea et al., 2005; Sitanon, 2005; Mai et al., 2005

Table 6.16 shows that the net return on maize was highest in Vietnam, followed by Thailand and Cambodia. It also shows that maize production in Vietnam is more capital intensive. As in the case of soybeans, the farm-gate prices of maize are very different.

Table 6.16: Production Costs and Returns of Maize

Items	Cambodia	Vietnam	Thailand
Average yield (MT/ha)	4.8	6.23	3.77
Total production costs (\$/ha)	139	422.7	300.4
Gross income (\$/ha)	209	671	417
Net return (\$/ha)	70	248	117
Farm gate price (\$/tonnes)	44	108	111
Costs per unit of output (\$/tonnes)	29.0	67.8	79.7
Net returns per unit of output (\$/tonnes)	14.6	39.8	31.0

Source: Nou Keosothea et al., 2005; Sitanon, 2005; Mai et al., 2005

Table 6.17 shows the net return from cassava was highest in Thailand, followed by Vietnam and Cambodia. Cassava in Vietnam is more capital intensive. Farm-gate prices of cassava in the three countries are very similar.

Table 6.17: Production Costs and Returns of Cassava

Items	Cambodia	Vietnam	Thailand
Average yield (MT/ha)	8.96	30.34	19.29
Total production costs (\$/ha)	117	677	325
Gross income (\$/ha)	220	787	449
Net return (\$/ha)	103	110	124
Farm gate price (\$/tonnes)	25	26	23
Costs per unit of output (\$/tonnes)	13.1	22.3	16.8
Net returns per unit of output (\$/tonnes)	11.5	3.6	6.4

Source: Nou Keosothea et al., 2005; Sitanon, 2005; Mai et al., 2005

Vietnam generally employs more capital-intensive production methods than Thailand and Cambodia. The net return of soybeans and maize production per ha in Vietnam is higher than in Thailand and Cambodia. Moreover, the farm gate price of soybeans, maize and cassava in Vietnam is also higher than in Thailand and Cambodia, so there seems to be quite large potential for Cambodia to expand production.

6.4.3. Transportation costs

High transaction costs impede trade and discourage production. Cambodia's transportation costs are higher than those of neighbouring countries as a result of weaker human, institutional and physical market infrastructure. Some of the key factors that contribute to high transportation costs in Cambodia are poor roads, high fuel costs and high bureaucratic costs.

These issues have been cited already, but deserve repetition. Despite rehabilitation efforts in the past two decades, both the number and quality of roads and bridges are far from adequate. Road conditions are so poor that both products and people are expensive to transport and vehicles are costly to maintain and repair. Poor roads discriminate against heavy products with low value, such as cassava.

The high fuel price is the most important component of transport costs. According to the Ministry of Commerce (2002) study on integration and competitiveness, petrol taxes in Cambodia are the highest in the region. Like poor roads, high petrol prices increase costs of transporting goods and people, impede trade, push down farm-gate prices and discourage production.

With respect to high bureaucratic costs, exporters of agricultural products complained about the costs of moving products through authorities, such as customs and police. They maintained that such costs are a major constraint on competitiveness and are passed on to producers.

Table 6.18 shows that the transportation cost in Cambodia was about \$10–12 per ton per 100 km by road. This is extremely high compared to Vietnam and Thailand.

Table 6.18: Transportation Costs by Road (cost of fuel and truck fee only)

Item	Cambodia	Vietnam	Thailand
Cost of transporting soybeans (\$/tonnes/100 km)	10- 12	4- 5	2.5
Cost of transporting maize (\$/tonnes/100 km)	10- 12	4- 5	2.5
Cost of transporting cassava (\$/tonnes/100 km)	10- 11	4- 5	2.5

Source: Nou Keosothbea et al., 2005; Sitanon, 2005; Mai et al., 2005

6.4.4. Credit

Credit has been identified as one of the main issues facing producers and traders of agricultural produce. In recent years, the rural credit sector in Cambodia has grown considerably. From 2001 to 2003, the volume of rural credit provided grew from \$29 million to more than \$66 million. Although the growth is impressive, it has not been able to satisfy fully the present demand, which is estimated at \$200 million (Nou Keosothea et al., 2005). The rural population in one-third of all provinces still has no alternative to private moneylenders. NGO credit programmes reach only about 21 percent of rural households, so there is a need to expand rural credit and saving services by encouraging the entry of licensed private micro-finance institutions and commercial banks, and by strengthening the Rural Development Bank (RDB). In its role as a wholesaler, the RDB would provide stable and long-term funding to encourage retail institutions to expand and make the long-term loans necessary for increased capital investment.

Table 6.19 shows that the interest rate per year in Cambodia is about 36 to 60 percent for loans provided by micro-finance institutions and associations. This is extremely high compared to Thailand and Vietnam. Soybean, maize and cassava farmers are very reluctant to borrow from moneylenders at interest rates of about 46 to 100 percent per year. This high interest rate hinders Cambodian farmers from carrying out much needed investments in machinery and agricultural materials and puts them at a distinct disadvantage compared to their neighbours.

Table 6.19: Interest Rates and Loans

Item	Cambodia	Vietnam	Thailand
Interest rate per year (micro-finance institutions and associations)	36-60	12-13.8	7-8
Minimum loan (\$)	20	318	750
Maximum loan (\$)	200	637	2,500

Source: Nou Keosothea et al., 2005; Sitanon, 2005; Mai et al., 2005

6.5. Implications for Cambodian Agriculture: Soybeans, Maize and Cassava

This section is based on the lessons from the study of soybeans, maize and cassava in Thailand, Vietnam and Cambodia. It proposes some alternatives to develop the soybean, maize and cassava industries in Cambodia.

Cambodian agricultural development is at a crossroads. Cambodia could intensify its cropping of corn, soybeans and cassava, and emulate the Thai-Vietnamese experiences by exporting these crops to world markets at better prices. There is ample land in Cambodia to grow these cash crops—this is clearly shown by Cambodian agriculture statistics, with more new lands continually being brought into production under these crops. Presently there are some barriers which severely limit the export potential to Thailand and Vietnam. But there are many possibilities for Cambodia to increase the exports of its produce if these bottlenecks are removed. Apart from increasing production technologies, unprocessed crops could be processed before export, unlike the current situation, in which hardly any processing takes place.

Cambodia is in a good position to pick and choose a development model best fitted to its socio-economic conditions and aspirations. Speaking theoretically, it could take a shortcut by taking advantage of the experience of its neighbours and learning from them. The history of the maize industry in Thailand shows the following three stages of development.

First, enabling environments are important for production to emerge and to grow. Government policies on the development of basic infrastructure (especially dams, irrigation systems and roads) are normally the kind of long-term investments made by the public sector. Once water supply is secured and transport costs are reduced, the conditions are in place for rapid gains in productivity.

Second, when domestic demand is weak, stronger external demand is helpful in securing a stable market. Thailand's experience has proved that strong domestic demand is the most resilient source, from which high value added can be derived throughout the marketing chain—from the farm to final consumers. Domestic demand helps stabilise farm income and profitability. Regional trade in these crops helps to reduce supply shocks in any one country, stabilising prices and sustaining the important crop/feed-livestock linkages, e.g. in Thailand in the case of maize.

The final stage of development features a need for commercial policies that are mutually beneficial between Cambodia and Thailand/Vietnam. The Thai and Vietnamese governments, for example, spearheaded the research and development of new corn varieties. These efforts helped pave the way for the private sector to enter a new but risky market that potentially can yield high returns. The open-pollinated varieties had assured farmers of attractive returns, before the hybrid varieties made their way into the market. Although the distribution of these incremental benefits is not yet clear, today most Thai and Vietnamese maize producers have fully switched to hybrid varieties. All farmers in Cambodia use hybrid varieties of maize from Thailand and Vietnam.

6.5.1. Policy and Regulatory Reforms

Among the barriers identified by the Cambodia country study, informal toll fees are perhaps the ones that most seriously affect the competitiveness of agricultural exports. But new technology and credit would result in large gains as per unit costs decline further. Here some options are proposed to the Cambodian government for consideration in terms of policy and regulatory reforms.

6.5.1.1 Encourage Cooperative Movements

Agricultural cooperatives could pool the efforts of small, fragmented farms to increase their bargaining power and derive economies of scale from marketing.

Organised farmers would no longer be at a disadvantage when negotiating the price of their products with a few merchants, currently dominated by the Thais and Vietnamese. Production credit, too, can be provided by cooperatives. Dividends distributed to the members at the end of the year help to reduce per unit production costs. The purchase of necessary inputs by cooperatives could substantially reduce the average cost.

In the current situation, however, government support would be needed to help organise farmers to become more efficient. Such interventions have been few and far between, in part perhaps due to the fear and mistrust of rural people.¹

6.5.1.2 Reform Road Transport Regulations

The same kind of institutional mechanism/cooperation can be used by farmers themselves to improve their bargaining position and to reduce costs, e.g. by striking a deal with the informal fee collecting agencies, by formalising the relationship more equitably.

The government can do more than just living with the present system. It could reform the road transport system and, where necessary, put in some rules to take into account the reality of the present situation. This, however, requires both the political will to initiate such a reform and necessary resources (technical and financial) to take it forward to deliver concrete results.

Measures could be initiated with the consent of the government—at the highest political level—to delegate the toll collection power exclusively to the Transport Ministry. Subsequently this toll could be distributed to a policeman who is an official member of the checkpoint team. In short, on the basis of the current situation, one option may be formalising the informal system into a clear administrative structure and gradually improving it until full authority is finally delegated to the relevant government agency. Experience from Thailand shows that at the practical level, some monthly fee could be agreed upon between cooperatives and the local administration to ship commodities across town.

Another reality is that any new scheme of implementation must recognise the presence of oligopolistic power (a market situation in which there are a few sellers and many buyers of the same/similar product). These local merchants along with commune council members should also take part in the reform process to make sure that all voices are heard and that reforms are realistic.

6.5.1.3 Special Agricultural Development Zones

A possible approach to dynamise agricultural exports may be through the development of special agricultural development zones (SADZ). The SADZ strategy has the following strengths compared to the “normal” pace of agricultural development strategy:

- It helps the government to concentrate its attention in a particular area, thereby channelling scarce resources and management to a smaller area for maximum impact, rather than dispersing its attention over a wider, less manageable space.
- It is a clear opportunity for cooperation that Cambodia can provide to overseas partners/investors.
- It is easy to monitor, pilot and bring about changes and improvements, as well as to put in place the necessary infrastructure and services, including marketing, storage, transport and processing.
- Such a scheme could be a good project for foreign development assistance.

¹ Cooperatives could easily be confused with the collectivisation enforced under Pol Pot, and therefore be difficult to implement in the climate of mistrust that still remains.

- It would be a tangible development move by the government to attract other stakeholders to join in learning by doing in development collaboration. If successful, the model could be replicated for other areas and crops.

In this context, one model that could be experimented with would be contract farming.

6.5.1.4 Develop Framework for Joint Ventures

To proceed with the SADZ, it is imperative that a framework for joint ventures be developed to guide the implementation of a special economic arrangement between local investors and foreign counterparts. Given the calculated risk, at least perceived by many potential investors outside Cambodia, a comfortable level of administrative assurance is crucial. The government could invite selected foreign governments to assist in developing such a framework, or apply existing ones to a designated SADZ. In this process, private sector involvement would be of utmost importance.

Since the present business-as-usual situation for agricultural development in Cambodia is not good for anyone, Cambodia has very few other options but to seek a collaborative strategy that would generate business development initiatives. Such strategic moves are a crucial part of the business development framework and the implementation of SADZ.

6.5.2. Bridging Technical and Financial Gaps

Cambodia could seek technical and financial assistance from its major donors, which include the Asian Development Bank (ADB), Thailand, Vietnam the EU, and other major trading partners that aim at developing a long-term economic relationship with Cambodia. Thailand would have a special interest in developing such a relationship. The present Thai government announced two years ago its commitment to assist neighbouring countries, through its Indochina Fund, to develop a well-targeted investment scheme that would bring mutual economic benefits. Thailand is certainly in need of raw materials and processed food/feed, and something like SADZ or contract farming would fall squarely under this kind of an assistance scheme.

There would appear to be considerable common interest in the area of food and animal feed exports to Thailand and Vietnam, especially as these countries are at a more advanced stage of agricultural development and may prefer to move into higher value crops, leaving considerable scope for Cambodia to take up the gaps so created. Such a strategy, however, will require deliberate and strategic interventions to improve quality, marketing, processing, grading and standards—expertise available in the neighbouring countries that should not be difficult to transmit to Cambodia, officially or otherwise.

6.6. Conclusions

Cambodia has the potential to develop soybean, maize and cassava industries in terms of geography, land fertility and availability. This has been recognised and prioritised in major national plans such as the Socio-Economic Development Plan II (2001–2005) and the National Poverty Reduction Strategy (2002–2004). Regional integration and WTO accession plus loose border control due to poor governance all mean that Cambodia cannot resort to protectionist measures.

The study indicates that Cambodia faces many production and marketing constraints. Production constraints include lack of quality seeds, technology, information and credit. Marketing constraints include lack of market information, high transportation costs and fees and poor relationships/mistrust between farmers and buyers. Most agricultural exports are raw products because Cambodia has a very limited agro-processing capacity, and exports are informal in nature and subject to high informal fees at border crossings.

The study shows that Cambodia produces smaller volumes of soybeans, maize and cassava than Thailand and Vietnam. The net return from these crops in Cambodia is lower than in Vietnam and Thailand. Farm-gate prices of soybeans and maize in Cambodia are very low while transportation costs and interest rates on credit are very high compared to the neighbours.

To make Cambodian agriculture more competitive, possible strategies would include setting up cooperatives, reform of the road transport regulations, implementation of special agricultural development zones and a framework for joint ventures to bridge the technical and financial gaps.

Annex 1. National Production in Cambodia by Province

1. Soybeans

Province	Harvested Area (ha)			Yield (tonnes/ha)			Production (tonnes)		
	2001	2002	2003	2001	2002	2003	2001	2002	2003
Kompong Cham	20,210	19,272	28,837	0.71	1.45	0.91	14,349	27,872	26,242
Battambang	4,279	6,012	12,375	1.28	1.30	1.86	5,469	7,816	23,056
Kompong Thom	3,220	2,023	2,531	1.08	0.83	1.64	3,471	1,688	4,147
Preah Vihear	539	771	936	1.50	0.54	1.40	809	413	1,308
Kandal	30	175	-	0.80	0.80	-	24	140	-
Other provinces	409	682	7,020	-	-	-	536	772	8,175
Total	28,687	28,935	51,699	0.86	1.34	1.22	24,658	38,801	62,918

Source: Ministry of Agriculture, Forestry and Fisheries, Agricultural Statistics 2001-02, 2002-03 and 2003-04

2. Maize

Province	Harvested Area (ha)			Yield (tonnes/ha)			Production (tonnes)		
	2001	2002	2003	2001	2002	2003	2001	2002	2003
Battambang	29,648	32,409	42,227	4.63	2.86	5.52	137,152	92,778	232,936
Kandal	10,682	9,403	5,391	1.35	1.58	1.64	14,390	14,854	8,817
Kompong Cham	5,374	8,035	1,585	0.89	1.07	3.11	4,772	8,604	4,931
Banteay Meanchey	7,598	8,435	7,301	1.14	1.11	2.00	8,698	9,329	14,600
Prey Veng	2,190	1,684	1,311	1.51	1.60	2.09	3,310	2,690	2,742
Kratie	1,812	1,703	638	1.41	1.52	1.76	2,553	2,594	1,125
Other provinces	9,909	9,925	5,324	n/a	n/a	2.25	14,714	18,048	18,459
Total	67,213	71,594	63,777	2.76	2.08	4.45	185,589	148,897	283,610

Source: Ministry of Agriculture, Forestry and Fisheries, Agricultural Statistics 2001-02, 2002-03 and 2003-04

3. Cassava (wet season product only)

Province	Harvested Area (ha)			Yield (tonnes/ha)			Production (tonnes)		
	2001	2002	2003	2001	2002	2003	2001	2002	2003
Kompong Cham	4,740	8,532	13,093	14.15	4.74	18.33	67,051	40,421	239,968
Kompong Thom	1,880	1,321	1,053	10.46	7.66	7.70	19,660	10,125	8,111
Siem Reap	865	1,060	568	11.84	15.62	6.94	10,243	16,555	3,942
Battambang	146	949	1,123	6.18	11.43	17.55	903	10,847	19,712
Kampot	770	800	675	5.18	7.71	3.65	3,990	6,169	2,461
Stung Treng	150	223	315	4.00	4.34	4.00	600	968	1,260
Kratie	334	120	182	9.03	15.13	5.38	3,016	1,816	979
Other provinces	4,705	6,279	6,898	-	-	5.48	36,799	33,113	37,804
Total	13,590	19,284	23,907	10.47	6.33	13.20	142,262	120,014	314,237

Source: Ministry of Agriculture, Forestry and Fisheries, Agricultural Statistics, 1999-2000, 2001-02 and 2002-03

Annex 2. Production Costs in Detail: Cambodia, Vietnam and Thailand

1. Soybeans

Cost per ha (\$)	Cambodia	Vietnam	Thailand
Land rent	70	27.4	29.7
Seed	27.5	49.3	51.8
Land preparation	20	46.7	39.3
Planting	4	29.6	28.0
Fertiliser	-	119.5	9.6
Pesticides	7.5	277.5	13.9
Weed control	-	50.0	33.0
Irrigation	-	12.2	
Harvesting	15	70.0	71.5
Other	10	11.5	
Total costs	154	693.7	276.8

Note: Land rent per ha per crop, two crops per year; including family labour costs.

Source: Nou Keosothea et al., 2005; Sitanon, 2005; Mai et al., 2005

2. Maize

Cost per ha (\$)	Cambodia	Vietnam	Thailand
Land rent	30	32.9	40.6
Seed	33.6	34.2	48.3
Land preparation	40	67.8	40.5
Planting	5	18.2	17.4
Fertiliser	-	151.6	22.6
Pesticides	-	16.7	39.8
Weed control	10	33.9	22.6
Irrigation	-	4.4	
Harvesting	20.76	37.3	68.6
Other	-	25.7	
Total costs	139.36	422.7	300.4

Note: Land rent per ha per crop, two crops per year; including family labour costs.

Source: Nou Keosothea et al., 2005; Sitanon, 2005; Mai et al., 2005

3. Cassava

Cost per ha (\$)	Cambodia	Vietnam	Thailand
Land rent	40	21.9	50.7
Seed	-	36.9	45.3
Land preparation	17.5	77.0	28.6
Planting	18	67.5	20.9
Fertiliser	-	123.3	44.6
Pesticides	-	31.0	21.1
Weed control	30	98.1	53.2
Irrigation	-	33.4	-
Harvesting	5	137.4	60.3
Other	6.5	50.6	-
Total costs	117	677.1	324.7

Note: Land rent per ha per crop, two crops per year; including family labour costs.

Source: Nou Keosothea et al., 2005; Sitanon, 2005; Mai et al., 2005

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**Decentralisation and
Deconcentration Reforms
in Cambodia:
An Early Review**

C H A P T E R (7)

By:
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Decentralisation and Deconcentration Reforms in Cambodia: An Early Review

C H A P T E R (7)

7.1. Introduction

The Cambodian government has made sustained efforts to push ahead with decentralisation and deconcentration (D&D) reforms. Often, reform initiatives, which involve change, are likely to face both support and resistance for a variety of reasons. Reform is possible when the support outweighs the resistance. This is the case with D&D initiatives. The government recognises that it needs to restructure the governance system within which the state administration operates if it is to be able to improve public service delivery to its citizens. Decentralisation is seen as a way to achieve this. Inherent in decentralisation is the introduction of changes in how state institutions are managed. Changes are not enthusiastically embraced by certain groups that may view them as a threat to their current status. This article provides an analytical review of progress in relation to the overall D&D reforms, with a particular focus on accountability as a central element of governance and fiscal decentralisation and decentralisation of public service delivery.

The article demonstrates that while the government has made encouraging progress in putting a comprehensive policy and legal framework in place to guide D&D, it faces a huge challenge in tackling slow progress in some key areas: accountability and fiscal and sectoral decentralisation.¹ Accountability, decentralised service delivery and fiscal decentralisation are inextricably linked. To put it simply, an elected government cannot be held accountable if it is not given well-defined service delivery functions and adequate financial resources to perform the job.

This report is organised as follows: Section 7.2 discusses the overall context of decentralisation reforms, with a special emphasis on the emerging deconcentration reform initiatives. Section 7.3 analyses the concept of accountability, its status and the reform agenda for Cambodia. The analysis of the first two issues is based on literature and an analytical understanding of the authors. The potential for local service delivery by locally elected representatives, and the solution of the accountability problem, is discussed in Section 7.4. Information discussed in this section is derived from a recent CDRI research on Local Service Delivery and Commune Councils. Section 7.5 focuses attention on fiscal decentralisation, looking specifically at sources of revenue for local governments. Again, this discussion is also based on CDRI's study on Commune Own Source Revenues. A summary and conclusion of what these mean to Cambodia are provided in Section 7.6.

¹ The analysis reflected in this review covers developments only up to mid-June 2005.

7.2. Overall Context of D&D Reforms

7.2.1. Introduction

Decentralisation has become a popular reform in developing and transitional countries as a means to improve governance and reduce poverty. With no previous experience of democratic governance at the local level, Cambodia has chosen to decentralise its state administration to (i) promote participatory democracy and good governance, (ii) promote local participatory development and (iii) improve services for poverty alleviation.

In Cambodia, decentralisation refers to the devolution of power to the communes/sangkats, which were elected in 2002. The decentralisation is to be complemented by deconcentration, which refers to the delegation of administrative tasks, decision making and authority from central ministries to provincial/municipal departments and/or district offices. The two reforms are often referred to together as the D&D reforms. The current situation suggests that deconcentration has lagged far behind decentralisation.

Decentralisation in Cambodia has historically been linked with the SEILA programme, which is widely held to be a good example of a local development approach tailored to Cambodian conditions. It began in 1996 as a refugee rehabilitation and resettlement programme and gradually evolved to include local development activities.

Elections were held in February 2002 in 1,621 communes and sangkats throughout the country to elect commune/sangkat councils (CCs). Rules and regulations were prepared to define the roles and responsibilities of the new CCs. The most prominent of these are the Law on Election of Commune/Sangkat Councils and the Law on Administration and Management of Communes/Sangkats (LAMC), both enacted in early 2001. The decentralisation reform brought about several significant institutional and structural changes at national, provincial/municipal, district and commune levels.

At the centre, there are two main inter-ministerial committees established to support D&D—the National Committee for Support to the Communes (NCSC) and the Council for Administrative Reform. Both are accountable to the Council of Ministers. The NCSC is in charge of decentralisation, whereas the Council for Administrative Reform is responsible for deconcentration.

Provincial rural development committees and their executive committees were established to allow provincial/municipal governors to support communes through the use of the Provincial Investment Fund, which is about \$2 million per year.

Commune councils receive an annual fiscal transfer from the central government in the form of a discretionary Commune/Sangkat Fund (CSF), which averages about \$8,000, depending on commune size. The councils are also assisted administratively by one clerk, appointed and paid for by the Ministry of the Interior.

7.2.2. Deconcentration—*The Emerging Reform Agenda*

Deconcentration has been slow compared to decentralisation (Sar Kheng, 2005). The delegation of more power to sub-national (province/municipality, district and commune/sangkat) governments

will be the most profound reform since the adoption of the constitution in 1993. The D&D reforms are currently at a crucial juncture. The national policy guiding the deconcentration reform is the government's National Strategic Framework for D&D Reforms, which was approved by the Council of Ministers in mid-2005. This policy framework sets out objectives, vision, basic principles, scope and strategies to develop management structures for governance reforms, and guides all reforms affecting management at sub-national levels. The framework's major points are presented below.

7.2.2.1 Legal and Institutional Arrangements

Crucial pieces of legislation needed to move deconcentration forward are the organic laws, as required by the constitution. Organic laws define the roles and responsibilities of provincial/municipal and district levels of government. A senior inter-ministerial committee was established and chaired by the deputy prime minister and co-minister of the interior, HE Sar Kheng, to draft the organic laws. These are expected to be finalised by the end of 2005 (UNDP, 2005). To ensure that the new organic laws and the LAMC are harmonised,² there will be amendments to the existing LAMC. A legal framework for fiscal and sectoral decentralisation is also urgently needed.

Institutionally, the framework calls for a substantive shift in how provincial and district administrations operate. Presently, provincial line departments work mainly under vertical supervision of their respective central ministries and do not maintain regular coordination with the governor. The current system is perceived as creating high centralisation and fragmentation in planning, budgeting, implementation and personnel management. This suggests a serious problem of coordination and accountability between the province, the district and the commune, which has a considerable negative impact on service delivery. To address this, the framework calls for a unified provincial and district administration with its own consolidated budget, which is accountable to both the government and local citizens.

In this new system, an indirectly elected provincial and district council, with a five-year mandate, will be established to provide checks and balances to the provincial and district administrations. The details of how this council is elected and administered will be stipulated in the organic laws.

7.2.2.2 Reform Support Programme and Activities

A strong national programme is needed to support the D&D reforms. There have been demands from various donors that the government make a firm decision so that they can align their support accordingly. Although the government recognises this need, it views a detailed formulation of a reform support programme as premature, especially before relevant policies and laws are in place (Sar Kheng, 2005). To ensure continuity during this transition period, the SEILA/PLG programme, which was due to expire at the end of 2005, will continue until the end of 2006. It will ultimately be replaced by a national support programme for D&D reforms.

² Donors describe harmonisation as a key development objective. It is defined as "To ensure compatibility and appropriate cohesion between the separate Laws; to ensure adequate flexibility for policy development; and to ensure internal unity, certainty, clarity and precision within each Law." (UNDP, 2005)

The Ministry of Interior (MoI), through an inter-ministerial committee (IMC) established in January 2005, has a mandate to develop and implement D&D policies and organic laws once they are passed by the legislative bodies, the National Assembly and the Senate. Meanwhile, the MoI has approached the IMC to commission an independent study by international experts to identify the most important issues to support its mandated work. Among other things, the study is expected to examine and review donor support for D&D, including funding sources, institutional arrangements for funding and mechanisms and the future role of SEILA (Sar Kheng, 2005).

7.2.3. Challenges of D&D Reforms

A profound and politically sensitive process like D&D will inevitably face major challenges, some of which affect both decentralisation and deconcentration, while some are more applicable to one or the other.

7.2.3.1 Overarching Challenges

The D&D reforms in Cambodia have been carried out within a historical, cultural, institutional and governance context that inhibits decentralisation (Blunt and Turner, 2005). Cambodia has entered a stage in which an emerging democratic process meets a patrimonial culture (Rusten et al., 2004). Therefore, informal networks, patronage systems and rent seeking within the state apparatus are widespread, making state institutions highly politicised and personalised. The reforms also operate in a deeply embedded culture in which communal participation is historically weak and strict observance of hierarchy is considered part of core social values.³

A strong central government is necessary for effective administrative decentralisation (Cohen and Peterson, 1999). To be successful, D&D need to be viewed in conjunction with other system-wide reforms, such as public financial management, civil service and legal and judicial reforms. Currently, the capacity of the state is weak, both institutionally and in personnel. Financial accountability, for instance, is weak, and civil servants have long been seen as having limited skills and professionalism, as well as low incentives to work due to meagre salaries. It will take a considerable amount of time and effort to tackle these problems. It is very likely that, given their pervasive natures, slow progress in these areas will also slow the D&D reforms.

Civil society actors should also be more involved in the reforms, especially with regard to deconcentration. In a governance system in which citizens find it hard or are unable to voice their concerns effectively, civil society is crucial in promoting pro-poor policy dialogue, including increasing the number of channels of communication, which ultimately can enhance pro-social outcomes and better accountability (Cohen and Peterson, 1999; Hughes and Conway, 2004).

7.2.3.2 Challenges to the Emerging Deconcentration Reform

The challenges to deconcentration are closely associated with the overarching problems described above. The governing bodies of the D&D reforms, including the Seila Task Force (STF), NCSC and IMC, are expected to be integrated into a new national support programme. Despite this,

³ See Blunt and Turner (2005) for a detailed discussion of issues preventing post-conflict Cambodia from achieving strong forms of decentralisation.

further attention is needed to avoid potential issues of coordination, particularly overlapping or conflicting functions among various national reform support programmes.

The first concern is the capacity of the national institutions to support and implement the reforms. SEILA's success has been attributed mostly to its strong management structures and competent, motivated staff, who receive adequate salaries. This situation does not exist in the current system of the government. Second, the D&D reforms are significantly larger than SEILA, which implies a need for greater support.

Another expected challenge is resistance to the reform. Deconcentration will introduce profound changes in administrative structures as power and authority are devolved to sub-national levels of government. The national ministries will mainly be in charge of setting policies and guidelines, while actual implementation will be entrusted to sub-national line departments and offices. This means the national authorities have to release some of their power, which also means letting go of economic resources. The possibility of losing economic resources may create strong resistance.

7.2.3.3 Challenges to Decentralisation

Since the commune elections in early 2002, there have been a number of major achievements, but some areas need further improvement. Staffing and accountability structures within commune administrations need to be improved by deepening and expanding capacity and clarifying the roles and status of commune chiefs. Local participation and downward accountability are crucial areas, although it is generally recognised that there are no easy solutions.

The structures and management of the CSF should also be strengthened. The issues include establishing the CSF board, promoting transparency in local development projects, improving bidding and implementation and transferring funds through commercial banks rather than the current treasury system.

Finally, in the context of the emerging deconcentration policy, the roles of the elected CCs vis-à-vis the new provincial/municipal and district administrations should be clearly stipulated. The D&D framework indicates that the new reform will further develop the capacity of the CCs rather than undermine it. Yet, careful institutional and structural arrangements need to be set up to achieve this vision.

In the following section, we will discuss the concept of accountability from the point of view of western-Eurocentric literature, which tends to focus on objectivity and efficiency rather than the more traditional system of patronage-based loyalty which is prevalent in Cambodia. It ends with arguments in favour of the former rather than the latter, and proposes a definition of accountability more suited to the realities of Cambodia.

7.3. Accountability in Cambodian Local Government

Accountability is one of the underlying principles for successful decentralisation (Blunt and Turner, 2005). Since the first local elections in 2002, the government and donor agencies have expended a lot of effort to improve accountability, specifically in relation to good governance, better service delivery and improved social outcomes.

Accountability is therefore emerging as a crucial concern and is gaining more significance in Cambodian governance reforms. The government, donor community and civil society commonly acknowledge that good governance cannot be achieved and sustained without a workable system of accountability that fits Cambodia's historical, cultural, governance and institutional contexts.

This section briefly reviews the international concept and local understanding of accountability, identifies current issues and challenges within the framework of local government accountability and discusses these issues in the context of the new reforms.

7.3.1. The Concept of Accountability Internationally and in Cambodia

Authors and scholars on development have provided numerous definitions of accountability. For example, Fox and Brown (1998) define it as “the process of holding actors responsible for actions”. Schedler (1999) offers a similar explanation, adding that accountability also implies the application of punishments or rewards for actions. However, Mulgan (2000) comments that the “scope and meaning of accountability has been extended in a number of directions well beyond” this core sense. He further describes accountability as “a complex and chameleon-like term”. This impression of accountability as a vast and fuzzy concept is also acknowledged by Keohane (2002), who likens accountability to the proverbial blind men trying to describe an elephant.

Given the contentious nature of accountability, only accountability related to local government is further elaborated here. Central to this aspect of accountability is the notion of democratic/political accountability as commonly manifested through elections. Brinkerhoff (2001) explains political accountability as a system that can hold governments to their electoral promises and continuously respond to citizens' needs. However, the electoral system in Cambodia, which features proportional representation along party lines, tends to weaken political accountability since citizens often find it difficult to vote someone out of office if they wish to do so.⁴ Keohane (2002) defines political accountability in principal-agent terms, where the principals (higher hierarchy) can require the agents (lower hierarchy) to answer and explain and, if needed, reward and reprimand accordingly. This definition also implies answerability and enforcement. In Cambodia's current governance system, principal-agent accountability, together with answerability and enforcement mechanisms, may exist more widely in political party structures than in state administrative structures.

In addition to this central aspect of accountability, two other important types—financial and performance—are worth mentioning. Financial accountability deals with compliance with laws, rules and regulations pertaining to financial control and management (e.g. audits, timely disbursement of budget outlays). Performance accountability focuses on services, outputs and results that have been agreed with the intention of achieving efficiency. In the public setting, to hold agencies to account can be difficult, especially when the outcomes are abstract and hard to measure (Brinkerhoff, 2001). Both financial and performance accountability are limited in Cambodia's state structures.

Three types of accountability are applicable to Cambodia's decentralisation: upward (elected representative to higher level), downward (elected representative to citizens) and horizontal (bureaucrats to elected representatives).

⁴ Since it is parties that are elected and not individuals, it becomes difficult to remove an individual who may have party support but no popular mandate.

In Cambodia, the concept of accountability is not easily understood by the person on the street. Local people tend to understand the Khmer translation of “accountability” as something similar to “accounting”.⁵ They do not link the word with traditional Khmer values for governance, such as responsibility (*kar totuol khos trov chom pos mok*), honesty (*smos trong*), helpfulness (*jes jouy tok tu-reak*), or serving people (*bom-reu pro-chea-jon*). Considering this difficulty and the huge range of definitions offered, it is useful to focus accountability in the Cambodian context on two core aspects—answerability and enforceability—without which accountability cannot be maintained (Schedler, 1999).

The differences between the notion of accountability in the wider literature and accountability as practised in Cambodia are critical to understand. Political, personal, subjective and patronage-driven relationships of power, kinship ties and influence drive informal processes that directly influence an individual’s ability to be accountable. The desired state of accountability that the reforms seek to foster is a practical departure from the latter toward the former. For this article, we propose to define accountability as “holding the elected local government to serving the Cambodian people, especially the poor, in an honest, fair, efficient and effective way”. This definition implies the existing system must have the capability to respond to people, have access to good, clear information and have professional and motivated human resources and adequate financial resources in order to deliver public services effectively.

7.3.2. *Current Issues*

Ideally, the major promise of democratic decentralisation is that “by building popular participation and accountability into local governance, local government will become more responsive to local demands and more effective in delivering services” (Blair, 2000). Similarly, in Cambodia the major goals of decentralisation are “promoting pluralist democracy, promoting a culture of popular participation, and contributing to reduction of poverty” (Rusten et al., 2004). Accountability is one of the most important underlying principles to achieve these goals (Cohen and Peterson, 1999). This section will examine current key accountability issues of local government by considering upward, downward and horizontal accountability.

Upward accountability refers to local governments’ answerability to higher levels, a dominant force in Cambodian administration. Key factors contributing to the degree of accountability include a legacy of strong hierarchical political culture, gaps and ambiguities in the relevant legislation and the capacity of councillors (Blunt and Turner, 2005; Rusten et al., 2004)

Most of the current councillors and commune chiefs have been in office since the early 1980s and are perceived to be obedient to higher authority. Councillors have strong links of informal accountability with their political parties, given that they have to affiliate with a political party to be eligible for the post (RGC, 2001b). The Commune/Sangkat law will be amended to provide more clarity in terms of commune councils’ roles and responsibilities and their relationship with higher levels of government. Lastly, upward accountability is strong, and councillors tend to look upward, rather than downward or horizontally, when making decisions.

⁵ Based on interview responses and personal observations.

Downward accountability, which refers to local governments being accountable to constituents, remains weak in the current system. Citizens' poor access to information, local government's lack of autonomy and an administrative system of very limited capacity are major causes of this weakness.

Downward accountability is weakened by an absence of external pressure from people, due to their limited access to information about their local government's performance (Rudengren et al., 2005).⁶ This is worsened by the non-existence of standard accountability mechanisms, such as public hearings or disclosure statements and reports. Commune councils are required to hold public and democratic meetings at least once a month. However, the extent to which citizens have been able to use this forum to seek information or make their voices heard to their elected representatives is unknown.⁷ Also, the prevailing social norms make it difficult for people to question higher authorities. This serves to further suppress the quest for improved downward accountability. Second, inadequate commitment to full autonomy for the commune councils has hindered downward accountability.⁸ The councils still largely depend on the CSF to respond to local needs. Lack of authority to collect or generate their own revenues is another obstacle. However, the MoI and Ministry of Economy and Finance (MEF) have jointly drafted a prakas on a commune/sangkat revenue sharing pilot project, a first attempt to allow local communes/sangkats to obtain a share of locally generated revenues. This is a good beginning and a helpful sign, although it will take considerable time for the implementation of this prakas to materialise.⁹

Horizontal accountability refers to accountability across administrative units at similar levels of government. It can be as problematic as vertical accountability. Weak horizontal accountability in Cambodia is attributed to a lack of enforceability due to limited choice, an upwardly accountable bureaucratic system and inadequate incentives provided to bureaucrats.

First, in the current system of commune administration, enforceability is constrained because the clerk is hired and paid for by MoI and performs most of the administrative tasks, making it hard for the commune to apply and enforce rewards and sanctions. This point is connected to the strong upwardly accountable bureaucratic system. Various ministries employ bureaucrats at different levels of government, and all, including the commune clerks, are accountable to the central government, not to the elected local councillors (Rusten et al., 2004). An example of this can be found in the agricultural extension sector, where extension programmes, funded by an IFAD loan, are implemented directly by district staff with minimal involvement from the councils (Eng et al., 2005). The problems are complicated, especially when bureaucrats fail to perform their tasks properly. Should this happen, it is difficult for villagers to know which institution to hold accountable for failure. Although, throughout the recent past, village chiefs have always been accountable to the commune, this authority may well be very limited in practice because of the meagre remuneration that chiefs receive for their duties (Schedler, 1999; Cohen and Peterson, 1999; Agrawal and Ribot, 1999).

⁶ However, a recent report of the Centre for Advanced Study found that in general local people are well aware of the functions of commune councils.

⁷ There might be informal mechanisms used by people to voice their opinions, but the authors were unable to document them.

⁸ This point is made to suggest that downward accountability may not be easily improved by simply providing people access to information while they may not be culturally/socially empowered to use the information to demand accountability from higher authority.

⁹ The prakas has not been signed by the MEF at the time of this writing.

7.3.3. Accountability in the New Context of D&D

An important goal for decentralisation reform is to introduce accountability into local governance. As reflected in the D&D framework, the government recognises the importance of treating decentralisation and deconcentration as part of the same tightly knit, coherent and well-integrated package. Yet deconcentration has been lagging behind and must be brought up to speed. This can be realised through clearer assignment of roles and responsibilities to the province and the district, better defined local service delivery mechanisms and improved local revenue mobilisation.

The government's Rectangular Strategy stresses the importance of good governance as a precondition for sustainable development with equity and social justice. In other Cambodian policy contexts too, accountability is considered a vital element of good governance. For example, the World Bank (2004) suggests that in order to reduce poverty, serious efforts will have to be made to improve accountability in several areas. Accountability can be improved by strengthening checks and balances in judicial reforms, improving financial management, enhancing transparency in natural resource management, bringing government closer to people and removing obstacles to private sector growth. Without improvement in these areas, poverty reduction and development will be difficult to achieve.

The need for social and financial accountability has also been stressed in the recent SEILA mid-term review (Rudengren et al., 2005). It argues that there is a need for more checks and balances both within and outside the current SEILA system. The report describes downward accountability from commune councils to their electorates as weak, especially in the absence of information about commune performance. Similarly, downward accountability at the provincial level is hindered by lack of coordination in planning and implementation between line departments and commune councils. The provincial level of government is expected to be the major focus of reform in the new D&D strategic framework (RGC, 2005).

The D&D framework calls for a new management system for sub-national government. The new system is anticipated to improve development outcomes through a better coordination of work among provincial line departments and the development of better human and financial resource management. The biggest challenges will come in achieving social outcomes in areas such as poverty reduction, HIV/AIDS, natural resources and environment. All of these areas require clearly mandated, well planned, coordinated and funded efforts entailing the involvement of many different levels of government, as well as outside actors. Here, issues of accountability not only entail the activities of individual actors, but also encompass the broader system design.

Let us now examine local service delivery and the roles that the commune councils have been playing in it. We attempt to connect these issues to the broader accountability challenges already highlighted.

7.4. Local Service Delivery and Commune Councils: An Analysis of Four Services¹⁰

7.4.1. Introduction

The improvement of rural livelihoods is one of the priority actions of the National Poverty Reduction Strategy of the government. Effective service delivery at the local level is seen as crucial to the success of this initiative. The Law on Administration and Management of Communes/Sangkats envisages local councils having leading roles in service provision and local development. This vision is crucial to the development of local accountability because only when the councils are given clear service delivery responsibility and adequate resources can they justly be held accountable for their performance. The law, however, remains broad in terms of mandates for specific responsibilities. It is therefore important to understand how local services are currently delivered and how CCs can intervene to improve the flow of services.

Although a variety of public services are delivered at the commune level throughout the country, the institutional arrangements used to deliver them are not well understood. Furthermore, more direct involvement of CCs in the supply of services has not been sought systematically. Hence, we aim to share some lessons from our research on local service delivery and the roles of the commune councils to demonstrate how delivery of local services may be improved through more effective involvement of CCs.

Any effective local public service delivery involves a number of related activities, including planning and budgeting, financing, production, regulation and monitoring and evaluation. There are both “demanders” and “suppliers” for the delivery of public services. Rather than each individual expressing his or her own demand for a public service, there must be an arrangement whereby the demands of a variety of consumers are determined collectively. One role that local governments can play in the process is to aggregate the demands for public services by local residents. Since local governments are closer to the people than provincial or central governments, they can more effectively assess the particular needs of a locality.

Four locally provided services¹¹ are discussed: maintenance of rural tertiary roads, trash collection, primary health care and education (i.e. formal education at primary level, non-formal education and early childhood education). Our research shows that the CCs can play a useful role in the delivery of these services.

The discussion below reviews the factors that enable CCs to play such a role. We then recommend services that CCs could assume and identify obstacles that need to be overcome. We begin with a description of the current legal framework supporting service delivery and the options for improving the framework.

7.4.2. Review of Policies and Legislation Regarding Commune Council and Sectoral Local Service Delivery

The review looks separately at mechanisms for “on functions”, defined as the devolved role of CCs in delivering local services for the commune and its citizens. We then review “agency functions”, which, in contrast, can be delegated to the commune by the line ministries of the state.¹²

¹⁰ This section is based on CDRI’s final report to the United Nations Capital Development Fund, entitled Study of Local Service Delivery (Eng et. al., 2005, forthcoming).

¹¹ Due to space limitations, only four of the seven studied sectors are chosen for discussion in this article.

7.4.2.1 On Functions

On functions refer to governance roles and duties granted to commune councils through the LAMC. This law outlines the duties of councils with regard to local affairs in Article 43. These include:

- maintenance of security and public order;
- arrangement of necessary public services and responsibility for their good functioning;
- encouragement of the contentment and well-being of citizens;
- promotion of social and economic development and improvement of living standards;
- protection and conservation of the environment, natural resources and national cultural heritage.

Unfortunately, these directives remain vague and thus make it difficult to determine what services CCs are actually to provide. Additionally, the Sub-Decree on the Decentralisation of Powers, Roles and Duties to the Commune Councils does little to add precision or clarity.

The logic is that the very broad scope of these roles allows for the development of more precise functions in the light of experience over time. Rules and regulations should not be considered static documents, but can be modified as lessons are learned and policy is refined. However, clearer direction in developing implementation systems and structuring services is required for sustainable devolution of services to the local level.

To improve the policy and legislative framework with regard to on functions at this stage, an option is to focus on the development of a clearly understandable menu of services for which CCs can choose to take responsibility. In other words, create a list of illustrative, non-exclusive functions with options for implementation. Services could either be provided directly by commune administration staff¹³ or contracted out. The LAMC will need to be amended in order to include non-exclusive services that the CCs can choose to take on. These provisions and the redrafting of the LAMC in general should be done in conjunction with the drafting of the organic laws on provincial/municipal and district government.

In support of this, and essential to the success of CCs providing on function services, would be the enactment of rules and regulations empowering communes to raise their own funds in order to provide services. The most important issue with regard to fiscal management in relation to decentralisation has to do with the country's overall financial management system. The development of the law on the determination of types, rates and procedures for the collection of revenue from fiscal taxes, non-fiscal taxes and service charges for CCs cannot be done in a vacuum, and will have to be drafted in conjunction with deconcentrated revenue collection systems at the provincial and district level to avoid over-taxation or double taxation of the citizenry. In addition, there needs to be a clear link between the overall system of collecting and sharing these revenues and the revenues that are collected and disbursed by the national treasury.

¹² See Article 42 of the LAMC, which states that commune councils have two types of roles, as described here.

¹³ We recognise that these proposed roles are not currently feasible in the current system, as CCs have only one clerk, who is typically already overloaded with work.

7.4.2.2 Agency Function

The LAMC directly addresses the issue of granting agency functions from the state or line ministries to the CCs. Article 42 states that the commune has the “role as an agent to represent the state under the appointment or delegation of power by the state authority”. Article 44 further clarifies this by stating that the state authority or line ministry “may delegate powers to the commune, together with the increase of capacity and providing with means, materials and budgets for implementation”. Note that delegation of authority must be accompanied by necessary capacity building support and appropriate budget allocations. Clearly defined roles and performance expectations as well as adequate capacity and financial support, are prerequisites for upward accountability. For instance, if multiple line ministries suddenly began to grant substantial agency functions to the CCs, there could be a serious breakdown in the system due to lack of capacity, lack of funds (e.g., unfunded mandates) and poor integration or conflict with existing rules and regulations.

We recommend the creation of a permanent entity within the MoI to take responsibility for evaluating and approving all agency delegations to CCs by other line ministries. The Technical Research Team within the Department of Local Administration, whose responsibility it is to monitor, control and evaluate the implementation of the LAMC, may be more suitable for this activity. Provisions in the LAMC should be amended to clearly reflect any such change.

In addition, the sub-decree on agency fees needs to be formed and implemented. The language within this sub-decree should require that the Technical Research Team, in conjunction with the line ministry that desires to delegate an agency function to CCs, conduct a needs analysis to identify actual financial needs before assigning the commune administration to carry out the delegated functions.

7.4.3. Local Service Delivery and Commune Councils

In this section, we illustrate the factors and circumstances that provide opportunities for CCs to play a useful service provision role.¹⁴ The first two services—maintenance of rural tertiary roads and solid waste disposal—can be considered “hard” services, while the other two—primary health care and primary education—can be deemed “soft”. Hard services are those in which CCs can play a more direct and hands-on role. Soft services are those in which CCs have only an indirect role.

7.4.3.1 Maintenance of Rural Tertiary Roads

The provision and maintenance of tertiary roads are ultimately the responsibility of the Ministry of Rural Development. The 2002 National Policy on Rural Roads identifies tertiary roads as potential commune responsibilities. However, it is not yet clear what categories (i.e., surface types and traffic volume) and length of roads have been identified and inventoried.

Rural tertiary roads mean road connections from district to district, from district to commune, from commune to commune, from commune to village and from village to village. Under current

¹⁴ The “useful” role carries substantial additional impact in the course of providing the service through involvement in planning, financing, monitoring and evaluation etc.

arrangements, the Provincial Department of Rural Development (PDRD) is responsible for district-to-district roads, and CCs are responsible for district to commune, commune to commune and commune to village roads.

Factors Giving Rise to Useful Involvement of Commune Councils

Experience and existing institutional arrangements suggest that assigning periodic and routine maintenance responsibilities for tertiary roads to CCs appears to be a promising option. The supporting factors include:

- legislation already envisages these as commune responsibilities;
- many CCs already have extensive experience with road maintenance through contractors using the CSF;
- demand for this as a priority service has already been expressed through choices that have been made regarding CSF training;
- construction and maintenance of rural tertiary roads of certain basic standards (e.g. 15 cm thickness with laterite surface) is technically feasible for CCs to understand, manage and monitor;
- there is already good understanding of the cost of the service, necessary condition in ensuring that the mandate is funded;
- commune implementation appears to be at least as efficient as any of the alternatives currently being practised;
- CCs can exercise their rights to enforce regulations over road uses within their jurisdiction.

Constraints

A number of hurdles need to be overcome before CCs can assume the responsibilities for maintaining rural tertiary roads. A number of questions and issues for consideration include:

- Would the government be prepared to fund periodic and routine maintenance of commune roads? If this funding were added to the CSF, it would roughly double the amount transferred to communes each year. A national formula needs to be developed to allocate rural road funds for all communes in the country.
- If allocations were made nationally according to a formula based on the number of kilometres of road per commune, is it possible that this could be adjusted at the district or provincial level in order to reflect relative conditions/degree of degradation? This could be done by the PDRD for each commune council.
- How can CC performance in monitoring road construction be strengthened so that quality is not compromised?
- How can supervision and support from the provincial level be made more efficient?
- What are the best available models for conducting routine maintenance?
- To assign rural road maintenance to the commune councils, an inventory of the rural roads is needed.

7.4.3.2 Solid Waste Disposal

The joint prakas between the Ministry of the Interior and Ministry of Environment on solid waste management states that the local authority, in cooperation with the Department of Environment, shall manage solid waste disposal in its locality. The Japan International Cooperation Agency (JICA) has assisted the municipality of Phnom Penh in the piloting of a solid waste management project, which attempted to involve the less urbanised sangkats on the outskirts of Phnom Penh in disposal management. Solid waste management in these sangkats used to be chaotic. The private company tasked with collecting trash and cleaning the areas did not demonstrate motivation or capacity to do the job. Phnom Penh Waste Management (PPWM), a semi-autonomous authority under the municipality, has been put in charge of the pilot project. PPWM is being assisted by sangkats in the collection of trash from narrow pathways where dump trucks cannot gain access. They also collect a service fee and are paid a certain share of the revenue (Eng et al., forthcoming 2005).

Factors Giving Rise to Useful Involvement of Commune Councils

The pilot project demonstrated some interesting results:

- Involvement of the four sangkats on the outskirts of Phnom Penh proved to be a good initiative. The trash from narrow pathways is picked up and brought to the main pick-up areas by trash collectors employed by the sangkats and paid from the commissions received.
- Constant migration of people into and out of the locality can be monitored only by CCs, which therefore can provide the most accurate number of households (residential as well as businesses) to be serviced.
- CCs are more effective at resolving disputes over fee collection.

Given the proven success of the pilot, it is strongly recommended that sangkat councils be given the tasks of updating the population registry, collecting trash from small pathways that dump trucks cannot access, collecting service fees and resolving disputes over fees.

In a more rural setting, where most solid waste is generated in the small local markets, there are strong reasons favouring CCs to assume the monitoring function. The current arrangement in which the province manages markets of medium size¹⁵ has not resulted in improved sanitary conditions. Commune councils could be allowed to manage local markets¹⁶ within their jurisdiction and mandated to keep them sanitary. More than provincial governments, councils are believed to have greater incentive to monitor the service provided by the CC-approved contractors and see the area they live in cleaner and more sanitary.

Constraints

In urban or peri-urban areas, the arrangement could be viable if (1) the areas are populated and the surrounding areas do not contain open waterways or abandoned/unused lands that people could use as alternative dumping sites, (2) the urban communes or sangkats are willing to cooperate with an

¹⁵ These are large markets that attract a wide range of customers and suppliers and serve multiple communes/sangkats (MoI and MEF, 2005).

¹⁶ Local markets are small with low turnover and attract primarily local suppliers (ibid.).

approved contractor to facilitate all necessary activities and (3) main trash collection responsibility is under an approved contractor or a semi-autonomous public agency. In a rural setting, there needs to be a transfer from the provinces to the communes of authority to manage the local markets. In addition, the communes need to be given the power to sign the garbage collection agreement with the private contractor so that they can hold the contractor accountable.

7.4.3.3 Education and Health

As a signatory to the Millennium Development Goals (MDGs), Cambodia has committed to improving its public services, such as education and health care. Evidence of this commitment can be seen in government policies like the National Policy on Primary Health Care and Education for All (RGC, 2000a; RGC, 2003). These policies specifically consider community involvement essential, as demonstrated by the creation of local bodies such as the Health Centre Management Committee, Commune Education for All Committee, and Cluster School Supporting Committee. Each of these committees has ensured participation and/or representation from the commune council.

In line with the overall objectives of decentralisation, which are to promote a pluralist democracy and reduce poverty, decentralisation in education and health care should relieve the financial burden of the central government, increase efficiency and effectiveness, promote the inclusion of marginalised groups, improve coordination and increase local control (Mody, 2004). Central to these objectives is the enhancement of local government.

Local level primary health services examined by a CDRI study refer to the 14 services under the minimum package of activities and other services (i.e., outreach activities) provided at the health centre, which typically covers between 8,000 and 12,000 inhabitants. Education services include formal education at primary level (grades 1 to 6), non-formal education (literacy classes) and early childhood education (community pre-school).

Factors Giving Rise to Useful Involvement of Commune Councils

The main factors that enable the local government to have a significant impact on service delivery include the policy environment, current pilot initiatives and practice. Both education and health policies envisage local government's role in the provision of these services. A current pilot initiative by UNICEF has empowered commune councils to play a more substantial role in both education and health. These initiatives include supporting the commune advisory bodies, such as the committee for women and children and identifying poor households for exemption from paying fees. Initial observations of this initiative have indicated that the involvement of the councils in service provision has contributed to improved services. A large number of councils have already provided social services to their constituents through the use of the CSF. Examples include the construction of schools, latrines and wells and a number of outreach services like immunisation.

Evidence from the local service delivery study suggests that there is considerable room for commune councils to assume additional meaningful roles in service delivery. One simple and

¹⁷ By non-technical, we mean the councils would use a simple form in which information can be filled in by ticking "Yes" or "No". This simplicity is necessary because it allows the council to do it quickly.

practical recommendation is to have councils conduct regular non-technical monitoring and evaluation of local services¹⁷ to complement the more technical monitoring done by the central inspecting agencies. Aggregating the results of this work from many communes and presenting them in a provincial forum is a possible measure to give the councils a more influential voice in demanding accountability.

Constraints

Despite the potential, service delivery in education and health care has yet to reach a satisfactory level. There are conflicts in relation to the expectation of service users, the capacity of and support for the commune councils, the current workload and the overall governance system.

Expectations of service users. Evidence from the case studies shows that people do not view the commune council as the key agent in solving problems related to education and health. People do not go to the CCs to voice their complaints or dissatisfactions over the quality of such services. The councils are perceived as too limited in the role they play to be responsive to demands for accountability for better services. If CCs were perceived by users as forums for demanding accountability, two things might occur. First, it might put pressure on CCs to do something about these services. Secondly, the directors of the health centres, as well as primary school principals, might feel sufficiently pressured to begin to address these issues.

Capacity and support. As already discussed, commune councillors are only required to be able to read and write. Very frequently, inadequate knowledge and education are a problem for councils (Rusten et al., 2004). Councils are not sufficiently knowledgeable to demand accountability from providers of health and education services, such as through participation in meetings of Health Center Management Committee and School Support Committee. In addition, the support the councils receive from provincial and district facilitator teams is typically oriented towards infrastructure projects, not social services (Rusten et al., 2004).

Workload. Currently a mandated role of councils is civil and election registration. The other major and more routine roles councils have assumed are local development activities, which range from formulating local priorities, implementing some of them by contracting using its CSF and monitoring and evaluation of projects with assistance from provincial technical support staff. Considering the average number of councillors and their workload and the administrative support from only one commune clerk, one should take a very cautious approach towards giving more tasks to councils, which could easily overload the system.

Overall governance system. There is no mechanism currently in place for commune councils to express satisfaction or dissatisfaction to provincial departments. Nor do the central ministries have mechanisms to incorporate external evaluation into their monitoring and evaluation. This problem has hindered the accountability of service providers to consumers.

Let us now discuss fiscal decentralisation and how it connects with accountability and service delivery. It is widely argued that the single most common reason that decentralisation fails is because local government does not have adequate local revenues to carry out the newly devolved and delegated responsibilities (Ojendal, 2005). Fiscal decentralisation is a crucial avenue to achieving more accountability.

7.5. Own-Source Revenues of Local Government

7.5.1. Introduction

It is generally agreed that one of the essential elements of successful decentralisation is providing adequate financial resources to local governments so that they can implement their development priorities and be held accountable. In Cambodia, the only significant revenue source that CCs have is the Commune/Sangkat Fund. This fund, however, is limited given the vast development needs of the localities. The current reform is struggling with how to take incremental, realistic steps toward the decentralisation of revenue-raising powers to local government (Eng and Rusten, 2004). Article 74 of the LAMC gives CCs the authority to collect taxes and user charges (RGC, 2001a). The law does not, however, provide any details about how this shall take place, nor what goods or services can be taxed. The regulations permitting councils to collect their own revenues have not yet been finalised.

This section begins with an illustration of the current local revenue structures and describes the sources of revenue of councils and of the provincial government. It ends with a discussion of revenue sources that could potentially be shared between the province and the communes, or reassigned to be entirely collected and managed by communes.

7.5.2. Current Local Revenues of Commune/Sangkat Councils

Currently, councils have three major sources of funds:

7.5.2.1 Commune/Sangkat Fund

Councils have the right to receive grants from the national revenue budget (LAMC, Art. 75). The Commune/Sangkat Fund was established by sub-decree in 2002. The CSF is a formula-based funds transfer from central government recurrent revenues and donors' grants to individual communes through the provincial treasury. The contribution from the government budget in 2002 was \$5 million, equal to 1.2 percent of recurrent domestic revenues (World Bank, 2002). The annual CSF is about \$8,000 per commune on average, which can be spent on local development priorities identified through the commune's development planning. This funding has enabled communes to provide some small-scale infrastructure projects.

7.5.2.2 Own-Source Revenues from Taxes and Non-Taxes

Communes/sangkats have the right to collect their own revenues from tax and non-tax sources, including service levies. These include land tax, property tax and rental tax (LAMC, Art. 74). The law also allows communes to receive total or partial transfers from national taxes and non-tax revenue sources, but does not provide details about how this can be done. Currently, the commune does not collect any taxes except local contributions for development projects. Local contribution is mandated by law as a matching fund to the CSF development fund, and collected from local citizens. The total contribution required is usually 10 percent of the amount of the CSF allocation. The total collection varies from 400,000 to 5 million riels. The collection can be

time-consuming and difficult because it is a voluntary contribution. In 2005, the revised Commune Project Implementation Manual has made some changes to allow councils some flexibility in deciding their share of contributions.¹⁸

7.5.2.3 Revenues from Agency Functions

Civil registration fees are the only revenue received by the commune from performing agency functions. Currently, collections from civil registration come from preparation of birth, death and marriage certificates, for which people have to pay a flat fee of 400 riels per certificate. The minimal administrative revenues so far collected by communes average between 20,000 and 140,000 riels per year (Rusten et al., 2004).

7.5.3. Overview of Current Revenues at Provincial Level

7.5.3.1 Tax Collection at Provincial Level

Most revenues at the provincial level come from taxes. There are 16 taxes currently collected under the 1997 Law on Taxes. Only six formal taxes are collected for the provincial budget. These are taxes on unused land, taxes on transfers, patent taxes, slaughtering taxes, taxes on means of transportation and public lighting taxes. Annually, the Ministry of Economy and Finance issues a prakas to delegate revenue collection responsibilities and proposes a budget for the allocation of these revenues to the provincial/municipal government. This prakas authorises the province/municipality to collect different categories of revenue from tax and non-tax sources, along with specific collection amounts, (Eng and Rusten, 2004).

According to the Law on Taxes, there are three tax regimes: the real regime, the simplified regime and the estimated regime. The tax regime is determined by the form of the business, the type of business activity and the level of turnover. At present, only the real regime and the estimated regime are applied. The real regime refers to all businesses with licences approved by the Ministry of Commerce and with annual turnover of more than 200 million riels. Businesses with licences approved by the provincial/municipal office and with turnover of less than 200 million riels fall under the estimated regime.

The administration of tax collection in Cambodia operates at three levels, each having separate responsibilities. Within the MEF, the National Tax Authority is the sole body authorised to manage the collection of all categories of taxes. It has branch offices in every province and municipality, and other offices in almost every district. The provincial tax department is responsible for tax collection and is assisted by district tax offices. Where there is no district tax office, the provincial/municipal tax branch collects the taxes. All revenues collected are transferred to the provincial treasury.

There are some problems with the current tax collection, including (i) poor quality of data for tax authorities and poor tax records and registers, (ii) lack of staff, as there are only two or three staff at the district tax office, who are in charge of collecting taxes from eight to 15 communes within the district, (iii) low salaries and inadequate incentives for the tax authorities, (iv) lack of

¹⁸ Interview with Mr. Hans van Zoggel, training adviser of Partnership for Local Governance, on 11 May 2005.

information dissemination, transparency and assistance for the taxpayer on what taxes are being collected and (v) unclear assignment of authorities' responsibilities and calculation of taxes (Eng and Rusten, 2004).

7.5.3.2 Non-Tax Revenues at Provincial Level

The provinces collect other non-tax revenues such as pheasy (market fees) and user fees (e.g. business licences, land services). Other line departments collect some fees and charges at the commune level. The distinction between taxes, fees/charges and licences is unclear. A number of levies are referred to as charges, although in reality they are taxes, since no service is rendered directly or indirectly to those paying the levies (Eng 2004).

7.5.4. *Challenges in Introducing Commune/Sangkat Own-Source Revenues*

There are challenges in introducing own-source revenue to communes. First is the lack of available data to identify potential local government sources of revenue, revenues for possible reassignment from the province to the communes and revenues that might be shared between the province and the communes. Second is the current practice of informal taxation. The establishment of formal taxes and levies may lead to double taxation, which in turn could create additional burdens for the poor. A third challenge concerns the management, storage and accounting of the funds, including the lack of secure safekeeping and absence of a commune banking system. The fourth challenge is the ability and willingness of the central government to address bottlenecks concerning local government own-source revenue generation and options for sharing or reassigning revenue between the province and the commune. The last major challenge is coordination between institutions at the national level.

7.5.5. *Potential Revenue Sources for Local Government*

The following are recommended revenue sources:

7.5.5.1 Tax on Means of Transportation

This tax should be shared with communes because (i) communes have already assisted in collecting it and received commission fees, albeit informally; (ii) it is a fairly simple tax for communes to administer and collect, because the councils have statistics of vehicles in the communes and (iii) through sharing tax collection responsibilities, it enables councils to learn how to manage tax collection. Should there be a complete devolution of tax collection in the future, they will already have acquired sufficient skills and experience. In addition, this type of tax is progressive and more equitable because people who enjoy more benefits pay more (e.g. a car owner pays more transportation tax than a motorcycle owner).

7.5.5.2 Patent Tax

This tax should be reassigned to and/or shared with communes. All types and sizes of businesses currently pay a patent tax, making it easy for communes to identify and collect taxes from local businesses. Patent taxes are already informally shared in places where the communes assist the district tax office with collection. Sharing should be formalised under the commune budget

according to clear rules. In terms of equitability, this tax is also progressive. Businesses with higher turnover pay higher patent taxes.

7.5.5.3 Market Pheasy

As mentioned in Section 7.4, the communes might be able to manage or even take over ownership of smaller markets. One option would be to assign small and unregistered markets to the communes, and allow them to manage the markets themselves or outsource this function, leaving revenues from the larger markets to the province/municipality. Another option is to consider possibilities for sharing revenue collection from provincial markets with communes. Some communes would realise little revenue from their markets or may not have markets within their boundaries. It is obvious that without adequate financial support, the commune councils will not be able to do much in terms of development. Similarly to taxes on means of transportation and patent taxes, pheasy is a progressive user fee. Bigger market stalls pay a higher fee.

7.5.5.4 Service Levy

A commune service levy could be collected from every household and business within the commune as an annual fixed fee that would depend on (i) the category of land use (agricultural, residential, commercial); (ii) the amount of land used and perhaps (iii) a few basic characteristics of land use (e.g., developed or undeveloped, size and quality of structure). Of course, more work would have to be done to develop a database with an appropriate classification system and to assign appropriate charges to each category. These are important to ensure the progressive nature of the levy. The fee system should always be designed to avoid cases in which the poor with larger but not necessarily very productive arable land pay unfairly higher levies than the better off who own smaller but more productive commercial land.

7.5.6. *Pilot Progress*

A draft prakas on commune/sangkat revenue sharing provides for the piloting of three provincial sources of revenue, namely taxes on means of transportation (vehicle registration fees), patent taxes (business licenses) and market pheasy (market fees). Communes/sangkats in the pilot are authorised to receive 20 percent of the taxes on means of transportation and patent taxes collected by the tax administration, as well as 100 percent of small market fees generated in their jurisdiction.¹⁹ Another draft prakas on bank accounts provides for piloting the use of accounts at a commercial bank by a number of communes/sangkats during fiscal year 2005.

7.6. Summary and Conclusion

Decentralisation reform in Cambodia has come a long way since its initiation in the mid-1990s. The success of D&D reforms depends on numerous closely linked factors: strong policy statements, clear and practical legislation, strong accountability mechanisms, and unambiguous delegation of service delivery functions accompanied by politically supported commitments to adequate financing of local government. These factors are required to promote robust forms

¹⁹ These prakas are not yet signed or implemented at the time of writing.

of decentralisation. The absence of any of them would negatively affect decentralisation. If any factors worsen, decentralisation could fail (Blunt and Turner, 2005).

To date, the government has made significant gains. The direct election of commune councils in 2002, the establishment of the Commune/Sangkat Fund and the official adoption of the Strategic Framework for Decentralisation and Deconcentration Reforms are three good examples of success. A number of other critical initiatives currently in the making include the drafting of organic laws, the piloting of tax revenue sharing between the provinces and the communes, the piloting of the use of private commercial bank accounts to manage commune finances and the creation of a provincial/municipal commune/sangkat fund accountability working group. Despite these positive developments, the challenges ahead remain daunting.²⁰

Accountability of the current elected local government is still far from satisfactory. Upward accountability remains strong due to the legacy of the hierarchical political culture, current line ministry structure and gaps and ambiguities in the legislative framework. Downward accountability is hindered by poor access to information, local government's lack of autonomy and the limited capacity of commune administrations. Horizontal accountability remains problematic due to lack of enforceability, an upwardly accountable bureaucratic culture and inadequate incentives for bureaucrats. It is hoped that the D&D strategic framework provides clear guidelines to address these problem areas and achieve better pro-poor accountability.

Sectoral decentralisation and the delegation of clear service delivery responsibilities to sub-national governments are yet to be put into place. Despite encouraging signs that certain central ministries view participation and involvement of the community and local councils as key to improved service provision, these ministries are a minority. A majority are still in the early stages of developing sector policies on delegation of functions and responsibilities to local levels of government. Commune council involvement in public service delivery till now has centred more on basic infrastructure and much less on services. This has been driven by both political and institutional factors.

Fiscally, much more progress is needed. The current fiscal transfer from the centre provides CCs with opportunities to spend funds at their own discretion, but the amount is very small compared to local needs. Sustained efforts are needed to expand the revenue collection base.

Given these overwhelming challenges, all stakeholders, including the government, the donor community and civil society, will have to roll up their sleeves and work in a more coordinated and harmonised manner if these problems are to be overcome and the positive outcomes of decentralisation achieved.

²⁰ See Blunt and Turner (2005) for a detailed discussion on challenges in a broader picture.

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**Moving Out of Poverty:
Preliminary Findings
from Two Villages—Case
Studies of Ba Baong and
Trapeang Prey**

C H A P T E R (8)

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C H A P T E R (8)

8.1. Introduction

Cambodia has achieved relatively fast economic growth in the last decade, as it went through a three-fold transition from civil war to peace, from one party to multi-party politics and from a regulated to an open-market economy. New official estimates of GDP reveal a modest growth rate of 5.6 percent per annum from 1995 to 1998 and 7.4 percent per annum from 1999 to 2004.¹ The impact of rapid economic growth on poverty over the past decade appears to have been minimal. Only 3 percent of Cambodians are believed to have moved out of poverty between 1996 and 1999 (Murshid and Phim, 2005). About 36–39 percent of Cambodians continue to live below the national income poverty line, and more than four out of ten rural Cambodians are deemed poor. In addition, Murshid and Phim (2005) conducted a literature review of poverty and vulnerability in Cambodia with special reference to the Tonle Sap region, which suggests rather poor linkage between macro-economic achievements and poverty reduction in the last decade. In fact, inequality of land distribution has increased remarkably, while access to and availability of common property resources (CPR) have declined dramatically. The domestic market and trade are still fragmented due to poor road conditions, while human development indicators suggest small/marginal improvements in rural areas in areas such as health and sanitation and education. Rural livelihoods remain highly vulnerable and subject to recurring natural disasters, including floods and drought.

Although there is a large literature on many aspects of poverty (Moore, 2004; Krishna, 2003; Rudqvist et al., 2000), poverty dynamics and the routes out of poverty have received little attention. CDRI is now participating in a global study entitled Moving Out of Poverty Study (MOPS) being carried out in 15 developing countries, and is engaged in conducting the Cambodia case study. The Cambodian MOPS is trying to address key questions relating to the role of growth, freedom and democracy:

- How and why do some people move out of poverty while others remain trapped?
- Do people experience mobility differently in the contexts of fast and slow economic growth? Are there gender differences?
- Does the quality of local governance, democracy and freedom matter?
- How do social identity and networks matter?
- Does global integration matter for poverty?

This study employs a combination of quantitative (panel data sets) and qualitative (focus group discussion) methods to analyse poverty dynamics and movement out of poverty since 1993. The quantitative part of the study analyses changes in household status in nine villages where CDRI has

¹ The National Account (2005), the National Institute of Statistic of the Ministry of Planning

worked before and has built up a panel data set. For three villages, the baseline data goes back to 1996, while for the rest it dates to 2001. The Cambodia MOPS revisited these villages in two rounds in 2004–05, the first round in September 2004 (agricultural lean season) and the second in March 2005 (agricultural surplus season). More than 1,000 households from the nine villages were covered, from the provinces of Kompong Speu, Kandal, Prey Veng, Kratie, Kompong Thom, Battambang and Kampot. The original quantitative questionnaire of the 2001 survey was used after adding further components required for the MOPS study to derive data on social networks, control over decisions, political participation, information access, crime and violence, perception of well-being and youth aspirations. The panel data sets help to quantify changes in household status and mobility patterns.

A qualitative, “perception” approach was also used to bring out the rich, underlying processes that contribute to mobility patterns. It consisted of six to seven focus group discussions (FGD) per village, with six to 10 participants per FGD, purposively selected to cover a variety of respondents: village leaders, key informants, households that had moved up, those who had moved into poverty, stagnant poor, and male and female youth groups. In order to capture trends of poverty and movement out of poverty, as well as social, economic and political development over, the last 10 years, tools were used including “community timelines” and “ladder of life”.

These mixed methods allow us to focus on a range of social, political, institutional and economic mechanisms that hinder or facilitate poor people’s access to economic opportunities. Furthermore, some of the normative assumptions regarding conditions necessary for poverty reduction—the role of economic growth and integration, democracy and local governance, freedom, power and social networks—can be critically examined. The analysis is innovative in that an attempt is made to learn directly from those who have moved out and stayed out of poverty, and those who have not, under current social, political and development conditions.

This article presents some preliminary findings on dynamics and movement out of poverty based on people’s perspectives in Ba Baong and Trapeang Prey villages—two villages located in separate agro-ecological zones of the country.²

Ba Baong is blessed with good agricultural land and access to water and has experienced steady growth based on modernisation of its farms, generating a rice surplus for sale. In addition, the fisheries reforms of 2000 introduced by the government led to much greater access by the community to common water resources, with some villagers reporting a doubling of income from fishing. However, the percentage of poor households increased from 23 percent in 1993 to 29 percent in 2004, as society appears to have become more polarised. The experiences of people who have moved out and stayed out of poverty suggest some basic processes at work, serving to diversify income away from farming. Those who rely too heavily on farming and fishing find it difficult to sustain their livelihoods.

In contrast, Trapeang Prey, with poor soil and lack of access to water, has managed to attract a few rural development programmes, especially since the mid-1990s. To date these programmes have had minimal impact. The villagers have suffered from the current trend of alienation from access to common property resources and a decline in local earning opportunities. However, many

² Ba Baong is in the Mekong plain. Trapeang Prey is in plateau.

villagers, especially the poor, were able to respond quickly to urban employment opportunities through migration, which allowed them to recover from livelihood shocks experienced locally. The percentage of poor households here declined remarkably, from about 83 percent in 1993 to 64 percent in 2004. The experience with regard to poverty reduction in these very different communities, and the unexpected outcomes, highlight the complexity of poverty reduction. The objective of this comparative study is to explore these aspects more fully at the community, household and individual level.

8.1.1. Village Background

Ba Baong Village: Ba Baong, in Ba Baong commune, Peam Ro district, Prey Veng, has made significant progress since the mid-1990s, and is now well integrated into the wider market economy thanks to its location. The village is about 14 kilometres from Neak Loeang market, half way to Prey Veng provincial town, on a national road. This community has experienced a significant population increase, from 434 households in the early 1990s to 543 households—comprising 1,246 males and 1,186 females—in 2004, due mainly to a baby boom and new marriages.³ As a result of this rapid population growth, all common land (about 20 hectares of flooded forest) has been converted into crop fields. The village covers a total of 766 hectares, of which 665 are used for dry season rice. About 610 hectares (i.e. almost all the land cultivated) are irrigated by water from the Boeng Sne and Touch rivers.

This is a rice surplus community. With support from development programmes (Cambodia-IRRI since the mid-1990s, Toek Gnouy Agricultural Development in 1999 and International Fund for Agricultural Development [IFAD] since 2003) and fertile soil and good irrigation, farmers can produce a maximum of five to six tonnes of paddy per hectare. Farming provides not only direct income to about 80 percent of village households but also seasonal employment to the poor, landless and a large number of seasonal migrants from neighbouring communities. However, many small farmers still face a rice shortage for three to five months. Besides farming, villagers engage in fishing from August to February. As in other rural communities in Cambodia, village households keep livestock for extra income. In recent years, migration to urban areas in search of work has become an important phenomenon.

Trapeang Prey: Trapeang Prey is a poor rice deficit village, administratively under Khsem Khsan commune, Odongk district, Kompong Speu. It is located about three kilometres from Bat Doeng market and about one and a half hour's drive from Phnom Penh. The village has benefited from a general improvement in rural infrastructure and the rapid demand from urban-based activities, such as garments manufacturing and construction, especially since 2000. Although Trapeang Prey has one sixteenth of the area and one-sixth the population of Ba Baong, it has almost double its population, from 40 households in 1993/94 to 75 households comprising 407 people—195 males and 212 females—in 2004. The increase came mainly from natural population growth. There are 17 female-headed households in this community. The majority of female-headed households are poor and have either very little or no farmland.

The village covers 47 hectares, of which around 37 are cultivated with wet season rice. About 80 percent of the households reported an average landholding of 0.5 hectares. Only a few households

³ This information is based on the recall of the village chief, who has held this position since the late 1980s. He could not recall the total of males and females during the interview in July 2004. The estimated population growth of Ba Baong village is based on the average size of households (five members per household) which was reported by village chief not to have changed over the last 10 years.

have two or three hectares of farmland. Using traditional methods, farmers can produce up to 1.3 tonnes per hectare in a good year. About 60 percent of households reported facing rice shortages in the last four or five years. The low rice yield is due to poor sandy soil, the use of traditional rice varieties, little application of chemical fertilisers and complete dependence on (erratic) rainfall. Lack of alternative water sources produces a heavy strain on the local economy in times of drought, causing a shortage of water for drinking, feeding animals and irrigating home gardens, in the dry season. From March to June 2004, each household had to purchase a barrel of water a day (500 litres), costing 3,000 riels, for drinking and feeding animals. Besides farming, a few households are engaged in making palm sugar. People also keep cows, pigs and chickens for extra income. About 60 percent of households have cows. Villagers also sell labour and collect resources from common lands in and around the village.

8.2. Community-Wide Changes since the Early 1990s

8.2.1. Rural Development Programmes and Policy Interventions

Ba Baong has attracted considerable attention from NGOs, the private sector and the government since the late 1990s, in part due to easy accessibility, good security conditions and its geographical location. This has led to a number of development programmes in the area aimed at improving livelihoods and living standards and generating incomes and earnings.

From the late 1980s to the early 1990s, UNICEF, in collaboration with the Ministry of Agriculture, Forestry and Fisheries, launched a family food production programme in order to address food insecurity. More than half of village households not only received food for work to offset shortages in the lean season, but more importantly were also trained to set up a home garden, which provided them with vegetables. The village was regarded as a good farming model by the programme due to its rapid adoption of farming innovations. Home gardening, however, has become impractical, as the village soon became congested as a result of rapid population growth and increased demand for housing space.

Oxfam came with UNICEF and installed three boreholes and several concrete open wells in order to provide villagers with access to clean water for drinking. In 1997, Cambodia Development Resource Institute installed another three boreholes for common use of the villagers. By 2004, there were about 100 wells in the village, mainly installed by the people themselves as they discovered the benefits of clean drinking water in preventing disease and illness. Almost all households in Ba Baong now have access to clean water.

In the mid-1990s, IRRI launched an integrated pest management programme, providing alternative farming techniques for dry season rice, including the use of high-yield varieties of rice (e.g. IR 66), chemical fertilisers, pesticides and proper land preparation. At the same time, a few tractor and hand-tractor owners from outside the village began renting their equipment to the farmers, gradually helping to transform the traditional subsistence farming into more modern operations involving “green revolution” technology. Rice yields shot up to three to four tonnes per hectare compared to only two tonnes per hectare with traditional farming.

In 1999/2000, a private company called Toek Gnouy Agricultural Development came to encourage farmers to grow a high-yield variety of rice imported from China, with yields of up to 10 tonnes per hectare, promising to buy paddy rice after the harvest at an agreed price of 500 riels per kg. More than 10 households participated in this activity and produced six to seven tonnes of paddy per hectare. The company, however, disappeared, and because of the low demand for such rice, most participants made a loss.

In 2000, the government decided to return 70 percent of its fishing lots (7, 8, 9, 12 and 17) to Ba Baong commune. In addition, two micro-finance institutions (MFI), PRASAC and ACLEDA, set up in the village, offering loans at 3–4 percent interest per month—significantly lower than rates charged by local moneylenders (10–30 percent per month). PRASAC provides group loans using mutual guarantees to ensure repayment, while ACLEDA provides more orthodox loans to individuals on the basis of collateral (mainly land).

In 2002, Agriculture Project for Development repaired two irrigation channels. SEILA contributed by rehabilitating 1,020 metres of derelict irrigation canals. The combined irrigation network, as already noted, covers a total of 610 hectares, with only 55 hectares still dependent on rainwater. IFAD has further introduced appropriate techniques, such as using high-yield varieties of rice and pest management for cultivation of dry season rice.

In Trapeang Prey, most development interventions since the mid-1990s have been aimed at reducing poverty and providing people more opportunity for earning through improving health care and sanitation and credit access. In more recent years, rural infrastructure development and educational interventions have also occurred.

In 1996, GRET (a French NGO) launched a rural credit scheme providing loans of a maximum of 100,000 riels per participant, with interest rates of 3 percent per month, generally covering the period April to March. In order to access this loan, participants must be organised into groups of six, similar to the PRASAC approach. GRET changed its name to Amret in the late 1990s and has thus far operated eight cycles of loans, providing a maximum of one million riels in 2004. In 1999, PRASAC also opened a credit scheme in this village along lines very similar to Amret. In 2002, a few households took loans from ACLEDA, pledging their land and houses as collateral.

In 1998, World Vision started its rural integrated development programme, including digging one communal pond, setting up a rice bank and upgrading and equipping a community building, a gift from CDRI in 1996, into a pre-school. It also introduced sanitary latrines and educated farmers about compost making for rice farming. From this programme, people reported gaining access to the rice bank for meeting food shortages and better access to water from the pond for a few months, although inadequate to meet the needs of the entire dry season period. Some participants reported attending training courses on how to improve wet season rice cultivation by using compost. Water availability remains a major hurdle both for drinking and enhancing agricultural production.

The impact of these development programmes on agriculture, and specifically on income generation, was significant in Ba Baong, while the impact on Trapeang Prey is considered minimal.

8.2.1.1 Impact on Agriculture

Change from Traditional to Modern Farming and Impacts on Income Generation and Livelihoods

In Ba Baong, the impact of rural and agricultural development programmes on dry season rice farming have been substantial, while being less successful with regard to livestock raising and non-rice crops. The adoption of more modern farming methods cannot be solely attributed to these interventions. However, other factors were crucial: initial conditions were favourable (e.g., fertile soils), and the village has a locational advantage in terms of market access (e.g., good commercial links with the Neak Loeang market, which is an important business hub).

The switch-over has been gradual, with modern agriculture beginning in the mid-1990s. Households with enough capital were able to obtain large yield improvements—five to six tonnes of paddy per hectare in 2003/4 compared to only around two tonnes in the early 1990s.

Agriculture in Trapeang Prey, however, remains undeveloped, characterised by subsistence farming. Wet season rice is the primary source of income for 80 percent of village households. Extensive farming with traditional rice varieties and low application of chemical fertilisers yields only around one tonne/ha of paddy rice. The outlook for agriculture in this area is bleak, and many local people fear that households will become ever more indebted and lose their land. A few cash crops, such as watermelons, sweet potatoes and vegetables, can be grown in the early wet season. In the late 1990s, a few better off households experimented with some of these subsidiary crops and were able to earn good returns. However, the prolonged drought affecting large parts of the country appears to have stopped this new, emerging trend.

8.2.1.2 Changes in Animal Raising

In **Ba Baong**, besides cultivating rice, villagers keep livestock such as cows, buffaloes, pigs and chickens for extra income. The returns from livestock, except for cows or buffaloes, have remained small and erratic over the last 10 years. As in other communities, villagers still use traditional husbandry methods, which involve high risks, especially due to disease. Cattle-owning households are considered to be better off, even though these animals are no longer important for farm operations. Nevertheless, they are a store of wealth and fetch a good price, 1-2 million riels per head. However, fewer and fewer households keep cattle these days because of a lack of pasture resulting from increased off-farm mechanisation and intensification of rice cultivation. There is no common pasture—cattle graze in unprepared rice fields, which are left fallow for a very short time, as all fields are ploughed quickly using tractors or hand-tractors, contrary to the practice until the mid-1990s, which allowed a much longer grazing time.

Ba Baong and adjacent villages have attracted a number of duck farmers from upland and neighbouring districts. They own large flocks and have been in operation since 1998. No one from Ba Baong ventured into this area even though returns are believed to be high. The practice is quite simple: the ducks run free, picking up rice grains left in the fields after harvest and searching for food in the common water bodies from November/December to February. The local residents so

far have not benefited from this innovation. In fact, there are rising concerns about pollution of the water, leading to a shortage of clean water for other animals, especially cattle.

In Trapeang Prey, raising livestock has become increasingly important for household income in the last few years as more and more households attempt to diversify and stabilise their earnings, partly assisted by the training in animal husbandry received from World Vision since 2000. Sixty-five households (87 percent) with a few draught animals are seen as having good productive capital and sufficient savings for coping with unexpected shocks or crises. Among new practices identified, a few households raise some ducks for eggs, and a new cow bank with four cows has been set up, initiated by World Vision. While villagers seem to consider animal husbandry as an important livelihood strategy, many have experienced losses, sometimes quite large, when animals sicken and die and have accumulated debts initially undertaken to buy animals for rearing. Unfortunately, there has been little assistance to provide the skills and knowledge to immunise livestock against common diseases.

8.2.1.3 Increasing Landlessness

Ba Baong has experienced a dramatic increase in landless households, now up to 63 (12 percent) in 2004, compared to only about 30 households (6 percent) in 1998 and 20 households (5 percent) in 1994. Fifty percent of landless households are headed by single women. Crop failure, soaring prices of farm inputs, fluctuations in the price of rice, illness and new marriages are commonly mentioned causes of increasing landlessness. Many small farmers with one hectare or less have mortgaged their lands, because farming now is less profitable. They live from hand to mouth, relying mainly on selling their labour to earn a livelihood. Commonly, the lender has the use of mortgaged land in lieu of interest. They have to borrow money for food in the lean season (April to September/October), when the demand for labour is very low, and repay in terms of labour at a wage (2,000–3,000 riels a day), much less than the normal wage of 5,000 riels a day. As a result of such hardships, five households have temporarily migrated to Poipet in search of work. One household resettled in the upland area of Kompong Cham province, where there is a massive expansion of plantations and cash crops. Another household has resettled in Kirirom National Park in Kompong Speu.

In Trapeang Prey, around 20 percent of households in 2004, up from 12 percent in 2001, were reported to have no farmland due to distress sales, debt and new marriages. The number of households that have sold their land to better off neighbours or Sino-Khmers at Bat Doeng market has increased over time. After the end of the *krom samaki* of the early 1980s, 30 households reclaimed the land that they or their parents possessed before 1975. Households at that time occupied an average of one hectare of rice land. A few households with enough male labour and/or draught animals cleared bush land around the village and brought it into cultivation, giving them up to two hectares for wet season rice. There is no more land available for clearing, but the village population has increased. Parents have to divide and distribute their lands to their newly married children. Households with one hectare of farmland already faced food shortages for three or four months per year. Many households have been forced to borrow money to get over the seasonal food shortages.

8.2.1.4 Access to Credit

MFI's such as PRASAC and ACLEDA have provided loans at interest rates of 3–4 percent per month to villagers since 2001. Ba Baong villagers now have a choice of loans from either the MFI or private moneylenders. Local moneylenders, traders and merchants in recent years have tried to compete with the MFI by lowering their interest rates to 4–5 percent a month, compared to the 10–30 percent charged in the late 1990s. People now prefer MFI loans to private loans because they have a greater choice in terms of marketing and selling their products, and thus higher returns. However, many poor farmers continue to borrow from moneylenders to whom they are required to sell their harvests at lower than market prices, mainly because the access to credit from moneylenders is much easier.

In Trapeang Prey, GRET started a credit scheme in 1996 with a number of village households. The participants have benefited from a lower interest rate, 3 percent per month, compared to 10–30 percent per month from private moneylenders. Most participants have used the loans for raising pigs or producing palm sugar. However, the poor have used loans to meet consumption needs or to finance seasonal migration to Phnom Penh or other urban areas. Access to this rural credit scheme has been of great help. However, those who chose to invest in pig raising or farming ran deeper into debt due to the high risks involved. Since Amret is not able to meet all of the credit demand, many people (e.g. palm sugar makers) still borrow money from traders with whom they have to enter an agreement of compulsory sale at a lower-than-market rate.

8.2.1.5 Access to Clean Water, Health and Situation

In Ba Baong, all households have access to clean water from one of 93 boreholes. Water-borne diseases and related morbidity (and associated expenditures) are small. However, people now seem to be exposed to new health hazards. FGD participants agree that stomach ailments and blood pressure are on the rise for villagers aged 49 years and above, and abnormal births are increasing. These problems are suspected to be related to the use of excessive chemicals and pesticides, and from consumption of contaminated foodstuffs purchased from the market.

Trapeang Prey villagers, by contrast, still face severe water shortages, especially from March to April/June. Water shortage is not new for this village, but the period of scarcity is becoming longer. There was an attempt to install a few boreholes for drawing water from underground, but it failed.

Medical practitioners with formal and informal training from NGO health-care programmes are increasingly available in both villages. Most people, especially the poor, prefer local medical services to the commune health centre because of quicker service and because no services are free anyway. In the event of severe illnesses, Ba Baong villagers normally are advised to go to private clinics or the hospital at Neak Loeng market, about 14 kilometres from the village. Trapeang Prey villagers go to private clinics at Bat Doeng market, about three kilometres from the village. Seriously ill patients are very often sent to Phnom Penh. Illness is still a main cause of poverty in both villages. Despite appreciable improvement in the quality of health care, treatment remains unaffordable for many.

8.2.2. *Depletion of Common Property Resources*

8.2.2.1 Fishing in Ba Baong

Fishing is the second most important source of income after rice farming. Almost all households with male labour fish all year round. Fishing was restricted in the area around the village between the mid-1980s and 2000. At that time, there were frequent conflicts between fishing lot owners and fishers or farmers who fished or cultivated land close to the main streams. As part of its poverty alleviation policy, the government released a number of fishing lots for communal use in 2000. The immediate impact of this was a doubling of incomes from fishing in 2001 and 2002. In addition, farm households no longer have conflicts with fishing lot owners, as they did before 2001, so they now have secure access to their fields and are able to cultivate and harvest on time. However, villagers report a dramatic decline in the fish catch, attributed to over-exploitation and use of illegal fishing equipment. Community fishery organisations were formed by officials from Prey Veng town in 2001 to guarantee sustainable management of fishing. However, they have little power to counteract illegal fishing, which is abetted by the local fishery authorities.

8.2.2.2 Decline in Access to Communal Lands in Trapeang Prey

In Trapeang Prey, access to common property resources (CPR) played a critical role in village livelihoods, offering critical inputs/food for the poor, (e.g., inputs for palm sugar production in the mid-1990s). There used to be plentiful reserves of forest products such as firewood, wild yams, edible plants and animals. The availability of such resources has declined rapidly since the mid-1990s due to demographic pressures and encroachment on or privatisation of common bush lands.

CPR are no longer a significant source of livelihoods in this area. The annual real income per household from such resources decreased from an average of 131,000 riels (or 10 percent of total income) in 1996/97 to only 32,000 riels (1 percent of total income) in 2004. The poor, especially single-female-headed households, have suffered the most from the rapid decline in common resources. Their livelihood strategies have had to be drastically re-oriented towards the commercial sale of labour in an unstable market, often forcing temporary migration in search of work.

8.2.2.3 Decline of Palm Sugar Production in Trapeang Prey

Production of palm sugar was an important occupation for a significant proportion of households in this village in the 1990s. This activity has since declined dramatically due to the scarcity of firewood. In 2004, only 10 households out of the original 30 still processed palm sugar. There is considerable seasonality about the price of sugar, which ranges from 800 to 1,000 riels between November and February but falls to 500–600 riels in March and April. The poor do not have enough money to continue sugar production. In the mid-1990s, palm sugar processors often purchased old palm trees as cheap firewood for 20,000–30,000 riels per tree. However, palm trees are in now high demand as timber since the logging ban, and at present outsiders pay up to 50,000–60,000 riels for a palm tree. In other words, local palm sugar producers can no longer compete in the market. Even the leaves of the tree used as fuel, which were available for free, now command a price.

8.3. Relation between Economic Growth and Poverty Reduction

Ba Baong and Trapeang Prey have experienced different levels of economic development and poverty reduction due to differences in resource endowment, structure of growth and initial socio-economic conditions.

Ba Baong has experienced considerable progress in terms of agricultural modernisation, better housing conditions, good roads, level of market integration, accumulation of assets, including farm machinery, and better access to health and education services. The improvement in village welfare and livelihoods was slow from 1993 to 1996, but accelerated after 1998 after the second national elections. Despite significant agricultural development, there has been little impact in terms of employment and job creation for the poor, and indeed, it has decreased demand for farm labour. Annual real income per household, with five members on average, has increased from 2,166,000 riels (\$550) in 2001 to 3,520,000 riels (\$874) in 2004. This improvement is based on three main factors: the doubling or even tripling of rice yields, fisheries reform in 2000 and greater mobility or migration since 2000. The impact of agricultural growth on distribution and livelihoods will be discussed below.

In Trapeang Prey, despite poor soil, a dramatic decline in CPR and several years of drought, some progress has been reported in overall welfare. The small improvement of village livelihoods is attributed to better housing, improved road access, better health services, education and new earning opportunities, (i.e., employment in garment factories and construction). Large number of households seem to have a better life if durable assets are an indicator: There were 16 motorbikes and 27 television sets in 2004, compared to only four motorbikes and six television sets in 1998. Large numbers of households were able to build or improve their houses. The number of thatched roof houses declined from 62 percent in 1998 to 59 percent; and tile or tin-roofed houses increased from 10 percent and 9 percent in 1998 to 22 percent and 19 percent respectively in 2004.

Real income per capita has increased dramatically, from 214,000 riels (\$54) in 2001 to 454,000 riels (\$113) in 2004. Some of the benefits even went to the poor, so that poverty declined from 83 percent of households in 1993 to 64 percent in 2004. Earnings from working in urban areas rose significantly, from 371,000 riels or 29 percent in 1996/7 to 1,249,000 riels, equalling 51 percent of total household earnings, in 2004.

The overall situation in the area remains dire, however, as agriculture has suffered from continued drought, CPR have dwindled, and traditional livelihoods have declined rapidly. The only avenue left for the poor is migration to the cities in search of employment, which has heightened labour mobility. The situation of female-headed households is especially severe.

8.3.1. *Agricultural Growth and Livelihoods*

Access to modern agricultural technology in Ba Baong not only allows timely cropping and minimum risk of crop damage from drought and pests, but also, and more importantly, has served to stabilise the local economy and generate multiple linkages. Before 1996, there were only three tractors and no hand-tractors in the village. People had to hire machinery from outside the village for land preparation. Ba Baong now has enough farm machinery to plough all the rice fields and can even rent them to neighbouring villagers for extra income. There are now a total of 10 tractors

and more than 30 hand-tractors in this village. Almost every farmer owns a pump (there are more than 400 in the village) for irrigation. Capital has gradually accumulated and is invested locally.

However, the impacts of agricultural modernisation on the livelihoods of village households have been mixed. Rich and medium households appear to have been the main beneficiaries. A degree of entrepreneurship also evolved as private individuals invested in tractors and farm machinery and made these available on rent. Farm mechanisation shortened the farming period, therefore providing more time for farmers to devote to other earning opportunities emerging in the areas.

Agricultural modernisation has created more economic opportunities, especially for those who own land and productive assets. At the same time, small and marginal farmers failed to benefit because of capital constraints. At the same time, modern farm practices have meant heavy use of chemical fertilisers and pesticides, which have degraded the natural resource base and depleted aquatic resources on which the poor traditionally depend for their livelihoods. For instance, more and more farming households have shifted from transplanting to sowing cultivation, which requires extensive use of chemical fertilisers and pesticides, in order to reduce expenditure on hired labour. This has degraded the soil, polluted water and is killing off the aquatic animals and plants that the poor collect for subsistence. There is also increasing concern about rising inequality. Poverty appears to have risen, from 23 percent in 1993 to 30 percent in 2004. More and more small farm households that are evicted from farming and becoming landless are looking for alternative sources of sustenance and livelihoods. The rich are becoming richer and the poor are living from hand to mouth or becoming poorer. The increasing concentration of wealth exists side by side with interlocked credit markets tying in rice harvests which have to be sold to the lending-traders at a lower than market price. MFIs like ACLEDA have entered the market but have not been able to make much of an impact on these “traditional” forms of credit.

8.3.2. Infrastructure and Livelihoods

The construction of the national road from Neak Loeng to the provincial town of Prey Veng and to the upland areas of Kompong Cham province was completed in early 2000. The leaders of the Ba Baong community fisheries, in collaboration with the pagoda committee, raised money to construct a village road to connect with the national road in 2001. As a result, local people now enjoy easier, faster and cheaper transport and communications. In particular, this has resulted in better market access and lower prices for inputs and higher prices for their outputs. It also makes it easier and cheaper for the poor to travel long distances in search of work, which has accelerated seasonal migration.

Trapeang Prey has just recently been connected to other commercial centres by the construction of several new roads. In 1999, the Tertiary Rural Roads Improvement Programme (TRIP)⁴ under the SEILA programme built a village road connecting to Bat Doeng market, about three kilometres away. In 2003, the Kompong Speu provincial Department of Public Works constructed a section of the national road, which also connects Bat Doeng market to Odong district, about 10 kilometres away, and to Thnal Totueng on National Route 4, about 20 kilometres away. The improved road system appears to have helped both local traders and seasonal migrants.

⁴ TRIP has been funded by Germany since 1995.

The impact of road improvement on incomes, especially from trade and migration/labour sale, is quite significant. For example, their real annual incomes increased from 197,000 riels and 519,000 riels (17 and 45 percent respectively of total household income) in 2001 to 720,000 riels (29 percent) and 1,249,000 riels (51 percent) in 2004. The impact on education has also been notable, as children now find it easier in the rainy season to go to the primary school at Trapeang Kraloung village, which is about a kilometre away.

8.3.3. Labour Migration

Despite agricultural modernisation in Ba Baong, unemployment and under-employment persist. A few villagers started going outside the village to sell labour in 1998, and since then their numbers have grown rapidly. For many poor people and youth, migration is the only way to earn money, especially during the post-harvest lean season, when there is little work available on farms. The numbers involved are not small. In 2004, one or two members of virtually every household, both men and women, aged 17-25 years migrated after the harvest season in search of work. Destinations include Phnom Penh, other towns, and even distant Banteay Meanchey, near the Thai border. Most of the women, around 50, are working in garment factories in Phnom Penh.

In **Trapeang Prey**, selling labour or migrating to urban areas, especially Phnom Penh, has become the main source of household livelihoods, accounting for 51 percent of the total household annual income earned in 2004, an increase from only 29 percent in 1996/7. A few girls started working in Phnom Penh in the late 1990s, with the assistance of a CDRI female field enumerator who was involved in a CDRI field research project in 1996. Since then, others have followed, so that now almost every household has one or two women aged 18–30, who have completed secondary school or at least can read and write, employed as garment workers in Phnom Penh or its outskirts.

Urban development has had a big impact on village incomes and transformed Trapeang Prey livelihoods. Some villagers aged 18–40, regardless of education 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 \$30–50 a month. However, remittances from male migrants are not as significant as those from female migrants because they are not as good at saving as women. Many households depend on remittances from the city to buy inputs for rice cultivation, raise more pigs and cattle or to build or renovate houses. These external links have been critical in alleviating the suffering and the adverse effects that would have resulted from drought and successive crop failures.

Lack of education is a constraint on maximising the benefits that new employment opportunities seem to be generating. With little or no education, the poor are left with the lowest paid jobs, such as digging and carrying earth, or farm work that is available only for short periods of time.

8.4. Dynamics and Movement Out of Poverty

8.4.1. Definition of Poverty

Poverty is complex. It means different things to different people, and people within any given community may have different words for different levels and categories of poverty. What

constitutes poverty depends very much on who defines it. The views of politicians, development practitioners, researchers and the “poor” may diverge substantially. However, poverty has been understood largely in terms of income and consumption: a person is deemed to be in poverty if his/her income is not enough to purchase minimum subsistence requirements known as the “poverty line”, which varies across time and societies (Murshid and Phim, 2005).

In Cambodia, the income poverty line is defined as the monetary equivalent of a food basket of 2100 calories a day, with a small allowance for non-food consumption. This narrow consumption-based poverty measure has merit since income represents the capacity of households to access the necessities of life. In the absence of other appropriate measures, it serves as a partial proxy of well-being. However, poverty is not just a shortfall of income or caloric intake. The Human Development Report 1997 suggested that poverty means more than a lack of what is necessary for material well-being. It means the denial of opportunities and choices that are widely viewed as essential to lead a long, healthy, creative life and to enjoy a decent standard of living, freedom, dignity, self-esteem and the respect of others.

In Cambodia, poverty is often thought of as not having enough food or own-produced rice, which afflicts mainly the landless and small landholders or people lacking earning opportunities. The poor also live from hand to mouth in a very small cottage/hut and have very few assets apart from their own labour. They are largely dependent on selling labour, which is often pledged in advance to landowners in exchange for consumption loans. In an effort to meet subsistence needs, all family members, except small children and the disabled or elderly, have to work and contribute to household incomes. They are also prone to illnesses, which reduce their productivity and income, and can lead to indebtedness, leaving little opportunity for them to move out of poverty. Their children, ranging from five to eight per family, are their only assets, although they have, at best, only a few years of schooling. The poor therefore are not able to respond robustly to emerging opportunities and remain trapped in poverty. Poor families also often face enormous difficulties in keeping their children in school due to the high cost as well as the pressure to contribute to the household income. Households with a single female head and many dependents are likely to be at the bottom of the social ladder.

Studies elsewhere suggest that children face a brighter future when female parents can move out of poverty,⁵ but this is not happening in these two villages, where opportunities are limited. Obviously, poverty is likely to be transmitted across generations. In most cases, girls have to quit school at an earlier age than boys to help with household work, child-care or earning a living.

The poor are often viewed by other community members, including village leaders and key informants, as undependable, prone to drinking and gambling, unable to save, and engaged in domestic violence. The poor in Trapeang Prey feel discriminated against. They are reluctant to participate in village gatherings since they do not have proper clothes, which in turn limits their ability to build good social networks. Such networks could be invaluable in building social capital and improving access to information and opportunities.

⁵ See www.un.org/cyberschoolbus/briefing/poverty/poverty.pdf

8.4.2. Household Socio-Economic Classification in 2004

Socio-economic stratification began to intensify in both villages as early as the early 1990s. In the beginning, households with adult male labour and good farming equipment were considered as the “medium” group. This group was in a position to convert flooded or bush land into farmland, thereby extending their farms and producing a rice surplus. The savings thus generated were used to start small businesses. Those without adequate labour were at a disadvantage, especially female-headed households.

In 2004, some Ba Baong villagers categorised all households into five socio-economic groups—rich, better off, medium, poor and destitute. Others (e.g., village leaders) spoke of four groups, while the upwardly mobile recognised only three groups. By contrast, only the three lowest groups were commonly identified in Trapeang Prey (Table 8.1).

Table 8.1: Characteristics of Household Socio-Economic Classification in 2004

Classification	Ba Baong: 543 households	Trapeang Prey: 75 Households
Rich	About 1 percent: 10 hectares or more arable land, a vehicle for large-scale rice trading. Some have 10-15 hired workers, a big house, mobile phone, 1-2 motorbikes, generator and constant incomes all year round, plus other important assets that the better off also have.	
Better Off	20 percent: 8-9 hectares of arable land, a fairly big house, a threshing machine and hand-tractor, motorboat, a few batteries for lighting and fishing, 3 households with 1 or 2 tractors, moneylenders and medium scale paddy traders, plus other assets that the medium have.	
Medium	50 percent: 1-2 hectares of arable land producing some surplus rice for sale, a few cattle, a hand-tractor for some, fairly good housing, a motorbike for many households, free from debt, one or two water pumps, more than half with TV, good fishing equipment, 1-2 batteries for lighting at night, selling labour for extra income.	36 percent 1-1.5 hectares of farm land producing enough rice for consumption, 4 cows and one oxcart with rubber wheels, 16 households own a motorbike, a bicycle or radio, some households have TV, a battery for lighting for some, tin-sheet house and sugar production for some, petty trading or running small grocery shop for some. Selling labour after cultivation.
Poor	25 percent: Less than a hectare of land, rice deficit 4-5 months, 1-2 cattle or shared ownership of cows for some, indebtedness, a water pump for some, a TV for some, house roofed with thatch or tin, fishing equipment, heavy dependence on selling labour.	37 percent: 0.3-0.4 hectares of farmland, rice deficit about 5 months, shelter roofed with thatch, and some households were able to buy some timber for housing, 1-2 cows, palm juice and sugar production, selling labour.
Destitute	4 percent: landless, selling labour, hand to mouth living, unable to borrow money, small flimsy cottage, 5-8 children, frequent domestic violence, not able to send their children to school.	27 percent: No productive assets, more children, frequent domestic violence, hand to mouth earning and a flimsy cottage, mobile labourers, not able to send their children to school.

8.4.3. Change in Household Socio-Economic Classes from 1993 to 2004

The gap between socio-economic groups was very small in the early 1990s. However, inequalities intensified, especially after the second national elections in 1998. The poor became poorer while the better off became richer. Table 8.2 provides an overview of these changes in each village.

Table 8.2. Changes in Household Socio-Economic Groups, 1993 to 2004

Reference year	Ba Baong			Trapeang Prey		
	1993	1998	2004	1993	1998	2004
Total households	420	500	543	43	64	75
Rich			1%			
Better Off	4%	3%	20%			
Medium	73%	69%	50%	17%	19%	36%
Poor	18%	22%	25%	46%	33%	37%
Destitute	5%	6%	4%	37%	48%	27%

Note: these figures are based on the recall of the village leader and the key informant groups.

In Ba Baong, “rich” as a category is a recent development. In the early 1990s, four groups were identified: better off, medium, poor and destitute. The proportion of better off households increased to 20 percent in 2004, from only 3 percent in 1998 and 4 percent in 1993. By contrast, the proportion of medium households declined steadily from 73 percent in 1993 to 50 percent in 2004, while the poor have increased from 18 percent in 1993 to 25 percent in 2004. The destitute remained almost unchanged over the last 10 years: 5 percent in 1993, 6 percent in 1998 and 4 percent in 2004. The number of poor and destitute households has increased from 23 percent in 1993 to 29 percent in 2004. About 17 percent of medium households have been able to improve their livelihoods and join the better off group, while 6 percent have fallen into poverty.

Trapeang Prey experienced a remarkable increase in the ranks of the medium group, from 17 percent in 1993 to 36 percent in 2004, and a significant decline in poor and destitute households, from 46 percent and 37 percent in 1993 to 37 percent and 27 percent respectively in 2004. The percentage of poor and destitute households has declined from 83 percent in 1993 to 64 percent in 2004. In other words, 19 percent of households have been able to move out and stay out of poverty over the last 10 years.

8.4.4. Mobility Determinants at Household Level

The poor are often unable to graduate from their deprived situation due to a number of factors. First, they lack access to productive assets, mainly land and financial capital, or economic opportunities to improve their earnings. Second, they have poor health, knowledge and life skills, which reduces productivity and restricts mobility and choices. Third, the poor are exposed to a high level of insecurity and income shocks. Finally, they are disadvantaged in terms of voice and participation, and are not able to influence policy in their favour.

8.4.4.1 Moving Out and Staying Out of Poverty

People have different experiences associated with escaping from and staying out of poverty. The ability to diversify income sources appears to be a common route out of poverty in both villages, but the ability to diversify varies. Those who moved out and stayed out of poverty are reported to have been able to diversify their incomes by going into off- and non-farm employment, making

them less dependent on agriculture. This does not mean that all farming households are poor and unable to escape poverty, but most of them started with cultivation and then improved their livelihoods through developing additional, non-farm, sources of income. Those who depend only on farming and CPR seem to find it difficult to graduate from and stay out of poverty.

In Ba Baong, for instance, the rich and better off households were not much different from other villagers in the 1980s. Some of them were fortunate in having valuables left from the Pol Pot regime or having strong financial support in the 1990s from relatives living overseas. These factors allowed them to buy farming and fishing tools and to clear additional land in the early 1990s, enabling them to emerge as surplus rice producers and to generate savings.

Five households that were firmly among the better off category in the early 1990s had become rich by 2004. They invested their savings wisely, (e.g., in a rice mill and livestock raising). They are risk takers and always ready to move into profitable activities. A good example is to get into farm-equipment rentals, generally operated by the women, as well as the risky but highly profitable informal credit market. Some of them have expanded their landholdings over time, which they do not cultivate themselves but rent out to small farmers. Some of them have turned into big grain traders as surplus rice production in Ba Baong grew quickly.

The medium households in 1993 or 1998 essentially followed a similar pattern, becoming better off in 2004. They were able to generate some savings from farming and fishing, which enabled them to start small businesses such as making rice alcohol and raising pigs. Some have set up small grocery shops and provide loans at high interest rates of 10–30 percent per month to neighbours. Typically, home businesses are run by the wife or other female family members. The males are constantly watching out for emerging opportunities, many becoming medium-scale grain traders and speculators. A few of the poor households in 1993, thanks to remittances from overseas and hard work, became fish traders or bought a grocery shop and have now become better off.

In Trapeang Prey, not many households were able to diversify their sources of income away from agriculture in the late 1990s. Off-farm businesses, such as palm sugar production, setting up small rice mills and lending money to others, were key for the very few households that moved out of poverty and into the medium group. Diversification has required other family members to take up additional occupations in order to respond rapidly to developments in the informal economy. Diversification is a way of spreading risks and reducing vulnerability and an important key to survival, accumulation and expansion. The success of diversification depends very much on creativity, entrepreneurship skills and willingness to work hard, regardless of education. But good education is believed to be very important in helping people arrive at the right decision.

Migration to other urban areas was the most important route out of poverty for those in Trapeang Prey, especially after 2000. However, not everybody is able to benefit, because the urban demand for labour has not grown rapidly enough (Godfrey et al., 2001; Murshid and Phim, 2005). It is also vital to have excellent networks and information in order to benefit from migration.

Grown children who can earn an income play an important role in upward mobility. In both villages, people who were poor when their many children were small became much better off once the children grew older and began contributing to the family income. However, this route out of poverty may not be sustainable since the children eventually marry and often leave.

8.4.4.2 Moving into Poverty

Many medium households in 1993 or in 1998 have become poor now. The reasons for their decline are many. A major factor seems to be the risks in agriculture arising from weather shocks, price shocks, and substandard fertilisers and pesticides.

More large households also found their modest land possessions quickly parcelled out to married children, while others faced declining productivity due to old age and illness. Expenditures on ceremonies, especially on marriages, can be substantial, eroding household savings (and sustainability) quickly. Illness and the high cost of treatment constitute other important reasons why many medium households fall into poverty, or the poor remain trapped in poverty.

Most of the poor, however, reported little change in their condition over time. Nor do they appear to have any expectations about a more positive outcome in the future, given their poor resource base, indebtedness and lack of social capital.

8.5. Conclusion

Ba Baong and Trapeang Prey have experienced different levels of development, poverty reduction, inequality and polarisation in the last 10 years. Ba Baong has achieved steady progress between 1993 and 2004, while Trapeang Prey experienced slow growth over 1993–98 and stagnation thereafter. Crucially, the dynamics in each area were determined by initial conditions and resource endowments, which provided the context for the type of development interventions that took place. Independent, yet powerful, factors that are important relate to infrastructure development and integration into input, product and labour markets. Another major factor is depletion and over-exploitation of natural resources or CPR, which had provided temporary relief but can no longer be depended upon to serve as a safety net.

On the positive side, both villages have better access to health and education services. With the free registration policy since 2000, more and more children are able to go to school. Health care services have improved significantly, although most services are not free of charge and the costs remain unaffordable for the poor. Free vaccination programmes have helped to prevent childhood diseases.

The experiences of the two villages bring out the sharp contrast in rural fortunes and serve to identify the dominant processes that have aggravated polarisation and affected poverty. The most striking finding is that despite Ba Baong's favourable initial conditions and good overall performance, the rate of poverty increased, while in Trapeang Prey, the opposite took place. It was perhaps fortuitous that new work opportunities in garments and construction took up the slack and offset the decline experienced in the local economy of Trapeang Prey. If this had not happened, the situation there would indeed have been grim. Fundamentally, areas like Ba Baong are basically strong and economically viable, while areas like Trapeang Prey will remain at the mercy of broader economic forces.

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