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Foreign Investment in Agriculture in Cambodia

SAING Chan Hang, HEM Socheth and OUCH Chandarany with PHANN Dalis and PON Dorina

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List of Acronyms

ADB	Asian Development Bank
ASDP	Agriculture Sector Development Programme
CDC	Council for the Development of Cambodia
CDRI	Cambodian Development Resource Institute
CEA	Cambodia Economic Association
CEDAC	Centre d'Étude et de Développement Agricole Cambodgien
CIB	Cambodia Investment Board
ELC	Economic Land Concession
FAO	Food and Agriculture Organisation
FDI	Foreign Direct Investment
FGD	Focus Group Discussion
GDP	Gross Domestic Product
GTC	Green Trade Company
GTZ	German Technical Cooperation
KHR	Cambodian riel
MAFF	Ministry of Agriculture, Forestry and Fisheries
MEF	Ministry of Economy and Finance
MoE	Ministry of Environment
MoP	Ministry of Planning
MoWRaM	Ministry of Water Resources and Meteorology
NGO	Non-governmental Organisation
NSDP	National Strategic Development Plan
PPTA	Project Preparatory Technical Assistance
SEAFMD	South East Asia Foot and Mouth Disease Regional Coordination
SLC	Social Land Concession
UK	United Kingdom
UNDP	United Nations Development Programme
USA	United States of America
USAID	United States Agency for International Development
USD	United States dollar

PREFACE

The Food and Agriculture Organization of the United Nations (FAO), with additional financial support from the Ministry of Agriculture, Forestry and Fisheries of Japan (MAFF), has initiated the project, *"Support to study on appropriate policy measures to increase investments in agriculture and to stimulate food production"* (GCP/GLO/267/JPN). The aim of the project is to identify a policy framework for promoting, facilitating and supporting acceleration of investment by the public and private sectors to achieve domestic capital formation for stimulating sustainable food production. In the project, studies and analytical work have been undertaken to understand the nature and determinants of domestic capital formation and appropriate investment in agriculture for increasing food production. Data and information sets have also been developed with an aim to provide all relevant stakeholders with fundamental data and information to assist them in grasping and analyzing the status and trend of agricultural investment as well as formulating investment strategy. More information can be found at http://www.fao.org/tc/policy-support/investment-policy/.

As one of the project's activities, case studies on foreign investment in agriculture were carried out in order to understand and analyze the extent and nature of foreign investment in agriculture and its impact on the agriculture sector and food security. Because of the significance and importance of such investment in the country, Cambodia was identified as one of the case study countries. The Cambodia Development Resource Institute (CDRI) organized and conducted this study.

This case study report comprises the overview of agriculture sector and foreign investment in agriculture in Cambodia, policies and regulations affecting the foreign investment in agriculture, impact of the investment in the agriculture sector and policy recommendations.

Acknowledgements

The authors are deeply grateful to the Food and Agriculture Organization of the United Nations (FAO) for providing the financial support through a Japan funded Trust Fund project "Support to study on appropriate policy measures to increase investments in agriculture and to stimulate food production", which helped make this study possible. Profound gratitude is also extended to our colleagues at the Cambodia Development Resource Institute (CDRI) as well as the many individuals and institutions involved in this study for their kind support and motivation. Special thanks are due to Mr Saifullah Syed, Mr Pascal Liu and Mr Masahiro Miyazako of the FAO for their inputs and comments throughout the research. We are particularly grateful to Mr Khun Kakada, deputy director of the Rubber Development Department, General Directorate of Rubber, and the local communities for sharing their knowledge, giving us valuable in-depth insights into issues related to Economic Land Concessions.

The authors would also like to thank our executive director, Mr Larry Strange, and research advisor, Dr Rebecca F. Catalla, for their support and interest in this study. We are also grateful to our research team members, Mrs Pon Dorina for fieldwork coordination and Ms Phann Dalis for data collection and field work assistance. Special gratitude is also extended to our language editor, Ms Susan Watkins, for her patience and constant support. Thanks are also due to the many support staff at CDRI, especially Mr Ung Sirn Lee, director of operations, and Dr Tong Kimsun, programme coordinator of the Economy, Trade, and Regional Cooperation unit.

Phnom Penh, June 2012

Executive Summary

The noticeable rise in foreign direct investment (FDI) in agricultural land in developing countries in Africa, South and Central Asia and Latin America in recent years has sparked concerns among civil society groups and international organisations as to the potential impacts on poor local communities' access to resources. Growing interest from foreign investors in agriculture in Cambodia, particularly in agro-industrial crops like rubber, cassava, sugarcane and maize, has likewise raised concern about the potential effects of such investments on community livelihoods, the environment and national food security.

Agriculture has traditionally been a steady contributor to the national economy, employing a significant proportion of the rural workforce and generating substantial foreign exchange earnings. Now in its fourth legislature, the Cambodian government is focussing even more strongly on promoting the sector by relaxing taxes related to agricultural products and developing rural infrastructure such as roads and irrigation. New measures have been taken to help people in local communities, including the removal of big fishing lots from private ownership which allows local communities better access to fishery resources without having to fish in deeper waters or further from the riverbank.

The government has also undertaken forestry reform to facilitate investment in forestry and crops through the establishment of legislation on concessions, forestry community formation and environmental protection. The Sub-decree on Economic Land Concessions (ELC), adopted in 2005, helps in the granting of land concessions to foreign and local investors to exploit unused and/or infertile land.

Laws relating to sanitary and phyto-sanitary issues and animal health have been enacted to control livestock production, prevent losses and contain disease. Through the Ministry of Agriculture, Forestry and Fisheries (MAFF), the government recently prohibited the import of livestock from neighbouring countries to prevent the spread of swine flu and reduce the risk of animal disease pandemics.

Meanwhile, the government, with the support of development partners, has provided technical assistance to rural people engaged in rice farming, fisheries (aquaculture) and livestock production. It has also renewed efforts to improve the irrigation system so as to reduce farmers' dependency on rain, particularly in rice production, and bolster resilience to climate change.

As the agriculture sector is one of the main drivers of economic growth in Cambodia, a market mechanism has been set up to promote trade and channel agricultural products to local and international markets. To help the sector become more competitive, soft infrastructure related to rules and regulations, bureaucratic procedures and costs of doing business has been improved. Attracting investment in the energy sector is also deemed important, as the price of electricity in Cambodia is still high compared to other countries in the region.

The share of agricultural investment in total investment is small, averaging around 6 percent between 2000 and June 2010, despite the growing interest during this period from investors from countries such as Thailand, China, Vietnam, Korea, Singapore, Japan, Malaysia, Canada, America, India, France, the UK, the USA and Denmark. Investors engage mainly in crops, namely rubber, cassava, maize, sugarcane and cashew nuts, and forestry, such as teak and acacia. The dramatic rise in interest in recent years has triggered concern from various

stakeholders as to the potential effects of foreign ELC projects on community livelihoods, local environment quality and national food security.

Preliminary examination using data from the Council for the Development of Cambodia (CDC) and MAFF shows both positive and adverse effects from FDI projects. Some projects have created significant employment for local communities; others, however, have not. Notably, land conflict resulting from a weak land tenure system and limited consultation with local communities prior to the granting of ELC projects has become commonplace. Moreover, some projects that entail forest clearance have eliminated vital sources of traditional community environmental income from the collection of non-timber forest products, such as vines, wood resin, bamboo and rattan, and hunting. Furthermore, the filling in of streams by some ELC companies could lead to water shortages. Overall, from the investigation of the selected projects it appears that costs of FDI projects tend to outweigh the benefits.

With a rapidly expanding population and increasingly limited land, food security is another cause behind the growing concern in Cambodia. From our analysis of CDC (2000–09) and MAFF (1995-09) data on ELC investments and preliminary fieldwork on a number of FDI projects, and despite the traditional widespread informal paddy rice export to Thailand and Vietnam, we find that Cambodia will not suffer from food insecurity in the short and medium term. Nevertheless, in the long term, land use conflicts, water shortages and disappearing income sources compounded by the dramatic expansion in ELC investment in recent years could lead to a decline in household food consumption and a reduction in nutrition. Particularly at risk are subsistence farming households and those that cannot earn enough from growing rice, such as in Kraya commune in Kompong Thom province.

1
Introduction

In the past few years there has been a noticeable rise in foreign direct investment (FDI) in agricultural land in developing countries in Africa, South and Central Asia and Latin America. A major reason for this surge is the attempt by food- and energy-importing countries to tackle their domestic food and energy crises after being struck by high global food prices in 2008 and high oil prices in 2007 and early 2008. In this regard, investment banks such as Black Rock (USA), Deutsche Bank (Germany), Goldman Sachs (USA) and Knight Frank (UK) are seeking to secure sizable plots of agricultural land in developing countries as a potential new source of investment (Braun & Meinzen-Dick 2009; Smaller & Mann 2009). This situation has sparked concerns among civil society groups and international organisations as to potential impacts on poor local communities' access to natural resources.

Cambodia is endowed with huge freshwater reserves (the Tonle Sap Lake – 270 km^2 in the dry season and 16,000 km^2 in the wet season – and a 480 km stretch of the Mekong River) and an immense area of arable land. Some of the above-mentioned food-importing countries, including China, Kuwait, Malaysia, Qatar, Korea and Vietnam have honed in on the country's natural resources. State private land, in the form of economic land concessions (ELCs), is leased to concessionaires for agricultural exploitation for a maximum of 99 years (GTZ 2009). Currently, 85 companies, both domestic and foreign, have been contracted to exploit a total land area of 379,034 ha (MAFF 2010).

International and non-governmental organisations (NGO) have expressed critical concerns as to the potential effects of ELC holders' activities on the poor local communities located nearby. To date there has been little research on the economic, environmental and social impacts of FDI inflow on agriculture and its benefits for Cambodia. However, international evidence regarding the costs and benefits of such investment suggests that though large-scale agricultural land exploitation could restrict local communities' access to land and water, it could also contribute to the country's economic development through investors' participation in developing essential local infrastructure for agricultural expansion, particularly irrigation. It seems timely to explore the likely effects in Cambodia in more detail so that steps can be taken to mitigate any likely negative impacts.

1.1. Study Objectives

This study aims to examine the validity of some of the concerns expressed in Cambodia over the potential effects of FDI in agriculture on local communities and their environment. Initially, it investigates the extent and nature of FDI in agriculture and its sub-sectors, including crops, livestock, food processing, forestry and fisheries. It then analyses the policy and regulatory environment and institutions governing and facilitating such FDI, as well as prevailing business models, in the acquisition of agricultural land. The paper concludes by providing some policy recommendations in response to the challenges facing the sector.

1.2. Methodology

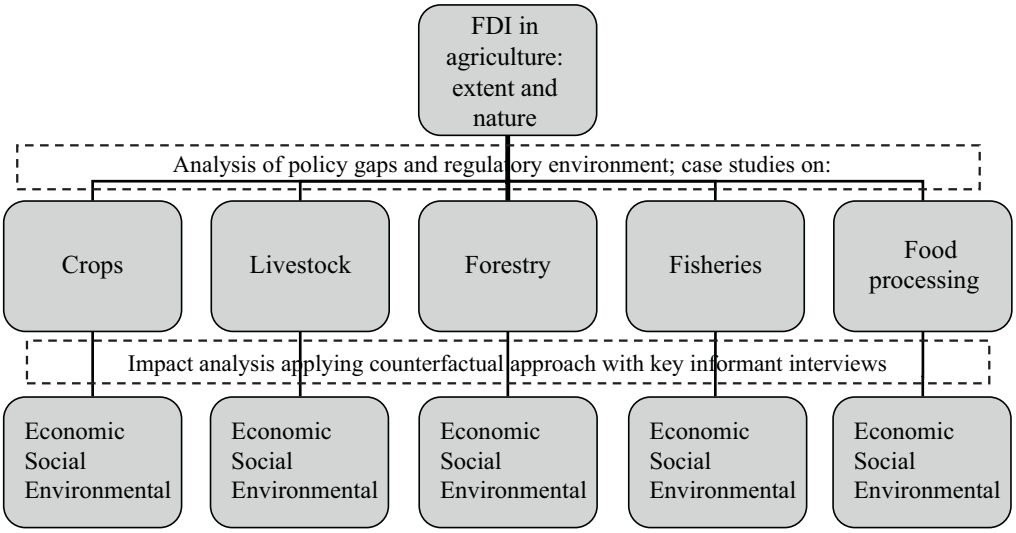
Data on land acquisition, particularly data on contract arrangements and ex-post and ex-ante data on socioeconomic and environmental indicators in the selected project locations, are rather patchy. Therefore, the study was based mainly on interviews with key informants and

discussions held in communities in or close to the concession areas. This approach is used to provide policymakers and other players with a general overview of the likely impacts of certain types of FDI projects on local communities and their environment.

Case studies on FDI in the crops, livestock, food processing, forestry and fisheries sub-sectors were based on past research and consultation with government officials and representatives from communities close to concessions. Focus group discussions (FGDs) were held with local communities and village authorities to capture the main economic, social and environmental impacts. Economic indicators included income, employment, development of irrigation and roads; social indicators took into account healthcare, water and land access and land conflicts; environmental indicators entailed use/overuse of pesticides and fertilisers and tree felling (forest cover). The study team also consulted foreign investors to discuss the costs and benefits of their projects and the potential hurdles to their investment in Cambodia.

The team also gathered secondary data from the Ministry of Agriculture, Forestry and Fisheries (MAFF), the Council for the Development of Cambodia (CDC), the National Institute of Statistics of the Ministry of Planning (MoP), the Ministry of Environment (MoE) and international organisations. Figure 1 shows the overall structure of the analysis.

Figure 1: Analytical Framework for the Analysis of FDI in Agriculture



1.3. Scope and Limitations

The broad nature of the study's scope means that it was not designed to reveal critical details of FDI projects and investment hurdles in agriculture sub-sectors. Rather, it aims to investigate selected projects and firms based on consultation with local communities and the expert judgement of the research team. More importantly, given time constraints, the study strives to reveal the overall picture of FDI in those sub-sectors only, compiling information on the likely effects on local communities and their immediate environment by applying a counterfactual approach.[1] The study tried to consult with foreign investors, but this was difficult as they were hard to trace: only two were interviewed in the end.

1 The pitfall of this approach is that measured impact could be either over or underestimated: asking respondents to compare their socioeconomic status before and after the project is highly subjective. However, the study aims mainly to provide only an overall picture of the likely effects of certain projects. In-depth impact analysis of specific projects, applying more sophisticated project evaluation techniques such as propensity score matching, before and after, difference-in-difference and instrumental variables, can be investigated later.

2

Role of Agriculture in the National Economy

Despite a significant reduction in the share of agriculture in total national output during the past two decades, from around 46 percent in 1993 down to about 28 percent in 2009 (MEF 2010), the sector remains one of the key growth-enhancing pillars as well as a poverty-reducing tool. This is because around 85 percent of the total population live in rural areas, the majority of whom rely on agriculture (mainly paddy rice) as their primary income and livelihood source. As outlined in the government's Rectangular Strategy Phase I and Phase II and the National Strategic Development Plan (NSDP) 2006–10 and the NSDP Update 2009–13 in pursuit of growth, employment, equity and efficiency, agriculture ranks high among the four broad strategic development priority angles. The other three are rehabilitation and construction of physical infrastructure, private sector development and employment generation, and capacity building and human resource development.

2.1. Contribution of Agriculture to the National Output

Prior to 2000, agricultural production accounted for almost half of Cambodia's national output, reflecting the agrarian nature of the country's economy. However, the sector's contribution has declined markedly in the past two decades. Latest data from MAFF show that it contributed only 33.5 percent of the country's gross domestic product (GDP) in 2009, down from 45.3 percent in 1993. The sector's share of employment of the national workforce also shrank, from 67.4 percent in 2002 to 55.9 percent in 2007, though it remains substantial despite the slump. This significant change in the structure of the Cambodian economy is a result of a rapid expansion in manufacturing industry, namely textiles and clothing, and the services sector.

Table 1: Share of Agricultural Production in National Output, 2002–09

Category	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**
Share of agriculture in GDP (%)	33.3	31.5	32.0	30.7	30.1	29.7	32.8	33.5
Share of employment in agriculture* (%)	67.4	64.2	60.3	59.1	57.4	55.9	-	-
Agriculture value added (KHR billion)	5108	5645	5596	6476	6830	7174	7562	7994
Growth of value added (y-o-y) (%)	-2.5	10.5	-0.9	15.7	5.5	5.0	5.4	5.7
Sub-sector shares in agriculture								
Crops (%)	42.4	46.8	46.1	50.9	50.8	52.2	52.7	52.9
Fisheries (%)	31.6	29.1	28.8	26.3	25.9	24.8	25.0	25.2
Livestock and poultry (%)	16.8	16.1	16.9	15.4	15.8	15.6	15.5	15.3
Forestry and logging (%)	9.1	8.0	8.1	7.4	7.5	7.3	6.9	6.6

Note: *Data from IMF (2007, 2009). Source: MAFF (2008, 2009, 2010)

Annual average growth (gross value added) in the sector was at about 5.6 percent from 2002 to 2009. Such slow growth can be attributed to weak rural-urban linkages; unsecured land ownership; sluggish investment, both public and private, particularly in irrigation, transport and agricultural research; and limited support infrastructure such as availability of and access to finance and affordable reliable energy and telecommunication services (World Bank 2004a, 2004b, 2006).

Crop farming dominated by paddy rice cultivation, contributes around half of the national agricultural output. Fisheries, including freshwater, aquaculture and marine, account for approximately 33 percent, livestock and poultry contribute about 16 percent, and forestry and logging around 8 percent of total agricultural output.

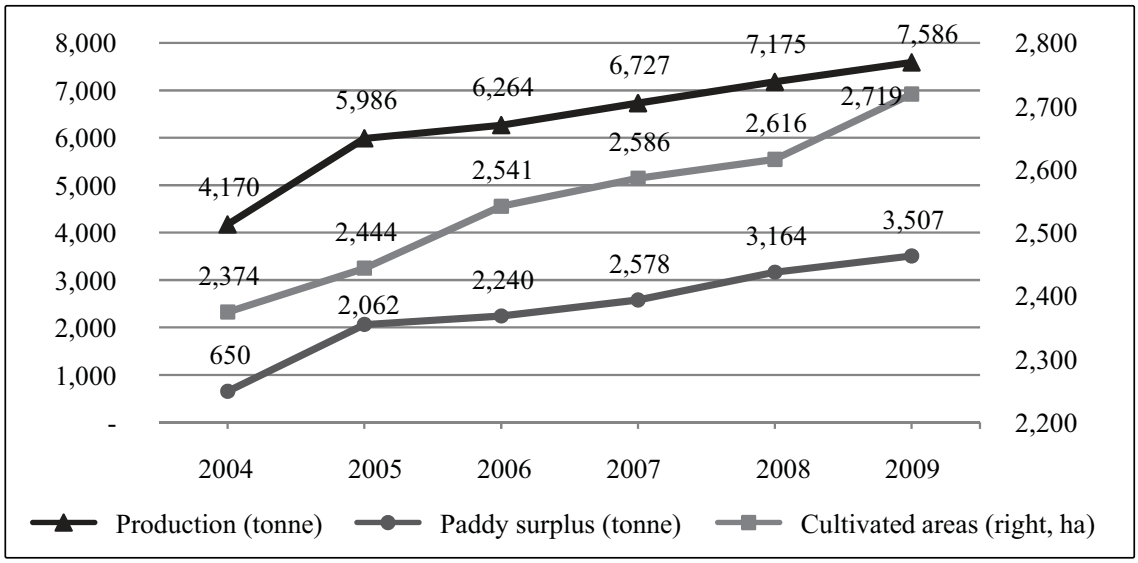
2.2. Production and Harvested Areas

Alongside the rapid growth in manufacturing industry in the past decade, an expansion of paddy rice, Cambodia's main staple food, has been remarkable. The area under paddy rice increased from about 2.4 million ha in 2004 to 2.7 million ha in 2009, resulting primarily from the government's expansion plan. Production also surged significantly from 4.2 million tonnes in 2004 to 7.6 million tonnes in 2009, thanks to meagre loss of cultivated areas, which is the difference between total cultivated and harvested areas. This substantial growth in production has led to a considerable paddy rice surplus (Figure 2). The sub-sector is estimated to employ around 2,940,000 people, which shows its significant potential to contribute to poverty alleviation in rural Cambodia (UNDP 2007: 5).

There is also evidence of fast and stable growth in the production of other main crops such as cassava, maize and soybeans, and a slight increase in mung beans, between 2002 and 2009 (Figure 3). This growth can be attributed to rising prices, pushed upwards by increasing demand for these crops in neighbouring Thailand and Vietnam, which are their traditional buyers. In terms of employment, soybeans, maize and cassava employ about 16,500, 12,500 and 4,000 workers, respectively (UNDP 2007: 5). Cambodia also produces a wide range of specialised crops, including sweet potato, peanuts, sesame, sugarcane, tobacco, jute and vegetables.

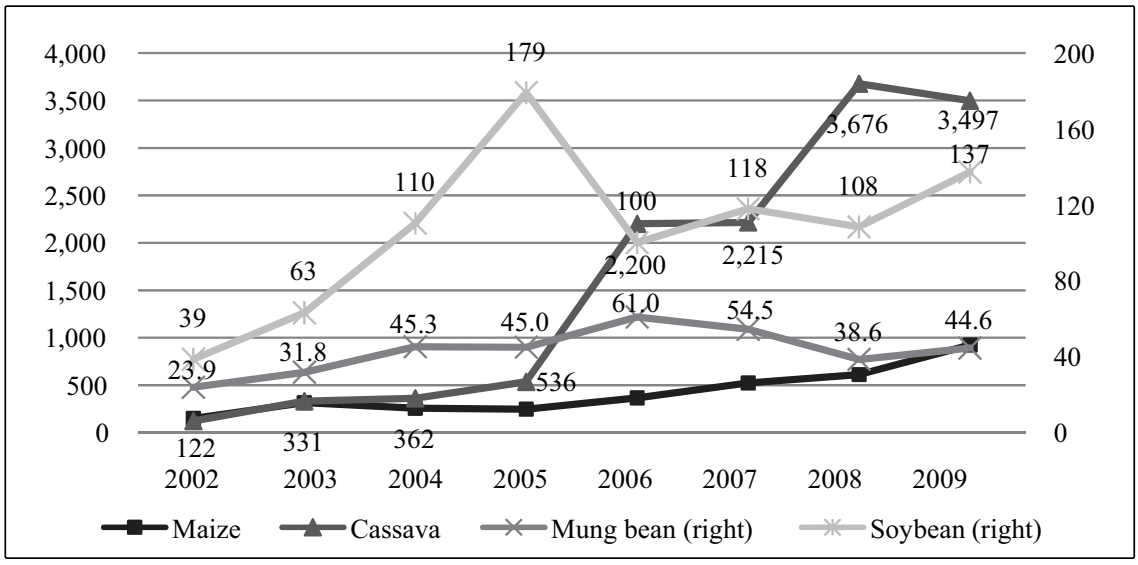
A steep acceleration in rubber prices on international markets during the past decade has generated considerable interest from both domestic and foreign investors in the sector in Cambodia, making this the country's main industrial crop. There has also been considerable engagement by Vietnamese investors in recent years, but the exact magnitude of involvement is difficult to estimate. The latest data from MAFF show that the total area under rubber plantation (both mature and immature trees), including rubber estates, new investments in the form of ELCs and smallholdings, was 130,921 ha in 2009, up from 82,000 ha in 2007. Figure 4 shows a decline in the tapping (mature rubber) area, which seems to contradict the figures above: some rubber trees are too old to be tapped and therefore have to be felled. Normally, rubber trees are ready for tapping within three to five years of planting. MAFF data (2007) indicate that 25,275 ha of old (i.e. unproductive) rubber trees were felled between 1996 and 2006.

Figure 2: Cultivated Area and Rice Production, 2004-09



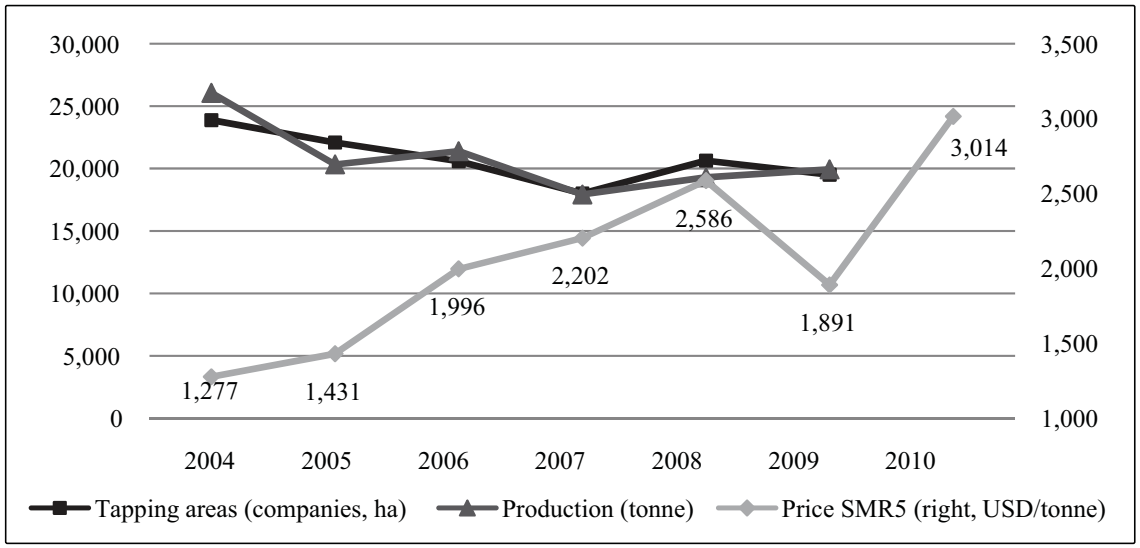
Source: MAFF (2009, 2010)

Figure 3: Main Crop Production, 2002–09 (000 tonne)



Source: MAFF (2009, 2010)

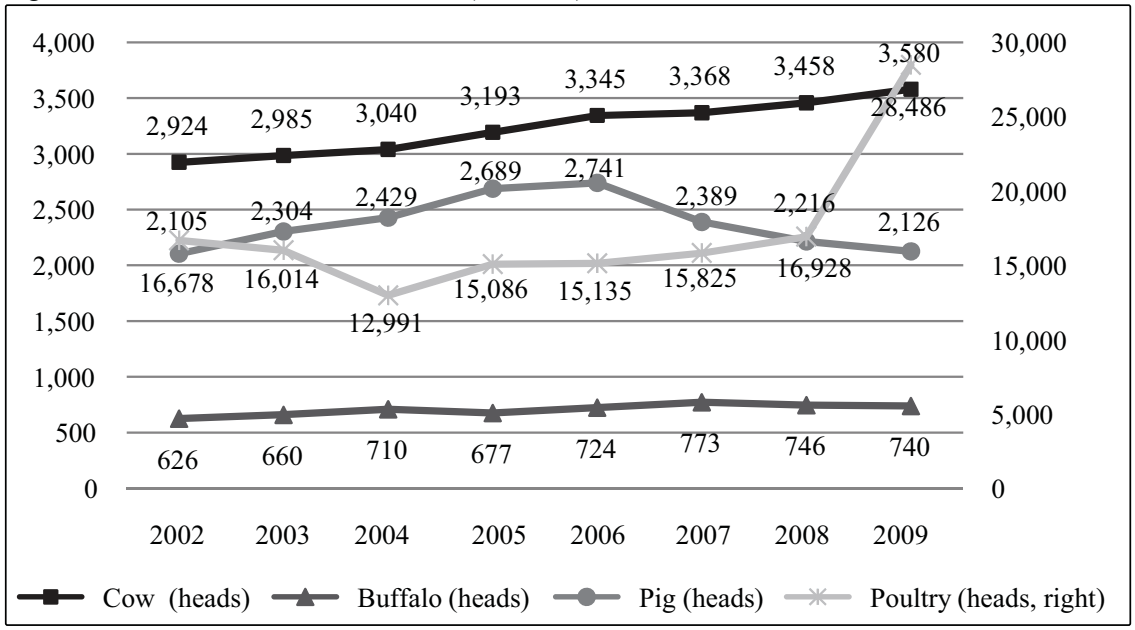
Figure 4: Rubber Plantation, Production and Price, 2004–10



Note: price for 2010 = average of nine months. Source: MAFF (2009, 2010); Malaysia Rubber Board (2010)

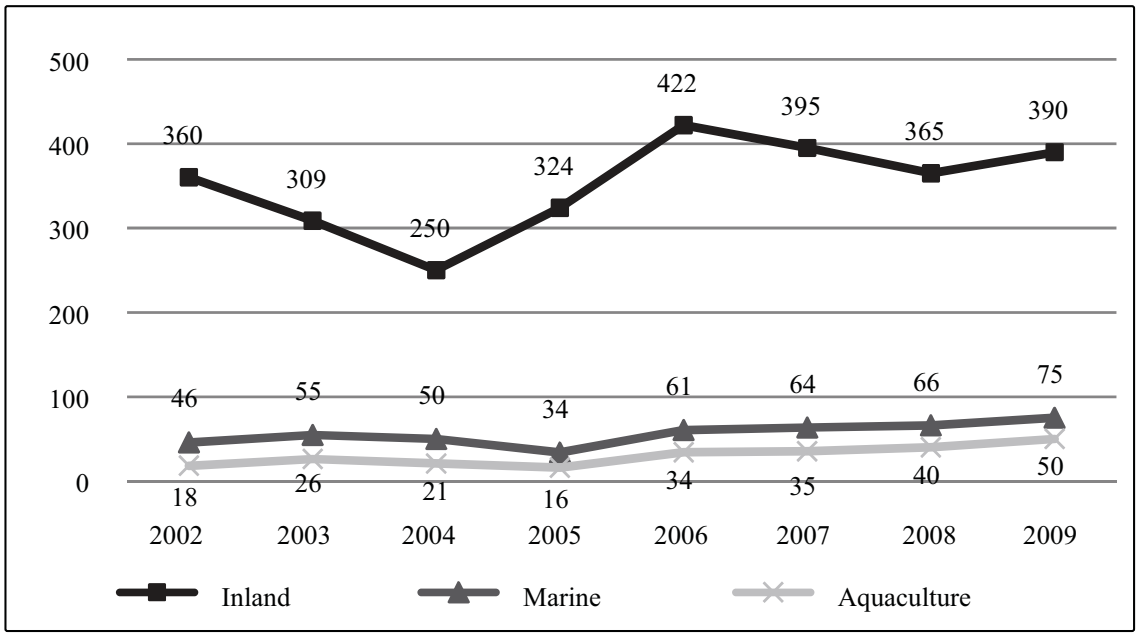
Livestock has contributed around one-sixth of total agricultural production during the past decade, and the sector is estimated to have employed 400,000 workers in 2006 (UNDP 2007: 5). In terms of numbers, poultry takes the largest share, despite the marked decline in 2004; the sub-sector later accelerated due to subsidies to counter the slump caused by avian flu, and producers' increased awareness of infection control and prevention. Production of cattle and buffalo also expanded during the period, with average annual growth rates of 2.9 percent and 2.5 percent, respectively. In contrast, there was a marked decline in pig production between 2006 and 2009 owing to rising fear of a swine flu (AH1N1) pandemic, substantial illegal imports of pigs from neighbouring countries, and high domestic production costs (MAFF 2010: 19).

Figure 5: Livestock Production, 2002–09 (000 head)



Source: MAFF (2009, 2010)

Figure 6: Fish Production, 2002–09 (000 tonne)



Source: MAFF (2009, 2010)

Inland freshwater fish contribute the majority of total fisheries capture due to the country's immense freshwater lake and its long stretch of the Mekong River which cuts across the country from Laos (upstream) to Vietnam (downstream). Although the total catch did not change significantly between 2002 and 2009, concern has been mounting as to the potential negative effects of the rising number of upstream hydropower projects, such as those in China and Laos, on downstream catches, such as in Cambodia. On the marine and aquaculture sides, growth in production has been slow but stable. More investment in the fisheries sub-sector could help offset possible further declines in fish catches in the future. This is especially critical as the sector's contribution to low-skilled income earners is substantial: it provides approximately 260,000 jobs (UNDP 2007: 5).

In the forestry sub-sector, there was large-scale illegal logging and a significant reduction in the country's forest cover in the 1990s. Given rampant illegal forest harvesting, the government imposed a moratorium on all logging activities and timber exports in the early 2000s, and cancelled about half of the total number of forest concessions. This resulted in a decline in forest production and exports but contributed to environmental conservation and wilderness protection.

According to MAFF, total forest cover in 2006, including evergreen, semi-evergreen, deciduous, wood shrub in dry land and several other types, was 10,864,186 ha, equivalent to approximately 60 percent of total land area (MAFF 2007: 94). Reforestation efforts by the Forestry Administration and private tree planting companies have not made a significant contribution to the country's forest cover; the area under new tree plantation in 2009 was 18,924 ha, up from 11,250 ha in 2005.

2.3. Foreign Exchange Earnings

Besides employment generation and production for domestic consumption, agriculture also generates a marked proportion of national exports. Table 2 shows the values of some key agricultural exports at current prices. Wood, articles made from wood and natural rubber played a leading role in the sector in generating foreign exchange earnings between 2002 and 2008, followed by edible fruits, vegetables and roots, cereals, fish and live animals. However, the average share of these products in total exports was only 4.48 percent, as Cambodia's national exports are concentrated largely in textiles and clothing. This latter sector has grown dramatically in recent years, except in 2008 and 2009 when it was hit by the two crises, namely the fuel price crisis and the global economic crisis.

Table 2: Major Cambodian Agricultural Exports, 2002–09 (USD million)

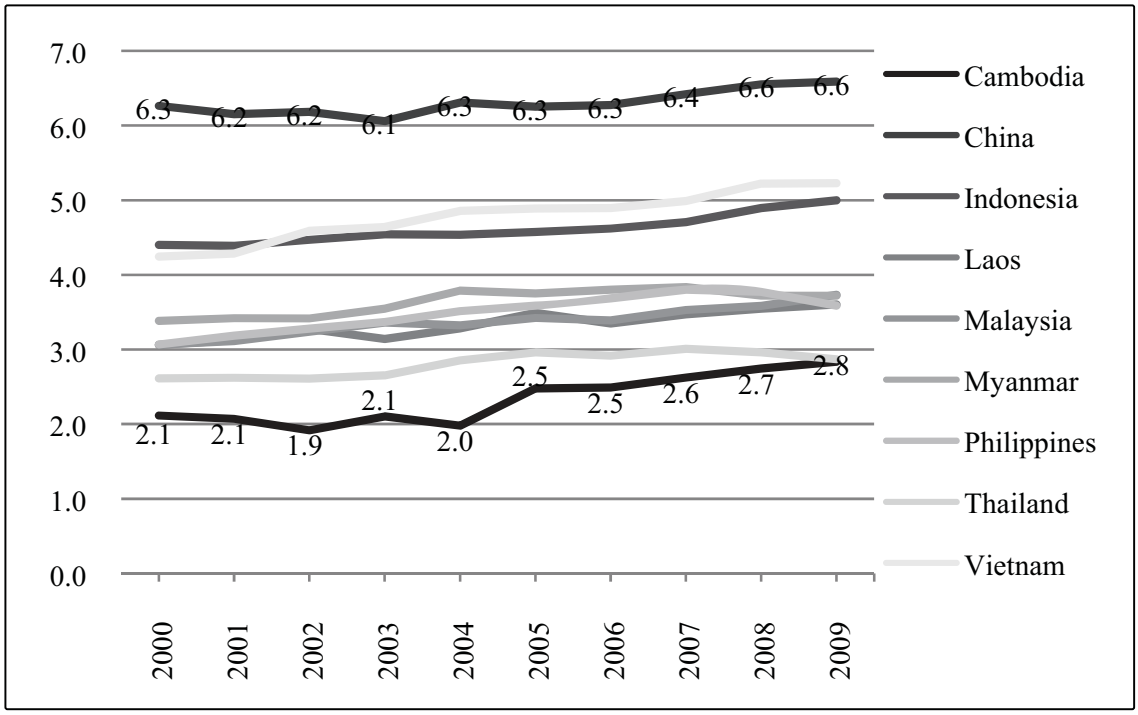
HS	Product name	2002	2003	2004	2005	2006	2007	2008
01	Live animals	2.38	2.21	2.42	0.51	5.51	1.61	6.13
03	Fish and crustaceans	8.12	6.65	21.93	15.38	15.14	10.42	7.82
04	Dairy products; bird eggs	0.00	0.00	0.00	0.00	0.00	0.05	0.57
06	Live trees and other plants	0.01	0.01	0.04	0.01	0.11	0.03	0.05
07	Edible vegetables and roots	0.54	1.77	2.61	0.82	1.30	11.29	22.10
08	Edible fruit and nuts	0.02	0.53	15.23	21.80	19.00	21.73	34.28
09	Coffee, tea and spices	0.05	0.03	0.11	0.18	0.28	0.83	0.85
10	Cereals	4.57	2.61	6.97	4.09	5.94	10.66	36.73
14	Vegetable plaiting materials	0.34	0.35	0.49	0.37	0.74	0.63	0.26
18	Cocoa and cocoa preparations	0.00	0.00	0.00	0.00	0.00	0.00	0.001
40	Rubber and articles	23.22	14.46	72.60	72.81	94.35	106.00	91.96
44	Wood and articles	20.67	15.79	64.20	73.80	74.43	106.38	67.01
45	Cork and articles of cork	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other product exports	1875.3	2235.4	2758.0	3065.7	3796.9	4333.0	4694.4
	Total exports	**1935.2**	**2279.8**	**2944.6**	**3255.5**	**4013.7**	**4602.6**	**4962.2**

Source: UN Comtrade 2010 (mirror data), http://comtrade.un.org/

2.4. Regional Comparison: Opportunities and Challenges

Cambodia's paddy rice yield has remained low compared with other countries in the region over the past decade. However, despite low yield of 2.9 tonnes per ha in 2009, there were signs of improvements between 2005 and 2009 which are attributable to better application of fertiliser and pesticide and additional investment in irrigation (World Bank 2009: 8). Better application of inputs, use of better quality seeds, less reliance on traditional tools and equipment and reduced dependency on weather conditions through investment in irrigation (whether public, private or by farmers themselves) can help the country catch up with others in the region. As 80 percent of farmers grow rice and poverty incidence in rural areas is high, government and private sector assistance in the form of Build-Operate-Transfer, such as irrigation facilities, and support from development partners and NGOs in terms of both hard and soft infrastructure are key to regional catch-up and to help farmers move out of poverty. In August 2010 the government unveiled a policy to promote paddy rice production and milled rice export.

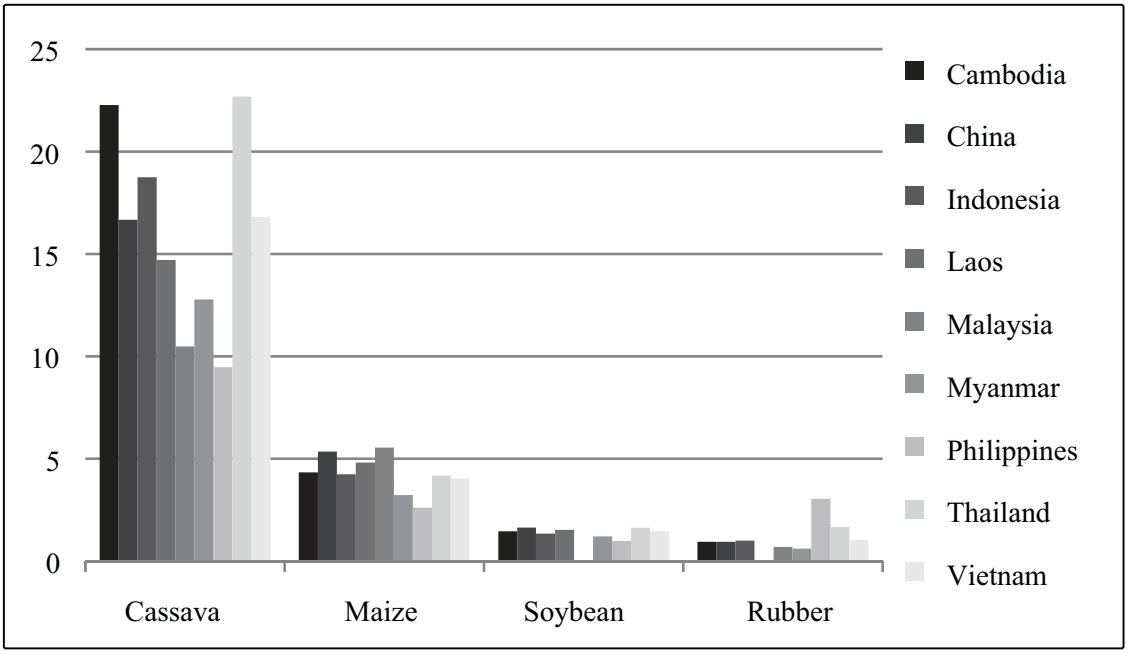
Figure 7: Paddy Rice Yield, 2000–09 (tonnes per ha)



Source: FAO (2010)

There is potential for growth in other crops too. Figure 8 shows that Cambodia was a champion in terms of its cassava yield in 2009 and was comparable with other countries in terms of its maize and soybean yields. Cambodia's cassava yield in 2009 was 22.3 tonnes per ha, higher than the regional average (excluding China) of 15.1 tonnes per ha. Maize and soybean yields were 4.3 tonnes per ha and 1.5 tonnes per ha, respectively, slightly above regional averages of 4.1 tonnes per ha and 1.4 tonnes per ha. Cassava, maize and soybean could therefore have production and export potential. Cambodia's natural rubber yield at 940 kg per ha is lower than the regional average of 1.3 tonnes per ha, but higher than in Malaysia (693 kg per ha) and Myanmar (616 kg per ha). Nevertheless, despite the low yield growth in rubber has been impressive in recent years given the rebound in world demand for natural rubber since the global economic recession.

Figure 8: Yield of Key Agricultural Products, 2009 (tonnes per ha)



Source: FAO (2010)

However, several hurdles and bottlenecks to expansion exist, some of which are more binding and protracted than others and require immediate interventions from the government (Table 3).

Table 3: Likely Constraints to Agricultural Development in Cambodia

Internal/domestic challenges	External constraints/factors
• High informal export cost • Lack of irrigation infrastructure and low level of technology in farming and processing • High input cost and low quality and capacity of milling/ processing • Inadequate storage and grain silos • Lack of low-interest credit • Lack of awareness of new and efficient planting techniques and lack of motivation to diversify production • Insufficient or absence of trademarks and geographical indications • High transportation costs due to infrastructure problems • Lack of marketing skills and market information system • No brand name • Deforestation due to the expansion of certain crops, like soybeans	• Many major consumer countries protect their markets (e.g. Japan, Korea, some ASEAN countries) • Few countries offer preferential market access for Cambodia • Exports rely largely on demand and milling facilities in Thailand and Vietnam • Importing countries often require a Special Purpose Ship Safety Certificate, which Cambodia lacks • Narrow export markets, i.e. Thailand and Vietnam, mostly for informal exports

Source: UNDP (2007)

3

Extent and Nature of Foreign Investment in Agriculture in Cambodia

After its transition to a free market economy in the early 1990s, Cambodia took steps to promote investment, both private domestic and foreign, through the privatisation of state-owned resources and the promulgation of the Law on Investment in 1995, which provided tax and administrative incentives to and protected domestic and foreign investors. Investment started to flourish, gaining more momentum when Cambodia achieved genuine peace and stability in the late 1990s after the Khmer Rouge collapsed and rebel fighters were incorporated into the government defence forces.

Data from the Cambodia Investment Board (CIB) of CDC for the period 2000 to June 2010 indicate upward trends of investment. The critical turnaround in total investment occurred in 2005; it stemmed primarily from considerable engagement from China, Thailand and Korea. Total investment continue to expand into 2008. However, the pace of expansion slowed in 2009 as a result of the impacts of the global economic crisis on the Cambodian economy: total investment in that year fell sharply to twice as low as that in 2008. Rostow (1960), among others cited in Todaro and Smith (2003: 115), indicates that countries able to save or generate investment of around 15 to 20 percent of GDP can grow at a much faster rate than those that save less, and that this growth will then be self-sustaining. However, it is difficult to apply this to the Cambodian case given the absence of data on actual implementation of approved investment projects in the country.

Private domestic and foreign investments were about equal between 2000 and 2010 with the average share of FDI in total investment at around 58 percent. FDI showed an upward trend but slowed in 2009 after the global economic crisis hit. Among foreign investors, China stood out, followed by Korea, the USA, Thailand, Vietnam, Malaysia, Singapore and Taiwan, in that order. Traditional investors, like China, Korea, Malaysia and Thailand, have been injecting more funds into the Cambodian economy since 2000, which reflects their growing trust and confidence in the country's investment environment. Additionally, countries such as Vietnam, Japan and the USA have shown rising interest in the past couple of years. This is a promising sign for overall output growth in the medium and long term, despite the shocks in 2008 and 2009.

3.1. Approved Investment by Sector

In terms of distribution by sector, tourism and industry have absorbed a great deal of investment during the past decade, followed by services. Tourism was a champion, with share in total investment averaging 35 percent between 2000 and June 2010, followed by industry (32 percent) and services (25 percent). Investment in agriculture was sluggish during the same period (Figure 9). In terms of accumulation of approved investment, tourism took the lead with 58 percent, followed by services (19 percent) and industry (17 percent), whereas agriculture (6 percent) contributed the smallest share. High capital inflows into tourism are attributable to the government's 1997 Open Sky Policy, the achievement of peace and political stability in 1998 and the gradual improvement of hard infrastructure, particularly road connectivity and bridges.

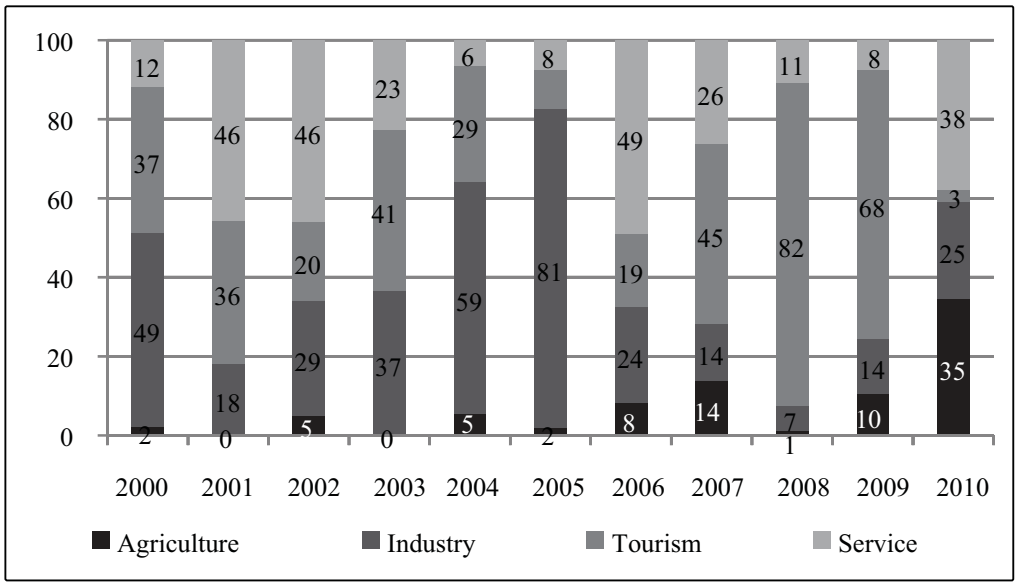
Table 4: Investment Approved by CIB, 2000–10 (Fixed Assets USD million)

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2000 – June 10	Share
Cambodia	57	65	93	185	76	366	2081	1323	3951	3764	151	12112	45.6
Japan	0	-	2	-	2	-	2	113	7	5	-	132	0.5
Korea	19	2	79	2	5	56	1010	148	1242	121	35	2720	10.2
Taiwan	19	57	7	1	14	10	48	35	19	27	39	276	1.0
Hong Kong	5	1	2	5	-	1	4	26	-	7	17	69	0.3
China	28	5	24	34	83	454	757	180	4370	891	60	6887	25.9
Singapore	8	-	1	4	5	25	12	2	52	272	6	388	1.5
Malaysia	2	51	1	5	33	26	28	241	3	7	110	507	1.9
Thailand	26	15		7	1	81	100	108	26	178	2	544	2.0
Vietnam	-	-	24	-	-	-	31	156	21	210	83	525	2.0
USA	12	6	-	-	2	4	62	3	672	1	2	764	2.9
France	5	-	-	6	3	8	-	35	38	50	-	145	0.5
UK	-	-	-	-	-	-	-	-	-	2	1	3	0.0
Others	35	3	5	1	5	18	320	298	415	330	83	1514	5.7
Total	**217**	**205**	**238**	**251**	**229**	**1050**	**4454**	**2667**	**10818**	**5865**	**591**	**26586**	100
FDI	**160**	**140**	**145**	**66**	**153**	**684**	**2373**	**1345**	**6866**	**2101**	**440**	**14474**	

Note: data for 2010 = January to June

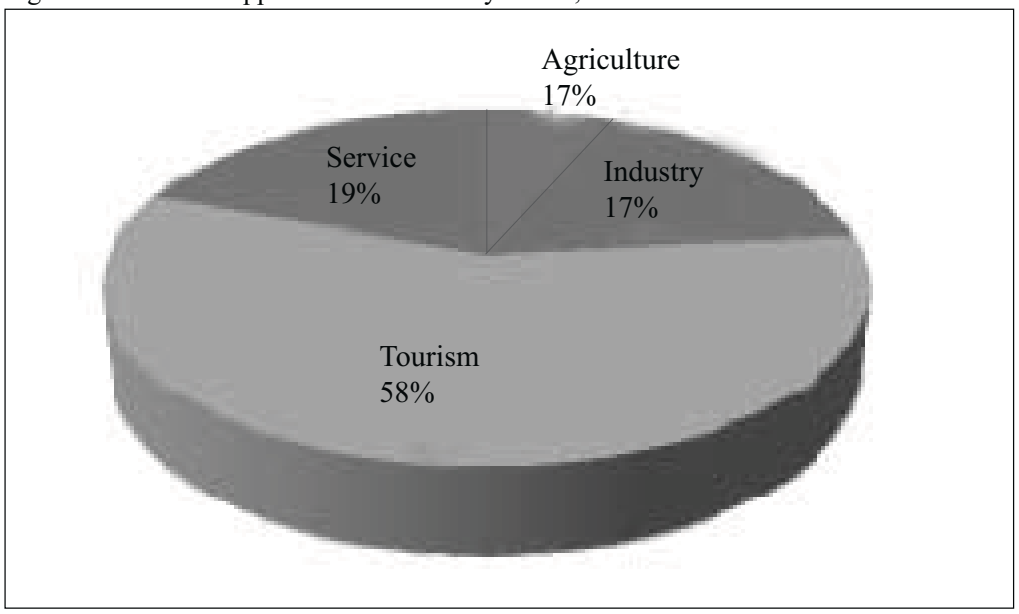
Source: CDC (2010)

Figure 9: Share of Approved Investment by Sector, 2000-June 2010 (USD million)



Source: CDC (2010)

Figure 10: Share of Approved Investment by Sector, 2000- June 2010



Source: CDC (2010)

Sluggish growth in agricultural investment between 2000 and 2010 could be explained by the fact that investment in agriculture is a long-term process with weak appropriability of return, and by the widespread nature of ill-defined property rights which prevent enterprises from using land and property as collateral to access finance (World Bank 2006: 74).

3.2. FDI in Agriculture by Nationality

Table 5 shows the significant contribution of FDI to agriculture in Cambodia between 2000 and 2010, with an average share of fixed assets of 78.4 percent, along with the slow but stable growth of private domestic investment, which averaged 21.6 percent in the same period.

The significant rise in both private domestic and foreign investment has clearly been more evident in recent years. This can be attributed to steep rises in global demand for natural rubber, particularly from China, India, Japan and the USA, as a result of a hike in the price of synthetic rubber after petroleum prices spiked in late 2007 and 2008, for bio-fuel refined from common crops like palm oil and maize, and for food, such as rice, from food-importing countries in the region and the world.

Although the monetary value of foreign projects looks small compared with total FDI in the three major sectors of tourism, industry and services, the total size of secured land in agriculture may be substantial and thereby have negative implications for the environment and Cambodia's food security.

Looking at data for the period 2000 to 2010, illustrated in Table 5, China stands out as the second-largest investor in agriculture with a share of fixed assets of 17.6 percent, after Thailand with the largest share of 21.7 percent. There is also evidence of rising interest in agriculture in Cambodia from such countries as Vietnam (14.8 percent), Korea (6.5 percent), Singapore (4.8 percent), India (4.4 percent), USA (3.6 percent) and Japan (1.8 percent). All of these countries are mainly involved in crops and forestry, as discussed in the following section.

Although this dramatic surge in foreign engagement in agriculture could be favourable at the macro level, negative trends could arise at the micro level if there is an absence of sound and prudent investment coordination mechanisms, environmental impact assessments and regular on-site investigations that are pro-poor, environmentally aware and consider food security as a priority issue.

3.3. Sub-sectoral Breakdown of Investment in Agriculture

The CDC does not have a template giving a sectoral breakdown of agriculture data. Instead, categorisation must be done using different data sources. This study breaks agriculture down into crops, livestock, fisheries, forestry, fruit, food processing and others. This is the first attempt, and the results may differ in future work given the constraints to sub-sector classification. For instance, rubber and acacia plantations, which might fit into either the crops sub-sector or the forestry sub-sector, is in crops in this study.

As mentioned in Section 3.2, Thailand ranks first in agricultural investment in Cambodia, followed by China, Vietnam and Korea, in that order. Breaking agriculture down into five sub-sectors, we find that foreign investors engage mainly in crops, forestry and others.

In crops, fixed asset investment is dominated by Thailand, Vietnam and China. Thai investors tend to have a strong interest in sugarcane, which is estimated to have created approximately 13,500 jobs, but less interest in rubber, palm oil and cassava. The majority of the firms come in the form of pure Thai ownership or partnership with Cambodians.

In contrast, Vietnamese investors appear to have been focusing more on rubber plantation in recent years, which is estimated to have generated around 11,000 jobs, and less so on cashew nuts, palm oil, cassava and sugarcane. The ownership structure of Vietnamese investors is similar to that of Thai investors. China is mainly geared towards rubber and cashew nuts and less so towards palm oil, sugarcane and cassava. Most Chinese investments are solely Chinese owned.

Table 5: Agriculture Investment Approved by CIB, 2000-10 (Fixed Assets in USD million)

Country	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2000–June 10**	**Share**
Cambodia	3.6	0.4	0.6	0.0	4.1	10.4	141	96.0	38.3	41.9	35.5	371.9	21.6
Japan	-	-	-	-	-	-	-	31.2	-	-	-	31.2	1.8
Korea	-	-	11.4	-	-	-	-	59.4	5.8	3.4	32.7	112.7	6.5
Taiwan	-	-	-	-	-	-	-	-	-	-	3.0	3.0	0.2
India	-	-	-	-	-	-	-	-	-	75.0		75.0	4.4
China	-	-	-	-	-	3.7	72.8	33.2	18.6	134	41.9	303.9	17.6
Singapore	-	-	-	-	-	-	-	-	-	82.1	-	82.1	4.8
Malaysia	-	-	-	-	8.2	-	-	-	-	-	-	8.2	0.5
Thailand	-	-	-	-	-	-	73.1	104	22.8	173	-	373.1	21.7
Vietnam	-	-	-	-	-	-	27.4	43.1	20.9	104	59.8	254.8	14.8
USA	1.3	-	-	-	-	-	58.5	-	-	-	1.7	61.5	3.6
Israel	-	-	-	-	-	-	-	1.7	-	-	-	1.7	0.1
Canada	-	-	-	-	-	5.5	-	-	-	-	-	5.5	0.3
France	-	-	-	-	-	-	-	-	6.2	-	-	6.2	0.4
UK	-	-	-	-	-	-	-	-	-	2.1	-	2.1	0.1
Denmark	-	-	-	-	-	-	-	-	-	-	29.5	29.5	1.7
Total	**4.9**	**0.4**	**12.0**	**0.0**	**12.3**	**19.6**	**373**	**369**	**113**	**615**	**204**	**1722.4**	
FDI	**1.3**	**0.0**	**11.4**	**0.0**	**8.2**	**9.1**	**232**	**273**	**74**	**573**	**169**	**1350.5**	
Share in FDI	**25.5**	**0.0**	**95.0**	**0.0**	**66.6**	**46.6**	**62.2**	**74.0**	**66.0**	**93.2**	**82.6**	**78.4**	

Source: CDC (2010)

Table 6: Approved Agriculture Sub-sector Investment Accumulated over 2000–June 10 (Fixed Assets in USD million)

Country	Crops	Livestock	Fisheries	Forestry	Others	Total	Share
Cambodia	174.0	3.6	0.4	72.2	121.8	371.9	21.6
Canada	-	-	-	5.5	-	5.5	0.3
China	194.6	-	-	77.3	32.1	303.9	17.6
France	6.2	-	-	-	-	6.2	0.4
Israel	1.7	-	-	-	-	1.7	0.1
Japan	31.2	-	-	-	-	31.2	1.8
Korea	90.1	-	-	-	22.6	112.7	6.5
Malaysia	2.6	-	-	-	5.6	8.2	0.5
Singapore	82.1	-	-	-	-	82.1	4.8
Taiwan	-	-	-	-	3.0	3.0	0.2
Thailand	327.0	-	-	46.0	-	373.1	21.7
USA	1.3	-	-	18.3	41.9	61.5	3.6
Vietnam	236.6	-	-	18.2	-	254.8	14.8
India	-	-	-	-	75.0	75.0	4.4
England	-	-	-	-	2.1	2.1	0.1
Denmark	-	-	-	29.5	-	29.5	1.7
Total	**1147.4**	**3.6**	**0.4**	**266.9**	**304.1**	**1722.4**	100.0
FDI	**973.4**	**0.0**	**0.0**	**194.8**	**182.3**	**1350.5**	
Share in FDI	**84.8**	**0.0**	**0.0**	**73.0**	**60.0**	**78.4**	

Source: CDC (2010)

Apart from these dominant players, Japan, Korea and Singapore have also made a marked contribution to investment in crops. A Japanese investor has partnered with Thai (50 percent), Cambodian (20 percent) and Chinese (15 percent) investors in a sugarcane plantation in Koh Kong province in southwest Cambodia close to the border with Thailand; this project was approved by CIB in November 2007. Korean investors tend to be drawn to rubber, cassava and cashew nuts, and their projects are purely Korean owned or partnerships with Cambodians. Singapore has two projects, both of which are in involved in rubber and maize and under Singaporean ownership; CIB approved both of these in July 2009.

In addition, there is involvement from France, Malaysia, Israel and the USA. France engaged in rice plantation and milling in November 2008 as a joint venture. Malaysia started a joint venture with Cambodia (12.5 percent) to grow palm oil, rubber and cashew nuts in July 2004. Israel, as a joint venture firm, started cassava plantation in March 2007, and the USA (100 percent USA fixed asset) was involved in cashew and cassava plantation in February 2000.

In forestry, Chinese and Thai investors are dominant. Chinese investors focus on the production of pistachio and acacia trees by investing their own fixed assets in ELCs. In the case of Thai investment, it is not clear what types of tree are grown. There is also involvement from neighbouring Vietnam, as well as from Denmark and Canada. Vietnamese investment is in the form of a joint venture with Cambodia (30 percent) in acacia plantation, which was approved by CIB in March 2010. Canada engages in teak plantation in partnership with China (40 percent) under the company name GG World Group Development;[2] this obtained approval from CIB in December 2005. Denmark is also involved in teak plantation and uses 100 percent own fixed assets; this project was approved by CIB in April 2010.

In addition to foreign engagement in crops and forestry, there are a number of other foreign investments in other sub-sectors, namely agro-industry in general, animal meal, maize drying, crepe rubber processing, palm oil refinery and development, herbal tea production, hollyhock plantation and processing, integrated sugarcane plantation and sugar refining. Investors from China and the USA are involved in general agro-industry, whereas Koreans invest in plantation and drying, hollyhock plantation and processing and animal meal. Malaysia had a palm oil development and refinery project approved by CIB in June 2004 as a joint venture with Cambodia (40 percent), and Taiwan invested its own fixed assets in a herbal tea factory in March 2010. The USA has one project in hollyhock plantation and processing, and India has one in integrated sugar plantation and processing, ethanol and power generation, namely the licensed company named Kamadhenu Venture[3] in Kratie province.

3.4. FDI in Food Processing

In the past decade there has been no significant involvement in food processing by foreign investors, whose share of fixed assets in total sector fixed assets is 28.7 percent. Cambodia thus takes the lead in this sub-sector, but in partnership with foreign investors like Vietnam, Singapore and Thailand. Australia set up a soya milk manufacturing plant with own assets in 2003 and has partnered Cambodia (which holds 51 percent) in beer manufacturing.

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2 www.elc.maff.gov.kh/comprofiles/stgg.html (accessed 10th November 2010).

3 MAFF has a different name for this: www.elc.maff.gov.kh/comprofiles/krtcarmad.html. (accessed 10th November 2010)

Canada started up a beer manufacturing project in 2010 with 100 percent fixed assets, and Singapore has partnered Cambodia (10 percent) to produce bottled pure drinking water. Thailand partners Cambodia (40 percent) in producing instant noodles and other instant food, as does Vietnam (Cambodia 30 percent) in producing beer, soft drinks and drinking water. China invested 100 percent of own capital in seafood processing in 2004. On the whole, apart from Australia and Canada, only countries in the region appear to have an interest in food processing.

Table 7: Approved Fixed Assets in Food Processing, 2000-June 2010 (USD million)

Country	2000	2001	2003	2004	2007	2008	2009	2010	2000–Jun 10	Share
Australia	-		0.7		9.0				9.7	13.0
Cambodia	-	0.8			10.1	3.7	8.5	30.2	53.3	71.3
Canada	-							4.3	4.3	5.7
China	-			0.7					0.7	0.9
Singapore	-							3.8	3.8	5.1
Thailand	-	1.2							1.2	1.6
Vietnam	-				1.7				1.7	2.3
Total	-	**2.0**	**0.7**	**0.7**	**20.9**	**3.7**	**8.5**	**38.3**	**74.7**	
FDI	-	**1.2**	**0.7**	**0.7**	**10.8**	**0.0**	**0.0**	**8.1**	**21.5**	
Share in FDI		**60.0**	**100.0**	**100.0**	**51.5**	**0.0**	**0.0**	**21.2**	**28.7**	

Source: CDC (2010)

Overall, at approximately 6 percent the share of approved fixed investment in agriculture has been minimal but stable during the past decade. Low appropriability of return on investment coupled with ill-defined property rights could hinder private and foreign investment in the food processing sub-sector.

3.5. Engagement of Foreign Investors in ELCs

Given the absence of CDC data on land/plantation size of foreign investments and some discrepancies between CDC data and the MAFF website,[4] this study probed data recorded by MAFF further in order to understand the scale of FDI in agriculture, particularly that in the form of ELCs, so as to identify the potential effects of FDI on the socioeconomic situation, the environment and food security in the country.

Public investment through the leasing of state private land in the form of ELCs to private domestic and foreign investors has been in evidence since 1995, prior even to the promulgation of the Land Law in 2001. According to the Sub-decree on Economic Land Concessions dated 27 December 2005,[5] ELC refers to a mechanism to grant state private land through a specific contract to a concessionaire for use in agricultural and industrial agricultural exploitation, namely the cultivation of food or industrial crops, livestock raising and aquaculture, construction of plants, factories or facilities for processing domestic agricultural raw materials, or a combination of some or all of these activities.

The principal aims of such initiatives are to develop intensive agricultural and industrial agricultural activities, to generate employment and diversify livelihood opportunities in rural

4 Note that the CDC dataset has no record of several of the ELCs reported on the MAFF website.
5 www.elc.maff.gov.kh/laws/subdecree.html.

areas, and to generate government revenue (USD1–10 per ha per year based on four land categories).

Table 8 indicates that private domestic as well as foreign investment in ELCs was not as substantial from the mid-1990s to the early 2000s as it has been since the early 2000s to the present. Cambodia's peace and stability, along with a better investment environment and rising global demand for industrial crops like rubber and cassava, could be driving factors.

It should be noted, however, that the scale of concessions between 1995 and 2003 was massive. In 1999, 2000 and 2001, concessions were granted for 20,000 ha, 315,028 ha and 100,852 ha, respectively. That such large-scale investment models were permitted before the adoption of the Land Law in 2001 and the Sub-decree on Economic Land Concessions in 2005 meant they were implemented in the absence of sound regulations and governance mechanisms, putting resources and local stakeholders at risk.

Table 8: Approved and Cancelled ELCs, 1995–2009

Year	Permitted and ongoing projects				Permitted but later cancelled projects			
	Size (ha)	Minimum size (ha)	Maximum size (ha)	No. of projects	Size (ha)	Minimum size (ha)	Maximum size (ha)	No. of projects
1995	11000	-	-	1	-	-	-	-
1996	2400	-	-	1	-	-	-	-
1998	60200	-	-	1	51500	23,000	28500	2
1999	33400	3000	20000	4	4100	-	-	1
2000	341898	1070	315028	5	11200	3200	8000	2
2001	128275	5000	100852	4	-	-	-	-
2004	6100	1200	4900	2	-	-	-	-
2005	67043	3000	10000	8	10000	-	-	1
2006	168256	4400	10000	20	40393	7172	9214	5
2007	29001	6436	8100	4	8692	-	-	1
2008	40936	6523	7200	6	-	-	-	-
2009	136130	807	9820	21	-	-	-	-
Total	**1024639**	**807**	**315028**	**77**	**125885**	**3200**	**28500**	**12**
Projects with no reported date and land size				**9**				

Source: Authors' calculation based on data from MAFF website, www.elc.maff.gov.kh/profiles.html (retrieved Oct. 2010)

By the end of 2009 MAFF had granted 86 ELC projects (excluding 12 that were cancelled), nine of which are not profiled on MAFF's website (see Table A1 in Appendix 1 for detailed information on all ELCs across Cambodia). Article 59 of the Land Law in 2001 states that land concession areas shall not be more than 10,000 ha. In response, MAFF has been negotiating with companies that have a land area larger than 10,000 ha and have been slow in implementing their business plans. Overall, 12 projects have been revoked, two of which had a land area over 10,000 ha. The three mega projects mentioned earlier remain underway.

However, it is vital to note that in order to secure larger tracts of state private land, some companies use two different names to obtain ELCs. For instance, Koh Kong Plantation Limited

and Koh Kong Sugar Company Limited in Koh Kong province have secured land areas of 9,400 ha and 9,700 ha, respectively. This creates a total land size of close to 20,000 ha.

As of late 2009, the total land size of reported ELC projects was 1,024,639 ha. Ngo and Chan (2010: 6) indicate that approximately 500,000 ha of ELC projects have been granted by and are under the administration of the Ministry of the Environment (MoE) but are not included in MAFF data. This pushes the total size of ELC projects up to around 1.5 million ha, close to the size of the area under paddy rice of 2.7 million ha in 2009 (MAFF 2010: 16).

As Table 9 shows, ELC projects are mainly under private domestic ownership, according to data from the MAFF website. As of 2009, foreign investors had acquired an ELC land size of 355,914 ha, which was around 35 percent of the total and equated to 13 percent of the total paddy rice area in Cambodia. China is the dominant player among foreign investors, with 17 projects covering a total land size of 186,935 ha (18 percent), including one mega project of 60,200 ha secured in 1998 in Koh Kong province. It has a strong interest in rubber, acacia and pistachio plantation.

Table 9: Distribution of ELCs by Nationality, 1995–2009

Category	Size (ha)	% of total	Mean size (ha)	Minimum size (ha)	Maximum size (ha)	No. of projects	No. of projects >10,000 ha
Active projects							
Unreported	-	-	-	-	-	9	-
Cambodia	668725	65	18576	807	315028	36	6
China	186935	18	10996	5000	60200	17	1
India	7635	1	7635	7635	7635	1	0
Korea	27622	3	5524	3000	7500	5	0
Malaysia	7955	1	7955	7955	7955	1	0
Taiwan	4900	0	4900	4900	4900	1	0
Thailand	37436	4	7487	6523	9700	5	0
USA	36203	4	9051	7000	9820	4	0
Vietnam	47228	5	6747	2361	9380	7	0
Total	1024639	100	13307	807	315028	86	7
FDI	355914	35				41*	1
Cancelled projects							
Cambodia	34711	28	8678	7172	10000	4	0
Chinese	66800	53	13360	3200	28500	5	2
USA	9214	7	9214	9214	9214	1	0
Vietnam	15160	12	7580	7560	7600	2	0
Total	125885	100	10490	3200	28500	12	2
FDI	91174	72	-	-	-	8	2

Note: * excluding number of unreported projects. Source: Authors' calculation based on data from MAFF website, www.elc.maff.gov.kh/profiles.html (retrieved October 2010)

Vietnam has seven projects with a focus on rubber plantation in Kratie, Ratanakkiri, Mondolkiri, Kompong Thom and Preah Vihear provinces, and Thailand has five projects concentrating on sugarcane in Oddar Meanchey and Koh Kong provinces. The USA has four projects growing teak trees in Kratie and Kompong Speu provinces, and Korea has five projects investing mainly in rubber and cassava plantation in Kompong Thom, Ratanakkiri, Kratie and

Kompong Speu provinces. India has interests in sugarcane, whereas Malaysia has interests in palm oil plantation.

As illustrated earlier, foreign investors tend to have a strong interest in such crops as rubber, cassava, sugarcane, teak, acacia and pistachio, which are specialities of Cambodia and well suited to the soil conditions in the country. By number of projects, their engagement is seen mainly in Cambodia's strategic crop provinces, such as Kratie (13 projects), Mondolkiri (5), Kompong Speu (5), Ratanakkiri (4), Stung Treng (4), Oddar Meanchey (4) and Kompong Thom (3) (see Table A2 in Appendix 1 for distribution of ELCs' land size and projects by province and nationality during 1995–2009).

Given the absence of data on actual implementation of foreign investment projects, it is difficult to generalise about the job creation and income generation benefits to Cambodia. If all the projects are fully realised, generation of income and jobs could be substantial. However, large-scale investment in agriculture in ELCs entails at least a degree of clearance of the forest upon which many rural households depend as a major source of income. Concentration of projects in provinces like Mondolkiri and Ratanakkiri, where the majority of the population is made up of ethnic minorities and most people depend on non-timber forest products as their major source of income, could endanger ethnic groups' livelihoods. Negative effects on community livelihoods can also be seen particularly in provinces like Kratie and Stung Treng, whose populations also depend on non-timber forest products plus fishing.

In addition, though Cambodia is now producing a rice surplus, long-term competition with regard to land use between paddy rice cultivation and other crops grown by foreign and private domestic investors could lead to concerns about national food security.

Effects of investment and ELCs in particular should be netted using the above mentioned indicators, i.e. generated income and employment, loss of communities' major sources of income from forest products, the competing use of water and land between rice and other crops under foreign investment projects, and companies' contribution to developing local infrastructure such as roads and irrigation facilities. Section 5 offers a preliminary assessment of the impact of FDI on agriculture in Cambodia.

3.6. Barriers to FDI in Agriculture

A firm survey to examine motivations for and barriers to investment in agriculture in Cambodia was conducted in November 2010. A semi-structured questionnaire (Appendix 2) was used to collect information on firms' contributions to infrastructural development and perceptions of mechanisms to mitigate investment barriers. CDC data for the period 2000 to June 2010 indicates that a total of 59 firms were involved in agriculture and food processing (see Table A3 in Appendix 1 for details). CDC provides no contact details for these firms and the majority of them are not listed in the Yellow Pages, which meant it was immensely difficult to approach them.

Some of the firms listed by CDC can be also found on the MAFF website, along with their contact details. Using the Yellow Pages, as well as information from MAFF, we compiled a list of 31 firms for which we had contact details (see Table A4 in Appendix 1). Because most of the addresses obtained from MAFF website were obsolete and some companies would not cooperate, we could reach only two firms, namely HLH Agriculture (maize plantation and drying) and Kogid (maize drying and rice milling). This meant that seeking answers to questions on barriers to investment in agriculture was a daunting task.

Based on responses from the two companies,[6] five factors stood out as key hindrances to investment applications and operations in agriculture in Cambodia. First, land tenure and securing a lease agreement remain a challenge. One company claimed it took several transactions to complete the leasing arrangement. In other instances, land brokers were the cause of land disputes between local communities and the company. The second problem relates to unclear guidance as to which institution a firm should approach to obtain a business licence. It took one firm two months to have its ELC approved by MAFF by using the right Cambodian broker, without whom it would have taken more than two years. Third, law enforcement remains weak. Fourth, administrative procedures are still long but somehow acceptable. Finally, dispute settlement and problem-solving mechanisms are seriously limited. For instance, there is no department in a specific ministry to help investors deal with problems arising during application for a business licence. Note, though, that firms do not see paying tips to public officials as a bad thing or a major problem, as it helps speed up the application process and firms accept that public servants' salaries are low.

In response to the above obstacles, firms recommended that the government consider adopting computerised investment or business licence application procedures and other related administrative procedures in order to reduce paperwork, time and cost and make it easier for firms to deal with problems during application. Firms also recommended setting up a feedback department in each responsible ministry to help investors address problems arising during application or operations.

No business model or contract arrangement between firms and farmers has been introduced. In practice, firms buy maize from farmers at the market rate without entering into any future contract. Farmers either get their produce to the factory gate or sell it to brokers, who later sell it to factories or firms. Using brokers is more common, particularly when brokers are the farmers' creditors.

Overall, despite a certain number of barriers, the two investors interviewed appeared to be supportive of the business environment in Cambodia. They said that Cambodia, as a developing country, has many steps to take in order to improve its investment environment, some of which are highlighted above.

6 It is crucial not to make generalisations using the results of these discussions, as a sample of two out of 59 companies does not give a true picture across the sub-sectors. This evidence should therefore be viewed as anecdotal.

4

Cambodia's Investment Policies and Regulations by Sub-sector

The Cambodian government has set comprehensive strategies to promote investment in agriculture. Being an agrarian country, Cambodia has huge potential in this sector as there is plenty of available arable land. However, the sector has not been sufficiently developed, partly due to limited capital investment in irrigation networks, technology, fertilisers and energy.

Meanwhile, the global economic crisis in late 2008 hit Cambodia's major sectors, that is, garments, tourism and construction. Although MAFF figures show a rather stable trend in agricultural production, investment in the sector declined because of low capital investment and low appropriability of returns from agricultural investment projects.

Since Cambodia's economic growth is narrowly based, promoting agriculture plays a crucial role in strengthening the country's economy. It is therefore prioritised in the government's Rectangular Strategy as a key pillar in achieving growth, employment, equity and efficiency. Under this strategy, agricultural policies are playing an increasingly important role.

The Rectangular Strategy emphasises that to improve agricultural sector productivity, diversification and intensification, land management, fisheries and forestry reforms must be harmonised with the development of rural infrastructure, energy, credit, markets and technology. To further promote agricultural investment and improve productivity, land reform is particularly crucial. The government is determined to implement the Land Law, the Law on Expropriation, the Law on Pre-emption and Land Development, the Law on Construction and Urbanisation and National Construction Standards. However, implementation of the Land and Expropriation Laws has sparked controversy as certain land or farm owners are not entitled to compensation because, according to the 2001 Land Law, some roads and rights of way are treated as state public property. They are not even entitled to improvements made during their occupation of such property. The reconstruction of National Highway No. 1 is a good example (ADB 2007).

To support the sector, the government has also waived taxes on imports of agriculture-related materials and suspended tax on agricultural land. Despite this support, Cambodian farmers still face production difficulties because their crops depend on rainfall and are vulnerable to natural disaster.

In general, by Cambodia's Investment Law, promulgated in 1994 and amended in 2004, and Sub-decree No. 111 on the implementation of the amendment to the investment law dated 27 September 2005, the CDC's CIB is responsible for overseeing the development of investment (domestic and foreign) activities. CIB's registration mechanism is used for investment projects in excess of USD2,000,000, locating in two provinces/municipalities, and special economic zones, while the sub-committee on investment is responsible for granting permits for projects less than USD2,000,000. Based on Sub-decree No. 17 dated 9 February 2005, the sub-committee comprises:

- Provincial governor as chairperson
- Representative from CDC/CIB as permanent vice-chair

- First and second provincial vice governors as vice-chairs
- Chiefs of departments of each relevant ministry, namely the ministries of Economy and Finance; Commerce; Industry, Mines and Energy; Public Works and Transport; Environment; Land Management, Urban Planning and Construction; Agriculture, Forestry and Fisheries; Planning; Water Resources and Meteorology; Tourism; Post and Telecommunications; and the Chamber of Commerce.

4.1. Fisheries

Fish is the second staple food after rice in Cambodia. It plays a crucial role in people's livelihoods and is a major source of income and food security in the country. There are two levels of fisheries management in Cambodia, namely central and local governments. At central level, the Department of Fisheries of MAFF is in charge of policy formulation and the conduct of research and inspection, while at local level, the sector is under the control of the Provincial-Urban Fishery Authorities which have the power to ensure compliance with the law in the areas under their jurisdiction.

Several laws govern the sector, including the Fisheries Management and Administration Law (1987), the proclamation on competent authorities in issuing permission to fish in open water, aquaculture, fish processing and special permissions (1989), and the Sub-law on Transportation of Fishery Products (1988). It should be noted that Cambodia's master plan for fisheries 2001-2011 was developed in 2001, while the Fisheries Law promulgated in 2006 was to better manage the sector. Despite the introduction of necessary regulations, illegal fishing and habitat destruction along the Mekong River and in the Tonle Sap Lake continue more or less unabated, and conflict over fishing rights between communities and politically and economically more powerful commercial fishing lot owners is common (FAO 2011: 6, 10). Law enforcement is observed to be *ad hoc* or case-by-case. For instance, the recent tough action taken by the prime minister on 1 July 2011 ordering the Minister of Agriculture, Forestry and Fisheries to remove fishery chiefs in five provinces around the Tonle Sap Lake on suspicion of fishery infringements by irregularly selling fishing lots, is part of the government's effort towards fishery reform (Yang 2011).

On the regulation of investment, no specific policy has been set; however, investment incentives, i.e. exemption of taxes and duties, are set out in Cambodia's Investment law. Those investments include fish hatcheries of more than 2 ha and shrimp farming and other aqua-culture production greater than 10 ha. The sector's investment procedures are similar to those outlined above.

In order to develop the sub-sector, the government has distributed marine and freshwater fishing lots to the people for both consumption and commercial purposes, with the aim of facilitating fishing operations, sustaining fisheries stock and preserving natural resources. Further, given the increasing demand for fish due to population growth, the government has been encouraging a shift in focus from natural catches to aquaculture.

To better manage fisheries resources, the government is establishing an effective price mechanism by ensuring proper demarcation of fishing lots and making the process of bidding for a fishing lot more transparent. This will help increase state revenue from fisheries. Tough measures are being taken to crackdown on illegal fishing activities and encroachment of flooded forests. Fish farmers and communities are given technical assistance, credit and market facilitation to improve their capacity and increase their revenue. To increase competitiveness and

market access, the government has encouraged large-scale fishery investments by improving infrastructure.

4.2. Forestry

Generally, the Forestry Administration (under MAFF) is in charge of the general governance of forests and forest resources in Cambodia in accordance with National Forestry Sector Policy and the Forestry Law (2002). The sector comes under two levels of management, i.e. central and local government[7]. Prior to 2000, forest harvesting had been rampant, rapid and widespread. The government's cancellation of 40 percent of all forest concessions in the early 2000s, equivalent to almost half of the original area under concession, as well as its moratorium in January 2002 on logging in concession areas and log transportation, has significantly reduced rampant logging (World Bank 2004a:19, 76).

Another measure introduced to clamp down on illegal natural forest products export is the sub-decree on forest and non-timber forest products allowed for export and import, dated 20 November 2006. This new rule allows the export of all kinds of processed and non-processed timber products derived from sustainable tree plantations, which offers room for private/foreign investors to engage in the sector through ELCs under the governance of MAFF (see discussion on ELC in section 4.5). It should be noted that there is no specific rule to promote investment in the forest sector.

In addition, the government has put efforts into forestry reform by establishing forestry policies, including Law on Concessions and sub-decrees on Economic Land Concessions and Forestry Concession Management, forming Forestry Communities fand other regulations related to environment protection, such as Law on Environmental Protection and Natural Resource Management and Sub-decree on Environmental Impact Assessment. These aim to ensure the livelihoods of local communities, as a large number of people in rural communities depend on forests. With the help from the international community, people are educated on how to properly use and protect the forests. In this way, sustainable development can be achieved and biodiversity protection guaranteed. Once forests are well protected, local communities can benefit both economically and non-economically[8] from community forestry as they have secured access to land and legal rights on forest use[9]. Across the country, forestry communities have reported significant reduction in illegal activities within the forest areas under their management. Protecting forests has direct impact on wildlife and biodiversity, which in turn is conducive to sustainable development and poverty reduction.

Therefore, the government has shifted more focus to raising environmental awareness by educating people and students on the conservation, protection and sustainable management of natural resources. In addition, the severe penalties meted out to those involved in illegal logging have been highly profiled in the media and offenders have been jailed. In spite of this enforcement, illegal logging has been subsequently reported.

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7 For detailed information on the function and structure of Forest Administration, see http://www.forestry.gov.kh/AboutFA/MandateEng.html

8 Non-economic benefits include spiritual/customary values (for ethnic minorities) and training, social capital and networking.

9 Ministry of Foreign Affairs of Denmark, *Community-based Natural Resources Management: Lessons Learned from Cambodia,* Technical Advisory Services, December 2010

4.3. Livestock

Livestock farming, i.e. pigs, cattle and poultry, needs to expand as demand for food increases, and the government is now focusing on improving food quality and safety. To attain this, the Department of Production and Animal Health of MAFF, which also has offices in the provinces, has set out the tasks related to policies on animal health and livestock production, improving veterinary services and extending credit support to livestock farmers. It is also responsible for enacting laws and regulations on the quality of animal products, controlling the import and export of livestock at border gates and inspecting sanitary and phyto-sanitary standards at slaughterhouses.

With support from USAID and FAO, the draft law on animal health and production which covers animal and public health issues was initiated in early 2009. As Cambodia is the transit point for cattle movements from Thailand to Vietnam, it is vital to have such law. Large-scale cattle and pig trading companies appear to be highly influential in the long-distance movement of livestock, both within Cambodia and between neighbouring countries. They are well-protected through high level connections at ministry level, which enables them to manipulate not only livestock traders, but also police, military police and veterinary officials (FAO *et al.* 2009: 21-22).

There is no specific rule with regard to promoting investment in the industry; however, as set out in the Investment Law, investors qualify for custom duty exemption if they produce more than 1,000 heads of livestock, or more than 10,000 fowl and eggs, or manage a dairy herd larger than 100 cows. Despite the absence of a specific policy, the overall investment procedure is in line with that stated above. Issues arising in the sector are often brought up at the Government-Private Sector Forum (a trouble-shooting mechanism) by the Technical Working Group on Agriculture and Agro-industry. For instance, the issue of widespread pig smuggling which harms domestic producers was addressed through Instruction No.001 dated 13 August 2007 on the prohibition of meat and live pig imports.

4.4. Water Resources and Technology

Water resource management is crucial to agricultural development. To date, Cambodia's irrigation system is still not sufficiently developed. The vast majority of farming is rain-fed, making it highly vulnerable to variable weather conditions. The government has formed water-user communities across the country by expanding reservoir capacity to meet demand. In addition, MAFF and the Ministry of Water Resources and Meteorology (MoWRaM) have, as required by the NSDP, prepared a Strategy for Agriculture and Water through the newly established Technical Working Group on Agriculture and Water.

The government, in order to scale-up productivity in agriculture for own consumption and trade, has intervened further, such as by providing high-quality seeds that yield high-quality produce, facilitating farmers' adoption of better technology, reducing harvest and post-harvest losses, and promoting innovative agricultural practices, including Integrated Crop Management. Reducing the price of electricity will also help lower the cost of production.

4.5. ELCs and Commercial Production

As Cambodia's potential to export agricultural products to the world market grows, the government is placing higher priority on commercial agricultural production, especially rice and other agri-business crops such as rubber and cassava. Unlike subsistence agriculture,

commercial agriculture can expand rural people's incomes and thus help lift them out of poverty. It will also provide new opportunities for children in rural areas to go to school, which will in turn improve rural people's livelihoods. To this end, government interventions relate to market information, new product opportunities to fit customer requirements, value-added processing facilities, quality assurance and food safety, profitable business promotion and infrastructure development.

The Cambodian government proposed agriculture sector intervention in 2003 by targeting structural reforms with support from ADB through its Agriculture Sector Programme Loan under which the government is in charge of disseminating wider information related to agricultural marketing and technology, liberalising fertiliser pricing and marketing, formulating rural credit policy, divesting rubber subsector, establishing local rural development committees and improving property rights. Further, the government has continued to improve access to productive land under secure title for the rural poor and commercial development in urban areas with support from several aid agencies such as AusAID on mine clearance and agricultural extension services, and the World Bank on land titling.

As discussed earlier, ELCs are a mechanism for providing state private land[10] to concessionaires for agri-industrial exploitation, including tree plantation, livestock farming and aquaculture as well as factories for processing raw agricultural materials. Alongside the granting of large tracts of unused and/or unauthorised lands as ELCs to both foreign and Cambodian investors, rural infrastructure, such as roads, bridges, markets and hospitals, is being developed by both government and private investors. Income from jobs created by these companies has to some extent allowed local communities to improve their standard of living.

The Sub-decree on Economic Land Concessions was introduced on 27 December 2005 in order to tap the opportunities of developing intensive agricultural and agri-industrial activities, increasing employment in rural areas, and generating state and provincial revenues. Article 29 of the sub-decree states that MAFF, as chair of the technical secretariat and an inter-ministerial body, is authorised and responsible for granting ELCs for a total land area greater than 1,000 ha, and the provincial/municipal governor is authorised and responsible for granting ELCs of less than 1,000 ha. However, MAFF always seeks approval from the Office of the Council of Ministers before granting approval to an investment company.

By law, feasibility study and environmental and social impact assessments are required prior to contract approval. Interview with one ELC company revealed that to get quick investment approval, a company has to engage local consultants, who are closely connected to officials at MAFF, to conduct feasibility study and environmental impact assessment. The process could be protracted if a company were to engage only international consultants. Despite the conduct of feasibility study and project border demarcation prior to approval, overlapping claims between villagers and ELC companies prevail. Provincial governors and the commune council often act as mediator once conflicts arise; however, villagers are often disappointed with the solutions offered by the company, a sentiment echoed by local authorities (see section 5 for further analysis).

The NSDP Update 2009–13 sets forth other policy measures to promote agriculture, including: land reform and land mine clearance; strengthening land management, distribution and use; securing land ownership; curbing illegal landholding; and preventing the concentration

10 By sub-decree, an ELC can also be used as a legal instrument to convert state public land into state private land (Articles 14 and 15, Land Law 2001)

of unused land in few hands. Moreover, small-scale farmers have been provided with social land concessions (SLC)[11] in order to promote production and encourage diversification. Clearance of land mines and unexploded ordnance to return land to agricultural use is a top priority for the government to enable better access for farmers and investors to larger land and expand production in more remote areas.

4.6. Rice

Cambodia has tried to grasp new opportunities in the rice sub-sector, particularly since the food price increases in 2007 and 2008. Rice is not only the staple food for Cambodians, it is also an important potential source of national revenue. As such, the government has encouraged investment in rice, starting by waiving tariffs on seeds, fertilisers and pesticides to promote paddy rice production. In addition, Prime Minister Hun Sen has called for further investment by both local and foreign investors in rice mills[12]. The promotion of rice processing, especially milling and packaging, is aimed at upgrading rice quality, reducing production costs, increasing value-added and targeting export markets. At the time of writing, paddy rice production was expected to reach around 7 million tonnes in 2010/11, with domestic consumption estimated at around 3 million tonnes in the same period. This increased production is mainly a result of investment in irrigation, expansion and intensification of cultivated land and use of better farming techniques and improved seeds.

Recognising the important role of paddy rice in enhancing growth and reducing poverty, the government came up with the policy on "Paddy Rice Production and Promotion of Milled Rice Export" in mid 2010, aiming to achieve paddy rice production surplus of 4 million tonnes and milled rice export of at least 1 million tonnes by 2015 by continuing to invest in irrigation, encouraging private sector investment in paddy rice processing and export, and improving procedures to facilitate export and transport. However, the rice sub-sector is challenged by weak governance and institutional support. Ear (2009), examining the dynamics of the governance and growth of Cambodia's rice industry, finds that the sector's export is markedly imperfect as two entities, the state-owned Green Trade Company (GTC) and the National Cambodian Rice Millers Association, headed by the director of GTC, are allowed to export milled rice above 100 tonnes without export licence. Another dominant exporter, Angkor Kasekam Roongroeung, acquired export licence through its governmental channels.

4.7. Rubber

In rebuilding the rubber sub-sector, the government started by investing in production for domestic consumption. Later, Cambodian rubber began to penetrate international markets, especially in Vietnam and China. The government then introduced important institutional and policy reforms for market-based agricultural growth with the assistance of external funding agencies, especially from the Asian Development Bank (ADB). The government began to withdraw from direct intervention in the production and marketing of agricultural and agro-based products, though state-owned rubber estates continued to constitute about 80 percent of the total rubber-exploited area of the country until 2004 when the world price of rubber increased (ADB 2003).

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11 Criteria for SLC have no time restriction with maximum 1.250 m^2 for residential use and 2 ha for agricultural use, and it can be transformed into private property.

12 Radio Free Asia, 22 March 2011

Continued state ownership was impeding the growth of the whole sub-sector by restricting the development of smallholder and family-scale rubber production and constraining smallholder processing and marketing (ADB 2003). Quality was also an issue, leading to Cambodian rubber being priced 15–20 percent lower on the global market than that of other countries. To address these problems, and in response to ADB conditionalities, the government initiated an overall review of the sub-sector and examined the rules and regulations for marketing rubber products. From 2000 to 2006, several policy and regulatory reforms were undertaken to promote smallholder rubber plantations and private sector processing factories and collection points. These liberalised private rubber production and marketing (Circular 2826 SCN.KSK on the "Announcement on Trading and Buying Stations for Rubber from Family Plantations", 13 June 2005) and provided mechanisms for the standardisation of rubber grades to enable Cambodian rubber to fetch higher prices on the global market (Prakas 086 RBK.KSK on the "Use of Regulation on Grades of Rubber in Cambodia", 17 March 2004).

Outstanding regulatory constraints on the marketing of rubber products are as follows (ADB 2009; SOFRECO & CEDAC 2005; Tasker 2003):

1. dichotomy between regulations supporting smallholder rubber production and regulations restricting their trade
2. restrictions on the export of unprocessed rubber and rubber wood
3. restrictions on the export of processed rubber unless approved
4. lack of certification of rubber products
5. excessive export tax regime
6. price discounts on Cambodian rubber
7. excessive paperwork required for transport and export
8. unofficial tolls and fees levied on transport.

5

Preliminary Impact Assessment of FDI in Agriculture

During recent years there has been rising interest in investment in land and agriculture in developing countries, particularly in Cambodia. Concerns about the potential risks of such investment have been echoed by various interest groups. A study by German Technical Cooperation (GTZ) in 2009 identifies both opportunities and risks from foreign investment in land in Cambodia, which are highlighted below.

Socioeconomic aspects: at the macro level there has been evidence of job creation in the production of bio-fuel, providing average monthly wage of USD100; improvement in local roads, but also degradation of community roads by heavily loaded trucks of the investment companies; generation of foreign exchange earnings through export of wood and wood products, rubber, cotton, essential oils, fish and live animals; and contribution to government budget through land concession rental payment of between USD0-10 per ha annually. At micro level certain risks arise. For instance, there is evidence of negative effect on indigenous people's access to land; loss of community opportunity to collect non-timber forest products; absence or lack of transfer of technical skills from foreign firms to farmers, such as breeding, use of new seed varieties, soil improvement or fertiliser use. Opportunities have also emerged, ranging from doubled income for unskilled construction and agricultural labourers to the development of rural schools and healthcare centres.

Food security: community food security could be affected through the loss of community access to non-timber forest products. Hansen *et al.* (2006) indicate that non-timber forest products contribute about 42 percent of poor household income and 30 percent of medium household income in rural communities in Cambodia. However, this study found that foreign investment in land is unlikely to have a negative effect on rural community food security in the short term.

Environment: foreign investment in land creates both environmental gain and risk. A host country could gain from import of new technology and environmentally friendly agricultural production methods and reduction of soil erosion through agricultural production on formerly abandoned land. However, benefits also bring risks in their wake. Environmental concerns over large-scale foreign investment include climate change and soil erosion, water security and quality, biodiversity and local ecology.

Given the concerns highlighted above, and with specific focus on foreign investment in agriculture, but not in land in a broad sense, this study attempts to shed more light on the likely impacts of foreign investment in agriculture on local community livelihoods, the environment, food security, and land and water use.

Taking stock of CDC data from 2000 to June 2010, the study found that foreign investors in agriculture engage mainly in crops and forestry in the form of ELCs, whereas in food processing they engage mainly in the production of drinking water, soya milk and instant noodles. This section focuses on crops (sugarcane, rubber, maize) and forestry in order to examine the likely impacts of such foreign investments.

The following assessment is based on results from focus group discussions (FGDs) conducted by the study team in December 2010 in Kompong Thom province for the case study on rubber, consultation with maize plantation and drying company HLH Agriculture,

previous FGDs conducted by CDRI on the impact of Chinese investment in natural resources on communities in Kratie and Stung Treng provinces (Hem & Tong 2010), and case studies on rubber in Mondolkiri province and sugarcane in Koh Kong province conducted by the Cambodia Economic Association (Ngo & Chan 2010)) in May and June 2010 (Table 10).

Table 10: Summary of Fieldwork by CDRI and CEA in 2010

No.	Company	Size (ha)	Location	Sub-sector	Source
1	Koh Kong Plantation Ltd (Thailand, Japan, China, Cambodia)	9400	Botomsakor district, Koh Kong province	Sugarcane plantation	CEA June 2010
	Koh Kong Sugar Company Ltd (Thai)	9700	Chi-Khor Leu commune, Sre Ambel district, Koh Kong province	Sugarcane processing	CEA June 2010
2	Socfin KCD (Belgium-Cambodia)	10000	Bousra commune, Mondolkiri province	Rubber plantation	CEA May 2010
	DAK LAK (Vietnam)	4000	Busra commune, Mondolkiri province	Rubber plantation	
3	Tong Ming Group Engineering (China)	7465	Kbal Damrei commune, Kratie province	Forestry (acacia)	CDRI April 2010
4	Tan Bien-Kompong Thom Rubber Development (Vietnam)	8100	Kraya commune, Kompong Thom province	Rubber plantation	CDRI Dec 2010
5	HLH Agriculture (Singapore)	9800 (Oral) 4500 (Amleang)	Oral district and Amleang commune, Kampong Speu province	Maize plantation and drying	CDRI Nov 2010

Source: Ngo & Chan (2010: Nos. 1, 2); Hem &Tong (2010: Nos. 3, 4)

Generally, each FDI project has both negative and positive effects on the environment and livelihoods of local communities, and their scale varies from one sub-sector to another. Rather than adopting a full sub-sector-wide impact assessment, this study develops case studies to generate ideas and raise awareness among various stakeholders, particularly policy-makers. As such, it is important to refrain from using these results to make generalisations about entire sectors.

5.1. Crops

The case studies on crops cover various projects, namely one on sugarcane production, two rubber plantations and one maize plantation. These projects were not selected randomly using factors such as land size, geographical location, crop type or company nationality, but through considerations of their importance and study budget limitations.

5.1.1. Sugarcane Plantation in Koh Kong Province

Koh Kong Plantation Ltd and Koh Kong Sugar Company Ltd

According to a survey by the Cambodia Economic Association (CEA), two ELC companies under the same representative's name—that of Ly Yong Phat—have been granted a licence for sugarcane plantation from the Cambodian government (Ngo & Chan 2010). The land covers about 20,000 ha, of which 9,400 ha is under Koh Kong Plantation Ltd in Botomsakor district

and 9,700 ha under Koh Kong Sugar Company Ltd in Sre Ambel district. The sugarcane is processed at the Koh Kong Sugar Company Ltd factory, which has production capacity of 6,000 tonnes a day, and is packed for export to European Union markets. CEA carried out its survey in Trapaing Kandal and Chi-Khor Leu villages, interviewing 143 households in order to assess impacts on employment, livelihood transformation and land transactions.

Socioeconomic impacts: A number of skilled, semi-skilled and unskilled jobs have been created for local people and for those living in the surrounding areas and other provinces. Depending on the season, these jobs include land preparation, planting, fertiliser spraying, pest control, weeding, harvesting, collecting and transporting. The planting and harvesting period from November to May is the peak season for employment. In 2009 approximately 3400 daily workers, around 30 percent of them from Koh Kong, were employed in the peak season compared to only around 1300 between June and October. These labourers were paid a daily wage of around USD2.5. In addition, accommodation and transport are provided for migrant workers from such provinces as Banteay Meanchey, Kampot and Kompong Thom. The two companies also employed a total of 511 Cambodian and Thai office staff, earning an average of USD6 per day, but it should be noted that just a slim proportion of the local people employed were office staff.

Prior to the arrival of the company, local people earned a living by farming wet season rice and cash crops and raising cattle. With the company's arrival, some of the land once used for villagers' cash crops was annexed by the sugarcane plantation. This has triggered serous disputes between the local people and the company, as a source of revenue for the former has been taken away. Further, local people's cattle can no longer roam freely on farm and forest land that has become part of the company's investment zone. If the company's guards see the community's livestock on the company's plantation, they will catch, detain and sometimes shoot the animals.

The company, after being awarded its ELC licence in 2006, started clearing the land without giving prior notice to the local community. This provoked strong protest by the local people: 449 households filed a petition letter on the loss of their farmland and other property. Even though the company has offered compensation to the affected households, there have been many complaints that it is insufficient and unfair. Villagers who have relatives working for the company tend to get better compensation, with overall compensation ranging from USD25 to USD350. One critical reason villagers cannot make a strong argument for their land is that most of them do not have a land title for the land they have been cultivating.

The central challenges underlying these disputes include the absence of clear guidelines or procedures to resolve them, unfair options offered by the company to compensate affected households, replacement of common dispute settlement mechanism by non-transparent and unfair case-by-case procedure, household-by-household solution, and limited or no assistance from the local authorities. A community representative claimed that local authorities are unhelpful, and thus the community has little support in finding a way to deal with the company.

Environmental impacts: The sugarcane plantation and processing factory reportedly generate two types of pollution. First, water pollution seriously affects the daily life of the local community, as waste chemical substances contaminate the water upstream which then affects downstream communities' water supplies. This water source is vital to the villagers, so the pollution harms both humans and animals. Second, factory emissions lead to air pollution, which has been bad enough to have affected local residents' breathing.

Infrastructural impacts: The CEA report did not capture information on the development of local infrastructure by the investing company. However, it is likely that roads have been built in order to transport materials and workers in and out.

5.1.2. Rubber Plantation in Mondolkiri and Kompong Thom Provinces

Socfin KCD and DAK LAK (Mondolkiri province)

In May 2010 the CEA conducted a survey on rubber plantation in Bousra and Krang communes, Peach Chinda district, Mondolkiri province (Ngo & Chan 2010). Eight ELC companies are licensed for rubber plantation, each with a land area of 3000–5000 ha. Most of them have cleared land and planted rubber trees. All of the ELCs are reported to be active, except for Sarmala Company, but the CEA study mainly focuses on the potential effects of Socfin KCD and DAKLAK.

Socioeconomic impacts: At the start of its operations in 2008, Socfin KCD employed approximately 10,000 people—around 2000 between May and August and around 8000 for the rest of the year. Around 20–25 percent of the total workforce comprised local people, with 60 percent female. The company will employ at least 1500 workers when the plantation is fully planted. Unskilled workers can earn around USD5 per day; their jobs include weeding and applying fertilisers and they work 10 to 15 days per month. Skilled workers can earn a bit more at around USD6.5–8 per day. All the skilled employees are migrants, particularly from Kompong Cham province, with work experience in the rubber industry. They are satisfied with their job even though they have to live far away from their families.

Overlapping land claims between villagers and companies are commonplace, as villagers traditionally move their farmland from one place to another every few years and do not have land ownership certificates. All villagers in Bousra commune have been affected by Socfin KCD and DAK LAK investment projects. Villagers were shocked when Socfin KCD cleared their lands without giving them any notice. Disputes erupted, resulting in the company's tractors being burned by the villagers. The Land Conflict Resolution Committee, headed by the provincial deputy governor and comprising district and commune authorities, was set up to tackle the problem. Around 172 affected households were on the list endorsed by the government, while the Community Legal Education Centre (a local NGO) claimed that 362 households in Bu Sra were initially affected in 2008. Ultimately, the company offered compensation schemes, such as cash payment of around USD200–250 per ha, land exchange and development. Villagers tended to opt for cash payment, as the land offered in exchange was too far from the village and not fertile enough for cultivation. Some initially selected the third option, but later switched to cash payment given procedural delay. Overall, cash payment was the best option.

On the DAK LAK project, around 40–50 percent of the concession belongs to villagers, with whom the company negotiated the deal in advance. Half of the villagers' section of the concession is near the village, which is convenient for raising cattle. The company has also provided loans to villagers with a grace repayment period of 10 years to allow them to plant rubber on the land allocated to them, and has agreed to buy latex from them at 80 percent of the international market price. The company even allows landless farmers to cultivate crops between saplings on its concession land until the rubber trees are mature enough for tapping. Villagers were satisfied with the compromises offered by the company.

Before the companies arrived, people in Bousra made a living by farming lowland and highland rice and cash crops, collecting forest by-products, raising livestock, fishing, hunting,

gold mining and running small businesses. However, the ELCs have badly affected highland cultivation, and some local people have also lost their land to the companies. This has brought hardship, as they can no longer generate an income from collecting non-timber forest products, which used to generate USD10–15 per week. They now have to go further from home to hunt and collect forest by-products in order to survive. Moreover, some have lost an income source from livestock farming given the loss of grassland to ELCs.

Environmental impacts: The study did not capture critical impacts on the local environment. It might be assumed, however, that the investment has caused a natural imbalance, given the sudden and large-scale planting of rubber trees. Rubber trees store carbon, but they require a larger volume of water which could lead to water use that competes with that of local ethnic communities. It could also result in loss of natural habitat, as forest land has been turned into private estates.

Infrastructural impacts: The companies have rehabilitated roads and contributed school buildings. For instance, DAK LAK donated a school building to the community in Koh Nhek district. However, there have been complaints about the destruction of community-funded roads since the arrival of the companies.

Tan Bien (Kompong Thom province)

CDRI conducted fieldwork in Kraya commune in December 2010, consulting a commune councillor on the overall impacts of ELCs on the commune and holding an FGD in Thmor Samleang village in order to examine the effects of the investment project. It should be noted that the number of private investments, both foreign and domestic, in the form of ELCs in Kraya commune has been rising. There have been several reports of disputes between Vietnamese companies, i.e. Tan Bien Investment and Phuek Fa Investment (Phuek Fa was formerly known as Mean Rithy Investment, owned by a Cambodian investor) and the local communities.

The major occupations in Kraya commune are growing paddy rice and cassava and collecting forest by-products. Villagers claim that an income solely from growing paddy rice is not enough and farmers generate extra income by collecting wood resin and vines or working as day labourers on rice fields or plantations. Some catch porcupines, as they are in high demand for medicinal purposes. Some use income from selling forest by-products to buy fertiliser to improve the otherwise poor soil fertility so as to increase their paddy yield (average yield is 2 to 4 tonnes per ha). Given rising market demand in recent years, about half of the total population of the commune has decided to clear state forest land to grow cassava, which on average fetches around KHR300,000 (about USD73) per tonne, while others have grown cashew nuts or jack fruit. Aware of villagers' hardships, the commune councils have turned a blind eye to such land clearance.

Socioeconomic impacts: There was evidence of significant job creation when Tan Bien started operating. The company employed a large number of people in the commune (no data confirmed by commune council) mainly to do jobs such as weeding, digging, spraying pesticide and watering at an average daily wage of around KHR12,000–13,000 (approximately USD3-3.5). However, the majority of employed villagers quit their jobs, complaining of unbearable hardship. Problems ranged from insufficient skills to tend rubber saplings and apply pesticide, to fraud in wage disbursements. In response, the company gathered a workforce from neighbouring communes and other provinces, mainly Kompong Cham, as farmers there are more familiar with growing rubber saplings and maintaining trees.

Another impact has been the loss of traditional sources of income, particularly resin and vine collection, as firms have bulldozed the commune's forest. In addition, several households have lost the cassava plantations they acquired through illegal clearance of state forest land to ELCs. Note that this clearance originally occurred with the tacit acceptance of the commune council, as noted above. As such, the project has been a double blow for households: loss of income sources but no employment and skills acquisition opportunities.

In compensation for the loss of the land, the firm provided households with USD200 per ha for cleared land with crops and USD100 per ha for newly cleared land without crops/ vegetation. However, one striking characteristic of dispute settlements between the company and villagers is that though the company representative agreed to follow requests made by the commune facilitator, in practice the firm broke this promise. For instance, the firm agreed to not disrupt or divert the streams, both small and big, used for animals drinking water and other agricultural purposes, but later filled them in and made no serious effort to keep its promise. The commune council has little power over the firm, which gets permission to implement its activities from provincial level authorities. Meanwhile, if villagers let their livestock roam onto the plantation, the animals are detained and can be retrieved only after paying a fine of KHR100,000 (approximately USD25).

Environmental impacts: There is no evidence of competing water use between the company and Thmor Samleang villagers. Villagers' paddy rice, cassava and other crops are rain-fed, and the company has excavated its own reservoir for watering rubber tree saplings. In addition, there are no complaints from villagers as to the overuse of pesticides that could degrade soil quality and pollute ground water, or the costs of harvesting the forest around the village and particularly the commune. However, this could relate to villagers' limited knowledge regarding the environmental impacts of the rubber plantation.

Infrastructural impacts: The company has built roads connecting its land to the commune centre. Although these roads have apparently been built to serve the company's business operations alone, villagers in Thmor Samleang, which is near the company's land, also benefit. Otherwise, there is no evidence of the firm's contribution to local infrastructural development, such as hospitals, schools, irrigation and the like.

Business model: No formal and genuine business model has been applied, but the company has cleared forest and expropriated households' plantations and in return employed villagers on the rubber plantation, but on an irregular basis only.

5.1.3. Maize Plantation in Kampong Speu Province

HLH Agriculture

HLH Group Limited, which is 100 percent Singapore-owned and was listed on 21 June 2000 on the SGX Mainboard, is involved in agriculture, property and investments, construction, agri-research and development. The company's application to invest in Cambodia was approved in 2007 and it started maize plantation in 2009 on 9800 ha in Oral district and 4500 ha in Amleang district, Kompong Speu province, 48 km from Phnom Penh.

The company has a 70-year lease on its concession land. With a capital investment of about USD45 million it has imported high-tech machinery from Singapore and so far set up one processing factory with production capacity of around 600 tonnes per day, and four plantations of between 450 and 2000 ha.

All farms are overseen by supervisors from the Philippines, Taiwan, Singapore, China and Myanmar, who have different management styles. All the assistant supervisors are Cambodian, and are supposed to take over the management jobs in the future once they have gained enough skills and experience. Thirty of the company's approximately 450 full time employees are office staff, with only two from Singapore. The majority of plantation workers, about 200 in low season and around 1000 in high season, are Cambodian.

Socioeconomic impacts: A significant number of jobs were created when the project began operations in 2007, providing average daily wages of KHR10,000-12,000 (USD2.5-3) though villagers had to spend around KHR1000 per day (around USD0.33) on transport to and from the plantation. Recently, the number of workers employed has declined considerably as the company has replaced manual labour with imported machines, for example for sowing and harvesting. This has limited villagers' opportunity to access this new income source. The company claims that it has not been able to apply a business model because farmers cannot afford to buy seeds and machines and lack appropriate technology for cultivating maize.

Meanwhile, HLH Agriculture has claimed around 40 percent of villagers' paddy rice fields and cleared forest land, severely affecting local people's main and traditional sources of income, namely rice growing and charcoal production. Kompong Speu Sugar, another large private investment company owned by Cambodian tycoon Ly Yong Phat (of the Koh Kong sugarcane plantations detailed above), has affected around 90 percent of villagers' paddy fields.

Resolving the disputes has been difficult as villagers do not have certificates to prove their ownership of the land they have traditionally cultivated. The company claims that there have been no big problems with the local community as it has worked in a consultative manner, inviting the local people, authorities and other relevant bodies to come together to find a solution to any issues arising. The company has promised to compensate people by giving them new plots of land but, as these are very far from the village, only a few have agreed. In terms of cash compensation, according to villagers, the company pledged to pay each family USD1000–2000 per ha, but this money has not yet materialised.

Given the lack of irrigation, paddy rice can only be grown in the rainy season. Therefore, the majority of villagers also produce charcoal by going to the forest and chopping down small trees. Each household has on average two to four kilns; a small kiln can process around 5 m^3 wood in around 15 days and generate around KHR350,000 (approximately USD85), and a large one can process around 10 m^3 wood in 20-25 days which is worth around KHR700,000 (around USD170). However, villagers can no longer produce charcoal because the forest near the village has been cleared and the company does not allow people to enter its demarcated land. The only way villagers can get wood now is by going deeper into the forest, which most of them are reluctant to do. They feel pessimistic about their future livelihoods since the arrival of the company, and some have quit their company plantation jobs. Meanwhile, the company claims the forest had already been cleared before it arrived.

Environmental impacts: Forest cover has declined as more land has been cleared. This could have adverse impacts on the ecological system and the biodiversity of the area. People in the village are very worried about this environmental degradation.

Infrastructural impacts: FGD revealed that so far HLH Agriculture and Kompong Speu Sugar have built no significant physical infrastructure. The few roads and bridges that have been built are for company use only. Most of the roads are government built.

5.2. Forestry in Kratie Province

Tong Ming Group Engineering and Eight Other ELCs

There are eight ELCs in Kbal Damrei commune, as confirmed in the interview with the second deputy chief of the commune in April 2011. Table 11 shows the distribution of projects by nationality. It is important to note that this account of the preliminary impact assessment has been compiled from the investigation of one investment project owned by Tong Ming Group Engineering in early 2010, and does not reflect the full-scale or commune-wide impact of all the investment projects listed in the table below.

Table 11: Profiles of ELCs in Kbal Damrey Commune, Sambour District, Kratie Province

No.	Company	Year of approval	Duration of contract	Size (ha)	Purpose of investment	Nationality
1	Great Island Agricultural Development Co., Ltd	2006	70 years	9583	Teak plantation and processing factory	American
2	Global Agricultural Development Co., Ltd	2006	70 years	9800	Tectona/teak plantation and processing factory	American
3	Asia World Agricultural Development Co., Ltd	2006	70 years	10000	Teak plantation and processing factory	Chinese
4	Great Asset Agricultural Development Co., Ltd	2006	70 years	8985	Pistacia Chinasis Bunge and other tree plantation	Chinese
5	Great Wonder Agricultural Development	2006	70 years	8231	Pistacia Chinasis Bunge and other tree plantation	Chinese
6	Tong Ming Group Engineering	2007	70 years	7465	Rubber, acacia, jatropha plantation and processing factory	Chinese
7	Agri-industrial Crops Development	2008	70 years	7000	Rubber and acacia plantation	Chinese
8	Carmadeno Venture Limited	2009	70 years	7635	Sugar cane plantation	Indian

Source: Interview with deputy chief of Kbal Damrey Commune, April 2011; MAFF ELC profiles 2011 (http://www.elc.maff.gov.kh/profiles.html)

Socioeconomic impacts: Communication between villagers, companies and authorities is weak: in some cases, villagers were shocked to see the companies turn up to clear land close to their backyards. There are disputes between the local community and the companies over land grabbing and restricted access to the forest. Villagers can no longer collect vines, wood resin, rattan and bamboo or hunt in the forest, which has cut off a main source of income. The forest plantation is protected by armed guards, and if villagers are found entering it they are arrested and fined and their belongings seized.

Meanwhile, villagers no longer favour working at the Chinese company given its strict working conditions (e.g. monthly salary is reduced if workers take a day off and workers are not allowed to go home if overtime work is necessary) and its land-grabbing activities. Workers are mainly from Prey Veng and Svay Rieng provinces.

Environmental impacts: The study team observed that the companies were using heavy machines to clear the forest, often violating the regulation that requires companies to keep

intact a 200 m strip of forest on each side of a large stream (one that is 20–30 m wide) and 100 m strip either side of a smaller one to ensure sustainable water use and environment protection. In practice, the companies have left just about 10 m of forest on each side of a stream. Villagers also mentioned that timber is frequently transported at night to Vietnam.

Infrastructural impacts: There is evidence of road construction, but no school buildings or pagodas have been built. New roads have been built mainly for the company's use and not for the public, who are not allowed to intrude on the company's property.

5.3. Overall Assessment

Overall, based on our preliminary examination, the costs of FDI projects seem to outweigh the benefits to an extent that is hard to estimate. FDI projects have both positive and adverse effects. On the positive side, some projects have created significant employment for local communities and those in nearby provinces. However, others have not. Meanwhile, land conflict is common across ELC projects, given the lack of insecure land tenure and limited or no consultation with local communities prior to the granting of ELCs. In addition, some ELC projects involved in clearing the forest have eliminated major sources of community income, such as collection of non-timber forest products and hunting. The filling in of streams, as reported in some project areas, could lead to water shortages.

Cambodia has not experienced food deficit during the past decade. Paddy rice production and the total area under cultivation have grown favourably, with average growth rates of 9.4 percent and 2.7 percent, respectively, between 2004 and 2009. In 2009 the total rice cultivated area reached just over 2.7 million ha, generating total production of 7.6 million tonnes and a surplus of 3.5 million tonnes (Table 11). Therefore, at first glance, Cambodia does not seem to have grave concerns related to food security in the short- to medium-term. Importantly, the drastic rise in the size and total number of ELC projects seems unlikely to threaten national food security in the medium term because the current stable surge in paddy rice cultivated area will continue to produce surplus for domestic consumption in the short and medium term. Also, taking a similar perspective, ELC expansion does not appear to compete for water use with paddy cultivation. However, in the longer term competing uses for water and land could be detrimental to national food security if the scale of ELC projects keeps growing at the current pace.

Table 12: Evolution of Paddy Rice Production Area and ELC Land Size, 2004–09

Category	2004	2005	2006	2007	2008	2009
Rice cultivated area (ha)	2374175	2443530	2541433	2585905	2615741	2719080
Rice area expansion (%)	2.6	2.9	4.0	1.7	1.2	4.0
Paddy rice production (tonnes)	4170284	5986179	6264123	6727127	7175473	7585870
Growth of paddy rice production (%)	-11.5	43.5	4.6	7.4	6.7	5.7
Paddy rice surplus (tonnes)	650184	2061830	2240438	2577562	3164114	3507185
Milled rice surplus (tonnes)	416118	1319571	1433880	1649640	2025033	2244598
Accumulated ELCs (ha) (total)	583273	650316	818572	847573	888509	1024639
ELC expansion (%)	1.1	11.5	25.9	3.5	4.8	15.3
Accumulated ELCs ha (FDI)	73100	97480	188499	217500	258436	355914

Source: MAFF (2010)

However, rising world demand for food (rice) and industrial crops, like rubber, cassava and sugarcane for the production of bio-fuel energy, could place Cambodia in a perilous situation if its trade and investment policies do not take food security seriously into consideration. Meanwhile, in the long term, land use conflicts between villagers and ELCs producing rice and industrial crops for export, fierce competition for water currently used for paddy rice production, and loss of traditional sources of income for local communities could contribute to a decline in household food consumption and thereby a reduction in nutrition.

6

Conclusion

Agriculture has been a constant contributor to the national economy, employing a significant proportion of the rural workforce and generating substantial foreign exchange earnings. In its fourth legislature, the Cambodian government has focused even more strongly on promoting the sector by relaxing taxes related to agricultural products and developing rural infrastructure such as roads and irrigation. New measures have been taken to help local communities, including opening access to big fishing lots that used to be under private ownership.

The government has undertaken forestry reform to facilitate investment in forestry and crops through the establishment of legislation on concessions, forestry community formation and environmental protection. The Sub-decree on Economic Land Concessions, adopted in 2005, has facilitated the granting of land concessions to foreign and local investors to exploit unused and/or infertile land.

Laws relating to sanitary and phyto-sanitary issues and animal health have been enacted to control livestock production, prevent animal losses and contain animal diseases. Recently, the government, through MAFF, prohibited the import of livestock from neighbouring countries to prevent swine flu and reduce the risk of animal disease pandemics.

The government, with the support of its development partners, has provided technical assistance in rice farming, fisheries (aquaculture) and livestock production. The government has also renewed efforts to develop the irrigation system so as to reduce farmers' dependence on rain, particularly in rice farming, and increase resilience to climate change.

As the agriculture sector is one of the main drivers of Cambodia's economic growth, a market mechanism has been set up to promote trade and channel agricultural products to local and international markets. To boost the sector's competitiveness, soft infrastructure related to rules and regulations, red tape and costs of doing business has been improved. Attracting investment in the energy sector has also been prioritised because the price of electricity in Cambodia is still formidably high compared with other countries in the region.

The share of total agricultural investment to total investment is small, at around 6 percent between 2000 and June 2010, despite growing interest from investors from countries such as Thailand, China, Vietnam, Korea, Singapore, Japan, Malaysia, Canada, America, India, France, the UK, the USA and Denmark. Investors engage mainly in crops, namely rubber, cassava, maize, sugarcane and cashew nuts, and forestry, such as teak and acacia. The dramatic rise in interest in more recent years has sparked concern from various stakeholders as to the potential effects of foreign ELC projects on community livelihoods, local environment quality and national food security.

This preliminary examination using data from both CDC and MAFF reveals both beneficial and adverse effects from FDI projects. Some projects have created significant employment opportunities for local communities, yet others have not. Notably, land conflict, largely as a result of the weak land tenure system and limited consultation with local communities prior to the granting of ELC projects, has been commonplace. Moreover, some projects involved in forest clearance have eliminated traditional sources of community income generated through collecting non-timber forest products, such as vines, wood resin, bamboo and rattan, and

hunting. Furthermore, the filling in of streams by some projects could lead to water shortages. Overall, then, it seems the costs of FDI projects tend to outweigh the benefits.

With population growth and increasingly limited land, food security is an emerging concern in Cambodia. From our analysis of CDC investment data (2000–09) and MAFF ELC investment data along with preliminary fieldwork on a number of FDI projects, we find that regardless of the traditionally widespread informal paddy rice export to Thailand and Vietnam, Cambodia will not suffer from food insecurity in the short and medium term. Nevertheless, in the long term, conflicts over land and water use, water shortages and loss of traditional income sources, all contributed to by the dramatic expansion in investment in ELCs in recent years, could lead to a decline in household food consumption and thereby a reduction in nutrition. Particularly at risk are subsistence farming households and those that cannot earn enough from growing rice, such as in Kraya commune in Kompong Thom province.

7

Policy Recommendations

To ensure that opportunities for foreign investment in agriculture in Cambodia are sustainable and beneficial to all, the government and concerned stakeholders should consider taking the steps outlined below.

7.1. Central and Local Government

- Environmental impact assessment should be conducted with wide participation from concerned stakeholders, particularly from communities close to project sites, prior to granting ELC approval. As impact assessments become more reliable and transparent, the number and scope of land conflicts will be reduced.
- To avoid land disputes and overlapping claims, MAFF and related institutions should demarcate ELC borders in consultation with adjacent communities.
- The government should monitor ELC operations more closely to prevent sub-standard forest clearance practices and such activities as filling in upstream water sources and excessive logging.
- Authorities at both central and provincial levels should hold frequent consultations with communities and companies so as to pre-empt problems.
- MAFF should regularly update and publicise the progress of ELCs' operations on its website and via other public media to ensure greater transparency and generate more credibility.
- The government should take food security seriously into account in the provision of ELCs in order to avoid problems of competing land use between industrial crop production for export and paddy rice production for domestic consumption.
- Also on food security, the government should review overall policy on investment in agriculture, particularly in relation to ELCs given their recent drastic expansion, to ensure agricultural trade policy is not geared solely towards foreign exchange earnings.
- To reduce land conflicts and ensure benefits from large-scale agricultural investment, whether private domestic or foreign, the government must take swift and prudent action to provide low cost secure land titles to rural communities by prioritising those to be imminently affected by projects.
- Future rules and regulations should put more emphasis on the protection of rural communities by conducting social impact assessment prior to project approval, and they should be in line with regulations on investor protection.
- Eliminating unofficial fees and setting up computerised systems to process investment and business licensing applications and related administrative procedures is vital to improve the investment climate; this should be done using a step-by-step or ministry-by-ministry approach.
- Dispute settlement mechanisms should be reviewed so as to build confidence among private sector firms.

- Ministries should set up a department to provide clear guidance and assistance to investors when they need it and receive feedback.

7.2. Private Companies

- ELC holders should be more transparent and accountable to nearby communities and the general public by contributing more to the development and maintenance of local infrastructure.
- Companies should maintain good, frequent and direct communication with local communities such as through community social gatherings and the like.
- Resolution of conflicts, such as land disputes, should be based on a win-win approach like the model used by the DAK LAK rubber plantation project in Mondolkiri.
- Companies, ELCs and processing plants in particular should be more responsible for maintaining the environment quality and ecological systems in their project areas.
- Chemical substances used in factories should comply with environmental regulations to protect people and animals from harmful pollution and water sources from contamination.

7.3. Affected Communities

- Communities should maintain good, frequent and direct communication with companies through community social gatherings and the like.
- Communities should be more involved with education programmes provided by the authorities and NGOs regarding their rights to property and how to resolve land conflicts.
- Communities should report any irregular operations of the ELC companies to the commune or provincial authorities immediately, for example the filling in of streams or excessive logging.

7.4. NGOs/Civil society

- Local NGOs should raise community awareness regarding civil rights and how to exercise those rights.
- Community NGOs should closely monitor potential conflicts between local communities and ELC companies and compile accounts to inform the public.
- Civil society groups should advocate for better recognition of community rights by ELC companies and local authorities.

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Appendix 1: Additional Tables

Table A1: Detailed List of all ELCs Granted by MAFF, 1995–2009

Name	Province	Nationality	Year of approval	Size (ha)	Purpose of investment	Status
Cambodia Eversky Agricultural Development	Kompong Thom	Cambodian	2005	10000	Cotton plantation	Cancelled
An Mardy Group	Kompong Thom	Cambodian	2005	9863	Agro-industry and animal husbandry	Active
Mean Rithy	Kompong Thom	Cambodian	2006	9784	Agro-industry	Active
HMH	Kompong Thom	Cambodian	2006	5914	Acacia plantation and other trees	Active
Tan Bien-Kompong Thom Rubber Development	Kompong Thom	Vietnamese	2007	8100	Rubber plantation and processing	Active
Gold Foison (Cambodia) A/C Import Export & Construction	Kompong Thom	Chinese	2007	7000	Acacia plantation and processing	Active
BNA (Cam) Corp	Kompong Thom	Korean	2009	7500	Rubber and cassava plantation	Active
CAMLAND	Kampot	Cambodian	2000	16000	Oil palms	Active
World Tristar Entertainment (Cambodia)	Kampot	Cambodian	2005	9800	Maize plantation and processing factory	Active
First Bio-Tech Agricultural (Cambodia)	Kampot	Cambodian	2005	10000	Agro-industry and animal husbandry	Active
Crystal Agro	Oddar Meanchey	Thai	2006	8000	Cassava and agro-industry plantation	Active
Tonle Sugarcane	Oddar Meanchey	Thai	2008	6618	Sugar plantation and processing	Active
(Cambodia) Cane and Sugar Valley	Oddar Meanchey	Thai	2008	6595	Sugar plantation and processing	Active
Angkor Sugar	Oddar Meanchey	Thai	2008	6523	Sugar plantation and processing	Active
LEANG HOUR HONG Import and Export	Battambang	Cambodian	2000	8000	Sugarcane and cassava	Active
Rath Sambath	Battambang	Cambodian	2009	5200	Rubber plantation	Active
AGRO STAR Investment	Kompong Cham	Cambodian	1996	2400	Fruit trees and animal husbandry	Active
TTY Industrial Crops Development Import-Export	Kompong Cham	Cambodian	2000	1070	Cassava plantation	Active
VANNMA Import-Export	Kompong Cham	Cambodian	2004	1200	Sugarcane and cassava	Active
Mieng Ly Heng Investment	Kompong Cham	Cambodian	2005	3000	Para rubber plantation	Active
Men Sarun Import-Export	Kompong Cham	Cambodian	2006	4400	Rubber plantation and other crops	Active
Phea Phimex	Kompong Chhnang	Cambodian	2000	315028	Tree plantation and paper factory	Active
The Cambodia Haining	Kompong Speu	Chinese	1998	23000	Agro-plantation and processing factory	Cancelled
Cambo Victor Investment and Development	Kompong Speu	Chinese	1998	28500	Maize, beans, soybeans, rice, cassava	Cancelled
Henan (Cambodia) Economic and Trade Development Zone	Kompong Speu	Chinese	1999	4100	Agro-industry and animal husbandry	Cancelled

Name	Province	Nationality	Year of approval	Size (ha)	Purpose of investment	Status
KIMSVILLE	Kompong Speu	Chinese	2000	3200	Agro-industry and animal husbandry	Cancelled
China National Corporation for Overseas Economic Cooperation Load Star Development	Kompong Speu	Chinese	2000	8000	Agro-industrial crops	Cancelled
CJ Cambodia (Lot 1)	Kompong Speu	Korean	1999	3000	Tapioca (cassava or manioc)	Active
CJ Cambodia (Lot 2)	Kompong Speu	Korean	2001	5000	Tapioca (cassava or manioc)	Active
Uk Khun Industrial Plants and Other Development	Kompong Speu	Cambodian	2001	12506	Cashew apple, agro-industrial crops and animal husbandry	Active
Golden Land Development	Kompong Speu	Taiwanese	2004	4900	Agro-industry and processing factory	Active
Grandis Timber Ltd	Kompong Speu	American	2009	9820	Maysak plantation	Active
Fortuna Plantation (Cambodia) Ltd	Kompong Speu	Malaysian	2009	7955	Oil palm and jatropha plantation	Active
The Green Rich	Koh Kong	Chinese	1998	60200	Oil palms, fruit trees and acacia	Active
Koh Kong Sugar Ltd	Koh Kong	Thai	2006	9700	Sugarcane plantation	Active
Koh Kong Plantation Ltd	Koh Kong	Cambodian	2006	9400	Sugarcane plantation	Active
Khema Kara	Koh Kong					Unknown
Plantation Agricultural Development (Cambodia)	Kratie	USA	2006	9214	Plantation of Chinese pistachio, bunge	Cancelled
Tay Nam (K)	Kratie	Vietnamese	2006	7560	Cassava, rubber, cashew and factory	Cancelled
Asia World Agricultural Development (Cambodia)	Kratie	Chinese	2006	10000	Teak re-plantation and factory	Active
Great Wonder Agricultural Development (Cambodia)	Kratie	Chinese	2006	8231	Plantation of Chinese pistachio, bunge	Active
Great Asset Agricultural Development (Cambodia)	Kratie	Chinese	2006	8985	Plantation of Chinese pistachio, bunge	Active
Green Island Agricultural Development (Cambodia)	Kratie	USA	2006	9583	Teak re-plantation and factory	Active
Global Agricultural Development (Cambodia)	Kratie	USA	2006	9800	Teak re-plantation and factory	Active
Central First Company Ltd	Kratie	USA	2009	7000	Rubber plantation	Active
Dau Tu Saigon-Binh Phuoc (SBK)	Kratie	Vietnamese	2007	6436	Rubber, cassava, and cashew plantation	Active
Mega Star Investment and Forestry Development	Kratie	Vietnamese	2009	8000	Rubber plantation	Active
Crops and Land Development (Cambodia)	Kratie	Chinese	2008	7200	Rubber and acacia plantation	Active
(Cambodia) Tong Ming Group Engineering	Kratie	Chinese	2007	7465	Rubber, acacia and jatropha plantation and processing	Active
Agri-industrial Crops Development (Cambodia	Kratie	Chinese	2008	7000	Rubber and acacia plantation	Active
PDA (Cambodia)	Kratie	Korean	2009	5256	Rubber, acacia and cassava production	Active

Name	Province	Nationality	Year of approval	Size (ha)	Purpose of investment	Status
Carmadeno Venture (Cambodia)	Kratie	Indian	2009	7635	Sugarcane plantation	Active
Growest Trading	Kratie					Unknown
Dong Phou	Kratie					Unknown
Dong Nai	Kratie					Unknown
Phou Rieng	Kratie					Unknown
Megasta Produce	Kratie					Unknown
Tay Nam BPM	Mondolkiri	Vietnamese	2006	7600	Cassava, rubber, cashew and factory	Cancelled
Wuzhishan LS Group	Mondolkiri	Chinese	2005	10000	Sumatran pine plantation and factory	Active
Land and Development Cambodia	Mondolkiri	Chinese	2008	7000	Rubber and acacia plantation	Active
Agro Forestry Research	Mondolkiri	Chinese	2009	7000	Rubber and acacia plantation	Active
Seang Long Green Land Investment (Cambodia)	Mondolkiri	Chinese	2009	7000	Rubber and acacia plantation	Active
DTC (Group)	Mondolkiri	Cambodian	2009	4000	Rubber plantation	Active
Unigreen Resources	Mondolkiri	Chinese	2009	8000	Rubber plantation	Active
COVYPHAMA	Mondolkiri	Cambodian	2009	5345	Rubber plantation	Active
Mondul Agri-Resources	Mondolkiri	Cambodian	2009	9100	Rubber plantation	Active
Varanacy	Mondolkiri					Unknown
DAK LAK	Mondolkiri	Vietnamese				Unknown
Ratana Visal Development	Pursat	Cambodian	1999	3000	Cashew apple and oil palm	Active
Mong Reththy Investment Oil Palm Cambodia	Preah Sihanouk	Cambodian	1995	11000	Oil palm plantation and factory	Active
Mong Reththy Investment Cassava Cambodia	Preah Sihanouk	Cambodian	2000	1800	Cassava plantation and factory	Active
Cambodia Agro Industry Group	Preah Vihear	Cambodian	2007	8692	Rubber and agro plantation	Cancelled
Thy Nga Development and Investment	Preah Vihear	Vietnamese	2009	6060	Rubber plantation	Active
Pelin Group Agricultural Development (Cambodia)	Ratanakkiri	Cambodian	2006	8847	Plantation of Chinese pistachio, bunge, etc	Cancelled
Global Tech Sdn., Bhd, Rama Khmer International and Men Sarun Friendship	Ratanakkiri	Cambodian	1999	20000	Oil palms, coffee and other crops	Active
30/4 Gialani Company Limited	Ratanakkiri	Vietnamese	2005	9380	Agro-industry, animals and factory	Active
Oryung Construction (CAM)	Ratanakkiri	Korean	2006	6866	Rubber plantation	Active
Heng Development	Ratanakkiri	Cambodian	2006	8654	Agro-industry and tree plantation	Active
Heng Brothers	Ratanakkiri	Vietnamese	2009	2361	Rubber and acacia plantation	Active
Heng Heap Investment	Ratanakkiri	Cambodian	2009	7000	Rubber and jatropha plantation	Active
Kiri Development	Ratanakkiri	Cambodian	2009	807	Rubber plantation	Active
Hong An Mang Yang K Rubber Development	Ratanakkiri	Vietnamese	2009	6891	Rubber plantation	Active

Name	Province	Nationality	Year of approval	Size (ha)	Purpose of investment	Status
Chea Chanrith Development	Ratanakkiri					Unknown
Samrong Rubber Industries	Siem Reap	Cambodian	2006	9658	Plantation of rubber and other	Active
Kain	Siem Reap	Cambodian	2006	4535	Rubber and agro-industry plantation	Active
Sophorn Theary Peanich	Siem Reap	Cambodian	2006	5042	Rubber and agro-industry plantation	Active
Sok Heng	Stung Treng	Cambodian	2006	7172	Plantation of acacia and other	Cancelled
Cassava Starch Production	Stung Treng	Cambodian	1999	7400	Agricultural and agro-industrial crops	Active
Sal Sophea Peanich	Stung Treng	Cambodian	2001	9917	Acacia, trincomali wood and others	Active
Green Sea Agriculture	Stung Treng	Cambodian	2001	100852	Trincomali plantation	Active
GG World Group (Cambodia) Development	Stung Treng	Chinese	2005	5000	Agro-industry, animals and factory	Active
Sopheak Nika Investment Agro-industrial Plants	Stung Treng	Cambodian	2005	10000	Acacia, trincomali wood and others	Active
Sekong Aphivath	Stung Treng	Cambodian	2006	9850	Agro-industry and animal husbandry	Active
Siv Guek Investment	Stung Treng	Cambodian	2006	10000	Acacia, trincomali wood and others	Active
Phou Mardy Investment Group	Stung Treng	Chinese	2006	10000	Acacia, trincomali wood and others	Active
Grand Land Agricultural Development (Cambodia)	Stung Treng	Chinese	2006	9854	Agro-industrial crops	Active
(Cambodia) Research Mining Development	Stung Treng	Cambodian	2009	7200	Rubber and acacia plantation	Active
Un-Inter Trading and Development Group	Stung Treng	Chinese	2009	7000	Rubber and acacia plantation	Active

Source: MAFF website www.elc.maff.gov.kh/profiles.html (retrieved October 2010)

Table A2: ELC Land Size and Projects by Province and Nationality, 1995–2009

	USA	Cambodia	China	India	Korea	Malaysia	Taiwan	Thailand	Vietnam	Total
Battambang		13200								13200
		2								2
Kompong Cham		12070								12070
		5								5
Kompong Chhnang		315028								315028
		1								1
Kompong Speu	9820	12506			8000	7955	4900			43181
	1	1			2	1	1			6
Kompong Thom		25561	7000		7500				8100	48161
		3	1		1				1	6
Kampot		35800								35800
		3								3
Koh Kong		9400	60200					9700		79300
		1	1					1		3
Kratie	26383		48881	7635	5256				14436	102591
	3		6	1	1				2	13
Mondolkiri		18445	39000							57445
		3	5							8
Preah Sihanouk		12800								12800
		2								2
Preah Vihear									6060	6060
									1	1
Pursat		3000								3000
		1								1
Ratanakkiri		36461			6866				18632	61959
		4			1				3	8
Siem Reap		19235								19235
		3								3
Stung Treng		155219	31854							187073
		7	4							11
Oddar Meanchey								27736		27736
								4		4
Total	36203	668725	186935	7635	27622	7955	4900	37436	47228	1024639
	4	**36**	**17**	**1**	**5**	**1**	**1**	**5**	**7**	**77**

Source: MAFF website www.elc.maff.gov.kh/profiles.html (retrieved October 2010)

Table A3: List of Firms in Agriculture and Food Processing, 2000–June 10

No.	Company	Business	Provincial address	City address	Shareholders	Sectors	Sub-sector
1	Research Mining Development	ELC	Sesan district, Stung Treng province	#44E0E1 Street 440, Teuk Laok, Chamkarmorn, Phnom Penh	China (51%) Cambodia (49%)	Crops	Agro-industry (rubber and trees) plantation and processing
2	Koh Kong Plantation Ltd	ELC	Botomsakor district, Koh Kong province	#205–209 Mao Tse Tong Blvd, Tuol Svay Prey, Chamkarmorn, Phnom Penh	Thailand (50%) Japan (15%) Cambodia (20%) China (15%)	Crops	Agro-industry (sugarcane) plantation
3	Malaysia Palm Oil Investment and Development				Malaysia (60%), Cambodia (40%)	Crops	Palm oil plantation and refinery
4	Lunasta				USA (10%) Korea (80%) Cambodia (10%)	Crops	Hollyhock plantation and processing
5	Kamadhenu Venture				India (100%)	Crops	Integrated sugarcane plantation and sugar, ethanol and power generation
6	KIMSVILLE	ELC	Cancelled		USA (100%)	Crops	Plantation of cashews, tapioca, fruit trees
7	Crystal Agro	ELC	Samrong district, Oddar Meanchey province	#157 Street 128, Mittapheap, 7 Makara, Phnom Penh	Thailand (100%)	Crops	Cassava, tree and sugarcane plantation and processing
8	HLH Agriculture			#P17 Pleasure Street, Maizeer Phsar Dey Hoy Street	Singapore (100%)	Crops	Maize, sugarcane and acacia plantation and processing
9	Real Green				Thailand (100%)	Crops	Cassava and sugarcane plantation and processing
10	Agro Forestry Research	ELC	Chong Plas commune, Keoseyma district and Pu Chry commune, Pechreada district, Mondolkiri province	#52 Street 294, Boeung Kengkang I, Chamkarmorn, Phnom Penh	China (100%)	Crops	Rubber and acacia plantation and processing
11	Tong Ming Group Engineering	ELC	Kratie district, Kratie province	#54 Street 294, Boeung Kengkang I, Chamkarmorn, Phnom Penh	China (100%)	Crops	Rubber and acacia plantation and processing
12	Oryung Construction	ELC	Andong Meas district, Ratanakkiri province	#134B Russian Federation Blvd, Teuk Laok I, Tuol Kork, Phnom Penh	Korea (100%)	Crops	Rubber, acacia and cashew plantation and processing
13	Land and Development	ELC	Chong Plas commune, Keoseyma district and Pu Chry Commune, Pechreada district, Mondolkiri province	#100A Street 230, Psar Demkor, Tuol Kork, Phnom Penh	China (100%)	Crops	Rubber, acacia and other crops plantation and processing

No.	Company	Business	Provincial address	City address	Shareholders	Sectors	Sub-sector
14	Uni Plant				Malaysia (87.5%) Cambodia (12.5%)	Crops	Rubber, palm oil and cashew nut plantation
15	CJ Cambodia (1 & 2)	ELC	Phnom Sruoch, Kampong Speu	Olympic Department, Street 215, Boeung Kengkang, Phnom Penh	Korea (95%) Cambodia (5%)	Crops	Planting cassava to manufacture into tapioca
16	Heng Brothers	ELC	Andong Meas district, Ratanakkiri province	#103 Street 105, Boeung Kengkang III, Chamkarmorn, Phnom Penh	Vietnam (80%) Cambodia (20%)	Crops	Rubber and acacia plantation and processing
17	Seang Long Green Land Investment	ELC	Chong Plas commune, Keoseyma district and Pu Chry commune, Pechreada district, Mondolkiri province	#100A Street 230, Psar Demkor, Tuol Kork, Phnom Penh	China (100%)	Crops	Rubber and acacia plantation and processing
18	C & V Group				Vietnam (82%), Cambodia (18%)	Crops	Rubber plantation and latex exploitation
19	Un-Inter Trading and Development Group	ELC	Sesan district, Stung Treng province	#234 Mao Tse Tong Blvd, Tomnup Teuk, Chamkarmorn	China (100%)	Crops	Rubber plantation and processing
20	DAK LAK Mondolkiri	ELC			Vietnam (95%), Cambodia (5%)	Crops	Rubber plantation and processing
21	Dong Nai Kratie	ELC			Vietnam (100%)	Crops	Rubber plantation and processing
22	Dong Phou Kratie	ELC			Vietnam (100%)	Crops	Rubber plantation and processing
23	Mean Rithy	ELC	Santuk district, Kompong Thom province	#021Eo Street 104, Takhmao, Sereypheap , Takhmao district, Kandal province	Vietnam (80%) Cambodia (20%)	Crops	Rubber plantation and processing
24	Phou Rieng Kratie	ELC			Vietnam (100%)	Crops	Rubber plantation and processing
25	Tan Bien-Kompong Thom	ELC	Kraya commune, Santuk district, Kompong Thom province	National Road 6, Damrei Choan Khla commune, Stung Sen district, Kompong Thom province	Vietnam (100%)	Crops	Rubber plantation and processing
26	Unigreen Resources	ELC	Ro Yar commune, Koh Nhek district, Mondolkiri province	#53D Street 70, Srah Chak, Daun Penh, Phnom Penh	Singapore (100%)	Crops	Rubber plantation and processing
27	Dau Tu Saigon-Binh Phuoc (SBK)	ELC	Thmey and Kantuot communes, Kratie province	#92 Norodom Blvd, Chaktomuk, Daun Penh, Phnom Penh	Vietnam (100%)	Crops	Rubber and cashew nut plantation and processing
28	Tay Nam BPM	ELC	Cancelled		Vietnam (70%) Cambodia (30%)	Crops	Rubber and cashew nut plantation and processing
29	Tay Nam K	ELC	Cancelled		Vietnam (100%)	Crops	Rubber and cashew nut plantation and processing

No.	Company	Business	Provincial address	City address	Shareholders	Sectors	Sub-sector
30	BNA	ELC	Santuk district, Kompong Thom province	#80A Street 118, Teuk Laok I, Tuol Kork, Phnom Penh	Korea (100%)	Crops	Rubber and cassava plantation and processing
31	Cane and Sugar Valley	ELC	Kreal commune, Samrong district, Oddar Meanchey province	#53 Monivong Blvd, Srah Chak, Daun Penh, Phnom Penh	Thailand (100%)	Crops	Sugarcane plantation
32	Tonle Sugar Cane	ELC	Pong Ro and Chongkal communes, Chongkal district, Oddar Meanchey province	#60 Street 199, Tuol Svay Prey 1, Chamkarmorn, Phnom Penh	Thailand (100%)	Crops	Sugarcane plantation
33	Angkor Sugar	ELC	Kreal commune, Samrong district, Oddar Meanchey province	#211 Street 93, Mao Tse Tong Blvd, Tuol Svay Prey, Chamkarmorn, Phnom Penh	Thailand (100%)	Crops	Sugarcane plantation and processing
34	Gold Foison A/C Import Export & Construction	ELC			Vietnam (70%) Cambodia (30%)	Crops	Agro-industry plantation (rubber, acacia and other trees)
35	Agri-Industrial Crops Development	ELC	Srechis and Kbal Damrei communes, Kratie province	#175 Street 155, Tuol Tum Poung I, Chamkarmorn, Phnom Penh	China (100%)	Forestry	Acacia and rubber plantation and processing
36	Plantation Agricultural Development	ELC	Cancelled		USA (100%)	Forestry	Chinese pistachio and bunge plantation and processing
37	Crops and Land Development	ELC	Srechis commune, Sambo district, Kratie province	#52 Street 294, Boeung Kengkang I, Chamkarmorn, Phnom Penh	China (100%)	Forestry	Acacia and rubber plantation and processing
38	Siv Guek Investment	ELC	Sesan district, Stung Treng province	Village 5, Chup commune, Tboong district, Kompong Cham province	China (100%)	Forestry	Acacia and rubber plantation and processing
39	Great Asset Agricultural Development	ELC	Sambo district, Kratie province	#326 Kampuchea Krom Blvd, Veal Vong, Tuol Kork, Phnom Penh	China (100%)	Forestry	Chinese pistachio and bunge plantation and processing
40	Great Wonder Agricultural Development	ELC	Sambo district, Kratie province	#326 Kampuchea Krom Blvd, Veal Vong, Tuol Kork, Phnom Penh	China (100%)	Forestry	Chinese pistachio and bunge plantation and processing
41	Grandis Timber			#61BE0 E1 Street 261, Teuk Laok, Tuol Kork, Phnom Penh	Denmark (100%)	Forestry	Teak plantation and processing
42	Serm Larp Agricultural Development & Import Export				Thailand (85%),Cambodia (15%)	Others	Sugar manufacturing
43	Global Agricultural Development Ltd	ELC	Sambo district, Kratie province	#1533 National Road 2, Chak Angre Krom, Meanchey, Phnom Penh	USA (100%)	Others	Agro-industry

No.	Company	Business	Provincial address	City address	Shareholders	Sectors	Sub-sector
44	Grand Land Agricultural Development	ELC	Sesan district, Stung Treng province	#3A Street 271, Teuk Tla, Russei Keo, Phnom Penh	USA (25%) China (50%) Cambodia (25%)	Others	Agro-industry
45	SCF				Korea (100%)	Others	Animal feed
46	The Fair Manufacturing Company			#8851 Street 598, Chrang Chamres, Russei Keo, Phnom Penh	UK (100%)	Others	Animal feed manufacturing
47	Kogid			Floor 3 KBC Korea Business Centre, #376 Monivong Blvd, Phnom Penh	Korea (100%)	Others	Rice milling and maize drying
48	Phnom Penh Honey Product				China (100%)	Others	Bee farms and flour processing (tapioca)
49	GG World Group Development	ELC	Stung Treng district, Stung Treng province	#25 Street 213, Veal Vong, 7 Makara, Phnom Penh	Canada (60%) China (40%)	Others	Plantation
50	Cavifoods			#30 Pasteur (Street 51), Maizeer Street Prey Nokor, Phnom Penh	Vietnam (70%), Cambodia (30%)	Others	Upgrading investment for warehouse system and rice processing chain
51	President Foods			Chamkar Dong (Street 217), Moil, Phnom Penh	Thailand (60%), Cambodia (40%)	Food processing	Instant noodles and instant foods
52	Nutrisoy Drinks Company				China	Food processing	Soybean drink
53	Lian Heng Investment			#16 Street 206, Phnom Penh	China	Food processing	Cold storage and seafood processing
54	Uy Mey Investment			#791 Street 369, Phnom Penh	China	Food processing	Ice cream, drinking water, etc
55	Sui Feng Beverage & Food Enterprises			#754 National Road 2	China	Food processing	Soft drinks, soybean drinks drinking water
56	Atlas Friend				China	Food processing	Canned fruit
57	Haha Food & Drink				China	Food processing	Soft drinks
58	Camex Marine Food				China (100%)	Food processing	Marine food
59	Five Star International Fertiliser Cambodia				Vietnam (100%)	Other industry	NPK and micro-organism fertiliser production plant

Source: CDC 2010

Table A4: List of Firms Contacted for Interview, November 2010

No	Company	Contact number/new address for follow-up
1	Research Mining Development	012 689 696
2	Koh Kong Plantation Ltd	
3	Crystal Agro	
4	HLH Agriculture	023 995 050
5	Agro Forestry Research	
6	Tong Ming Group Engineering	
7	Oryung Construction	
8	Land and Development	
9	CJ Cambodia (1 & 2)	
10	Heng Brothers	
11	Seang Long Green Land Investment	
12	Un-Inter Trading and Development Group	
13	Mean Rithy	
14	Unigreen Resources	012 630 130/023 428 899
15	Dau Tu Saigon-Binh Phuoc (SBK)	
16	BNA	
17	Cane and Sugar Valley	
18	Tonle Sugar Cane	
19	Angkor Sugar	
20	Agri-Industrial Crops Development	
21	Crops and Land Development	012 410 988
22	Great Asset Agricultural Development	
23	Great Wonder Agricultural Development	
24	Grandis Timber	
25	Global Agricultural Development Ltd	
26	Grand Land Agricultural Development	
27	The Fair Manufacturing Company	
28	Kogid	092 28 18 79/012 210 228
29	GG World Group Development	
30	Cavifoods	023 221 620/017 656 445
31	President Foods	

Appendix 2: Questionnaire to Examine Barriers to Foreign Investment in Agriculture and Mechanisms for Mitigating and Removing Them

Objective:

To examine factors hindering international investment in agriculture in Cambodia and mechanisms to mitigate those barriers

General background:

Given the recent significant rise in investment in agriculture, in land in particular, in Cambodia, the UN Food and Agriculture Organisation has a strong interest in reviewing the extent and nature of the development of foreign investment in the sector and has supported CDRI, Cambodia's leading independent development policy research institute, to conduct a scoping study on the sector's evolvement, with a partial focus on barriers to foreign investment in agriculture and mechanisms to mitigate or remove these barriers. The findings of the research will be compiled and shared among relevant policymakers and stakeholders, specifically your company.

All responses will be treated with full confidentiality and will be used for research purposes only.

We would be very grateful if you could kindly return the completed questionnaire one week after receipt to Mr Saing Chan Hang, Research Associate at CDRI, via hang@cdri.org.kh.

The questionnaire will be used in strictest confidence. Please inform the interviewee that the information supplied to us will be treated as strictly confidential.

Name of firm: _____
Contact (Mr/Ms) _____
Title _____
Email _____
Mailing address _____
_____
Telephone _____ Fax _____
Website _____

I. Firm Characteristics

1. Year started operations:
   i) Receipt of investment approval: _____ ii) started plantation: _____

2. Size of plantation: _____ ha; type of plantation: _____
_____ period of concession: _____ years

3. Number of full-time employees: _____
   i) Office staff: _____ ii) workers on plantation: _____
   (% of workers other than Cambodians: a. _____; _____ %; b. _____;
   c. Cambodian: _____ %)

4. Sources of investment capital: _____

5. Briefly describe firm's business plan: _____
_____
_____
_____

II. Specific Issues on Investment Barriers

II.A. Investment Application Procedure

1. Name of institutions involved in your firm investment application:
   i) _____ ii) _____
   iii) _____ iv) _____

2. Could you tell us how long it took to get the application approved? _____ days

3. Does the application process take longer than in of your country? If so, by how many days? _____ days

4. How can this system of application be improved in your opinion? _____
_____

2. Was it vital to use a broker? If so, how many did you use? _____

3. Was it costly to pay a broker? Could you tell us how much as a percentage of the total cost of investment application? _____
   _____
   _____

4. Did you have to pay unofficial fees to every institution involved? Could you tell us the percentage of the amount of the total cost of investment application? _____
   _____ _____ _____
   _____

5. Do you think land tenure is a grave concern in your business? Why? _____

6. Could you list all barriers to investment application in order of difficulty, and reasons?
   i) _____
   Reason: _____
   ii) _____
   _____
   Reason: _____
   iii) _____
   Reason: _____

II.B. Business Operations

1. Did you have to pay the government in order to clear the forest? If so, could you tell us in brief the model of payment? _____
   _____

2. How many hectares have you planted with crops? Please provide information on land size by crops: _____
   _____ _____ _____

3. Did your firm encounter any problems with the community, authorities or other stakeholders while clearing the forest and planting rubber trees? How did you deal with these? _____
_____ _____ _____

4. Do you think there is a viable mechanism to tackle the above problems?
Explain briefly _____
_____ _____ _____

5. Has your firm contributed to the development of any local infrastructure, i.e. roads, irrigation systems, etc., around your plantation?
Kindly provide a brief accounts _____
_____ _____ _____

6. Could you briefly describe how land, water and other required raw materials are used in your crop plantation? Are they produced domestically or imported from abroad? _____
_____ _____ _____

7. Does your firm have any contracts with local farmers for rubber plantation? What model of business contracts?_____
_____ _____ _____

III. Mechanisms to Reduce Investment Barriers

1. Do you have any specific mechanisms in mind for mitigating or removing barriers to investment in agriculture in Cambodia? _____
_____ _____ _____
_____ _____ _____

2. Do you have any other comments or suggestions you would like to add? _____
_____ _____ _____
_____ _____ _____

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