Rethinking Investments in Natural Resources:

China's Emerging Role in the Mekong Region

HEINRICH BÖLL STIFTUNG CAMBODIA

WWF

iisd International Institute for Sustainable Development / Institut international du développement durable

2008

Rethinking Investments in Natural Resources:
China's Emerging Role in the Mekong Region

Written by:
Jeff Rutherford, Kate Lazarus and Shawn Kelley

Edited by:
Ingrid Martonova

Graphic Design by:
Peter Stannard

Produced in 2008 with the support of:

Heinrich Böll Stiftung Cambodia
#34 Street 222, Sangkat Boeung Raing, Khan Daun Penh
P.O. Box 1436, Phnom Penh, Cambodia
Tel: (+855) 023 210 535
Fax: (+855) 023 216 482
E-Mail: phnompenh@hbfasia.org
Website: www.boell-southeastasia.org

WWF Denmark
Ryesgade 3 F
2200 Copenhagen N
Denmark
Tel: (+45) 035 36 36 35
Fax: (+45) 035 24 78 68
E-mail: wwf@wwf.dk
Website: www.wwf.dk

International Institute for Sustainable Development.
161 Portage Avenue East, 6th Floor
Winnipeg, Manitoba, R3B 0Y4
Canada
Tel: (+1) 0204 958 7700
Fax: (+1) 0204 958 7710
E-mail: info@iisd.ca
Website: www.iisd.org, www.tradeknowledgenetwork.net

Table of Contents

Acknowledgements

This report was written by Jeff Rutherford, Kate Lazarus and Shawn Kelley. The authors would like to thank the following individuals for their in-country research assistance: For the section on Vietnam, Ms. Nguyen Thi Hien, Central Institute for Economic Management and Mr. Pham Quang Tu, Consultancy on Development. For the section on Laos, Dr. Leeber Leebouapao, National Economic Research Institute. For the section on Cambodia, Mr. Sovannara Lim, Cambodia Development Resource Institute.

The authors would also like to thank John Dore, Nathan Badenoch, Katrin Seidel, Ruth Streicher, Heike Baumüller, John Kornerup Bang, Teak Seng, the participants in the three national consultations and the many people interviewed for this research for providing relevant information and comments on this report.

Project Description

This scoping study is part of a research project entitled Understanding China as an Actor in the Mekong Region, jointly implemented by the Heinrich Böll Stiftung, WWF and the International Institute for Sustainable Development. The project aims to shed some light on China's economic role in Vietnam, Laos and Cambodia as a basis for constructive dialogue between decision makers and other stakeholders in China and the Mekong countries. The research focus is on Chinese investments in natural resources – in particular in the mining, agribusiness and hydropower sectors – while also touching on issues related to trade and aid. In addition to the scoping study, case studies in the three countries will provide a more in-depth analysis of China's engagement in specific sectors. The project outputs will be available at: *www.boell-southeastasia.org, www.tradeknowledgenetwork.net and www.wwf.dk.*

Acronyms

ACFTA	ASEAN-China Free Trade Agreement
ADB	Asian Development Bank
AFTA	ASEAN Free Trade Area
APEC	Asia-Pacific Economic Cooperation
ASEAN	Association of Southeast Asian Nations
BCC	Business co-operation contract
CAP	Country Action Plan
CDC	Council for the Development of Cambodia
CEPT	Common Effective Preferential Tariff
CIB	Cambodian Investment Board
CIEM	Central Institute for Economic Management
CODE	Consultancy on Development (Vietnam)
CPI	Committee for Planning and Investment (Laos)
CRDB	Cambodian Rehabilitation and Development Board
CWE	China International Water and Electric Corporation
DDFI	Department of Domestic and Foreign Investment (Laos)
DONRE	Department of Natural Resources and Environment (Vietnam)
DPI	Department of Planning and Investment
EAC	Electricity Authority of Cambodia
EDL	Electricité de Laos
EHP	Early Harvest Program
EIA	Environmental Impact Assessment
ERAV	Electricity Regulatory Agency of Vietnam
EVN	Electricity of Vietnam
FDI	foreign direct investment
GDP	Gross Domestic Product
GEI	Global Environment Institute
GMS	Greater Mekong Subregion
GOL	Government of Laos
HS	Harmonised System
IFC	International Finance Corporation
IFI	International Financial Institution
IMF	International Monetary Fund
IPD	Investment Promotion Department (Laos)
kV	kilovolt
MAF	Ministry of Agriculture and Forestry (Laos)
MAFF	Ministry of Agriculture, Forestry and Fisheries (Cambodia)
MEM	Ministry of Energy and Mines (Laos)
MIGA	Multilateral Investment Guarantee Agency (World Bank)
MIME	Ministry of Industry, Mines and Energy (Cambodia)
MOFCOM	Ministry of Commerce (China)
MOIC	Ministry of Industry and Commerce (Laos)
MONRE	Ministry of Natural Resources and Environment (Vietnam)
MOU	Memorandum of Understanding
MPI	Ministry of Planning and Investment (Vietnam) and (Laos)
MW	megawatt
NGPES	National Growth and Poverty Eradication Strategy (Laos)

NGO	non-governmental organisation
NTFP	non-timber forest product
ODA	official development assistance
OECD	Organisation for Economic Co-operation and Development
PDA	Project Development Agreement
RGC	Royal Government of Cambodia
PMO	Prime Minister's Office (Laos)
RTP	Round Table Process
SAFE	State Administration of Foreign Exchange (China)
SEPA	State Environmental Protection Administration (China)
SEZ	Special Economic Zone
SIA	Social Impact Assessment
SOE	state-owned enterprise
USD	US dollar
VUSTA	Vietnam Union of Science and Technology Associations
WREA	Water Resources and Environment Administration (Laos)
WTO	World Trade Organisation

List of Tables and Boxes

Executive Summary

China is establishing itself as an economic powerhouse around the world. China's economic rise and consequent demand for a reliable and steady supply of inexpensive natural resources have led to a rapid increase in Chinese foreign direct investment (FDI) stretching all the way to Africa and Latin America. The backdrop for China's growing relationship with natural resource providing countries is regional and global economic integration, which is increasingly interlinking different parts of the world in complex value-chain arrangements. This global economic system links countries belonging to the Organisation for Economic Co-operation and Development (OECD), which are the main consumers of world products, with low-income countries, which provide the majority of natural resources on which the production of goods is based. The connection is made by manufacturing countries that turn natural resources into inexpensive manufactured goods for export and sale in OECD markets. Within this global system, China over the past decade has emerged as one of the main global production and manufacturing hubs.

During the first half of 2005, Chinese enterprises invested $4.1 billion overseas, an increase of nearly 250 percent over the previous year. In 2005, the outward investments of Chinese non-financial enterprises increased by 20 percent compared to 2004 to reach $12.3 billion. In the first three quarters of 2006, China's total outward investment amounted to $14.1 billion, an increase of 80 percent year on year, and estimates pegged total outward investment at $16 billion by the end of year. Given China's rapid industrial expansion and limited domestic natural resources, it is not surprising that mining and energy are key sectors in China's foreign direct investment portfolio. China's export credit and guarantee agencies, in particular the China Export Import (Exim) Bank and Sinosure, have played an important role in fostering the rapid expansion of Chinese trade and re-thinking of China's southward investment flows. In 2005, China Exim Bank approved loans to the value of RMB 158.6 billion (approximately $20 billion). Established only in 1994, the institution has grown to become one of the world largest export credit agencies.

Partly as a result of China's rapidly growing demand for natural resources, commodity prices are rising around the globe. Investments in extractive industries that were once prohibitive are now making economic sense. In 2002, China became the world's largest consumer of copper, and it is now one of the largest consumers of alumina, zinc and nickel. In 2002 China also became the world's largest consumer of natural rubber, bypassing the US at 3.45 million tons, or 18.2 percent of total world consumption. China's demand for natural rubber is estimated to reach 11.5 million tons per annum by 2020, about 30 percent of the world's total production. This growth is directly linked to China's growing demand for vehicles, which is estimated to reach 200 million vehicles by 2020, a vast increase from the 10 million vehicles that traversed the country in 2005.

China's 'Going Out' Strategy to meet its growing natural resources demand

China's economic relationship with the world is undergoing a rapid transformation. The 10th Five-Year Plan for National Economic and Social Development (2001-2005) set out a strategy for China to proactively make use of overseas natural resources, establish overseas supply bases for both oil and gas, diversify oil imports, build up a strategic petroleum reserve and maintain national energy security. Since 2004, the country's 'Going Global' (or 'Going Out') Strategy specifically intends to meet its growing demand for natural resources, both regionally as well as globally, and spur outward investment by subsidising investment by Chinese companies in overseas natural resources acquisition. The strategy and its related initiatives include the

promulgation of guidelines on outward FDI by countries and sectors, information regarding foreign countries' investment environment and opportunities, delegation of authority by the central government to certain provinces and municipalities and further relaxation of foreign exchange controls for outward investment.

The Chinese government has made laudable efforts to develop policies and guidelines to govern overseas aid and foreign direct investment. While this is still a nascent process, it has great potential for addressing and mitigating potential conflicts over investments in sensitive projects such as hydropower dams, strip mines and large-scale plantations. However, many challenges remain, as demonstrated by the guidelines for Chinese overseas investments in silviculture operations, which stipulate that Chinese companies should adhere to the laws of the countries in which they operate. In the case of the Mekong region, these laws are widely recognised as being poorly implemented. Were Chinese companies to operate as loosely as national companies when it comes to forestry or environmental regulations, this would not make for an improvement in business practices. The real leverage promised by such guidelines is that Chinese companies that bypass local regulations would not only be in violation of the laws of the host countries, but would in fact be in violation of the laws of China.

China's strategy in the Mekong region

China's relationship with the three Mekong Region countries Cambodia, Lao People's Democratic Republic (Laos) and Vietnam is dynamic and complex. On the one hand, relations have never been so good. Border and sea issues are handled peacefully, eclipsed by economic interests. The close proximity of these countries eases trade flows as infrastructure improvements are connecting major regional cities and borders are open for business through international gates.

The future promises greater economic integration through the ASEAN (Association of Southeast Asian Nations)–China Free Trade Agreement (ACFTA) which will see progressive liberalisation of trade and investment between the two trading partners over the coming years. Under the ACFTA's Early Harvest Programme, tariffs on around 600 unprocessed agricultural products were already eliminated by January 2006. China's major investments within the Greater Mekong Subregion (GMS) Economic Strategy have improved the infrastructure for transporting commodities, in part through the Asian Development Bank's (ADB) GMS Economic Corridors, which includes a network of roads connecting all countries in the GMS spanning Vietnam, Cambodia, Laos, Thailand, Myanmar and Yunnan Province of China. Further connectivity is extended through an expanding regional power grid and planned railway links from Kunming to Singapore, funded in part through development assistance and investment from China. All this has enabled China to build strong bilateral and multilateral relations through investment, trade and aid with its southern neighbours and protect itself from further western influences by securing its border areas through friendly relations.

In recent years, Cambodia, Laos and Vietnam have seen two related trends working in opposite directions. The first is the partial withdrawal of International Financial Institutions (IFIs) such as the World Bank and the Asian Development Bank (ADB), which have become hesitant to invest in environmentally and socially controversial mega-projects. In recent years the IFIs have developed international standards and best practices for investment in projects with potentially large social and environmental impacts, such as hydropower, mining and industrial agriculture. These standards are often criticised by host governments as being onerous and cumbersome and it can take years for projects to get approved. This has left an investment vacuum that has been gradually filled by largely Asian financiers, and has enabled 'new financiers' such as Chinese companies to take advantage of the favourable investment climate and abundance of natural resources of its immediate neighbours.

Currently, Chinese investment banks and companies are not yet bound to similar standards in their overseas activities, even though they may be required to follow them in their home countries. China brings a different kind of investment package to the table: one that does not have benchmarks of compliance with human rights, democratic ideals and environmental protection regulations, but is built on relationships and friendship. China is also seen as a 'soft power' of culture and ideas, one making friends all across the region, with friendship spearheading business activities. For example, the Chinese government has supported the construction of several important cultural and state buildings, such as the National Cultural Hall in Laos and the new office of the Council of Ministers in Cambodia.

However, the role of China is perceived differently within Cambodia, Laos and Vietnam as well as across different social strata. The question of Chinese ethnicity is a complex and sensitive subject, with millions of people who were born and raised in the three lower Mekong countries claiming Chinese heritage. Vietnam, naturally, carries the collective memory of China as a historical colonial power. The Cambodian government is welcoming of Chinese influence and capital, but there are concerns in the countryside about dams and other Chinese-funded investment projects. The divergence between the perspectives of the elite and the grassroots on the growing influence of China presents considerable challenges for Cambodian, Lao and Vietnamese leaders. Where a civil society is emerging, people have begun to voice opposition to Chinese investment interests, as in the case of the Spratly Islands, an oil-rich area in the South China Sea. In Laos, where there are no formal civil society institutions, there has so far been no public outcry against the influx of Chinese immigrants who accompany investments. However, public concern over the proposed construction of a Chinatown satellite city in Vientiane has been widely documented in various newspapers, newswires and listserves.

China's emerging role in finance and trade in Cambodia, Laos and Vietnam

In the Mekong region, China is gaining prominence as an important bilateral trading partner and investor while at the same time emerging as a strong competitor for global markets and investments with its southern neighbours. China produces almost half of the East and Southeast Asian region's gross domestic product (GDP) and one third of the region's exports. While China and Vietnam compete for foreign direct investment and markets around the world, China has also become Vietnam's leading trading partner. Further, China is the most important donor and foreign investor in Laos and Cambodia.

Official development assistance

The Chinese government provides considerable foreign aid to Cambodia, Laos and Vietnam, often without any major conditions attached and frequently integrated with cultural exchange and support. While significant compared to other donors, China's ODA is not often linked to the agribusiness, hydropower and mining sectors but mostly includes support for transport; communications; health, education and human resources development; and construction (of sports, culture and government building complexes) sectors. Cambodia is the only country among the three where the Chinese government has earmarked aid for hydropower development projects.

China's trade structure with its neighbours – importing resources, exporting manufactured goods

China's trade structure with Cambodia, Laos and Vietnam is presently dominated by China's imports of natural resources and exports of manufactured goods. More than 90 percent of exports from the three GMS countries to China comprise agricultural goods and raw materials. This stands in marked contrast to the structure of trade between China and some other Southeast Asian countries such as Malaysia, the Philippines and Thailand, where the trade

structure is more complex and exports to China are less resource-intensive. While the relative importance of investment and trade with China varies among the three countries, what they do sell to their large northern neighbour is overwhelmingly commodities. What they buy is mostly Chinese technology, machinery and consumer goods, many of which are of low quality, but within reach of poorer consumers in Cambodia, Laos and Vietnam.

Informal (or illegal) trade in commodities is widespread in the three Mekong countries. For instance, some state officials in Vietnam estimate that the majority of the coal and rubber exported to China is informal, with no duties paid to the state and no records of the exported tonnage and value. In northern Laos it is widely known that companies from China are setting up informal operations for commodities such as sugar, cassava, corn and timber, which are then transported across the border. In parts of Cambodia it is generally suspected, though not formally confirmed, that several Chinese companies are involved in informal ventures in timber, gold and other minerals destined for markets in China.

The principal difference among the three countries in their relationship with China is in the relative importance of investment and foreign assistance versus trade in relation to the agribusiness, hydropower and mining sectors. In Cambodia and Laos, Chinese investment in all three sectors is considerable. For Vietnam, on the other hand, China is only the fifteenth largest overall investor, and Chinese investment is considerable only in the mining sector. Vietnam itself is a regional leader in hydropower and mining, with its own investments in Laos and Cambodia, and it has extensive experience in growing rubber, also with investments in neighbouring countries. For Vietnam, trade with China, its largest trading partner, is most significant in the three surveyed sectors.

China's investments in agribusiness, hydropower and mining

The natural resource sectors of the three Mekong countries have long been described as under-developed. However the emergence of China as a major investor in the three sectors as well as a principal market promises fundamental changes in the landscapes and societies of the region. Chinese state-owned enterprises are becoming major investment players in Cambodia, Laos and Vietnam and fuelling natural resources extraction. For instance, the China Nonferrous Metals International Mining Co. Ltd. (CNMIC) is active in copper mining in Vietnam and bauxite mining in Laos. Chalco (Aluminium Corporation of China) has partnered with Thai and Lao companies to put forward an environmental impact assessment for bauxite mining in the same area as CNMIC in Laos and is also engaged in Vietnam. The Sinohydro Corporation, the largest hydropower dam building company in China, is developing numerous hydropower projects in both Laos and Cambodia. And the China Southern Power Grid Co. Ltd. is either active or exploring opportunities in all three countries.

In spite of its high potential, hydropower has remained largely untapped. However, in Laos and Cambodia, China is involved in roughly 21 hydropower projects either as an investor or developer. Most of the Chinese projects are designed and implemented by Chinese companies and backed by the China Exim Bank and Sinosure, which are involved in the majority of China's overseas investments. China's current role in hydropower in Vietnam appears to be quite minor. There are no joint ventures, with most hydropower development carried out by Vietnamese firms, formerly dominated by Electricity of Vietnam. However, China supplies most of the turbines and other equipment for small and medium hydropower and Vietnam currently imports 200MW of electricity from southern China. This is expected to increase tenfold by 2015, with projected imports of about 2,000MW.

Mineral extraction has been small in scale and intensive in labour to date. However, in Laos along the Bolaven Plateau and in the Central Highlands of Vietnam, China is starting to invest in large tracts of land for bauxite mining to export aluminium for its growing construction,

transportation and packaging industries. Other mining investments and/or exports in the three countries include gold, copper, iron, zinc and coal. It is expected that China will remain a large market for minerals and a key investor in the region.

Until recently, agricultural production in Cambodia and Laos was largely for local consumption and lacked intensive inputs and practices. But those days are over. China provides a major source of investment capital for agricultural inputs in the two countries and is a principal market for goods in all three. Such commodities as cassava, sugarcane, corn, palm oil, cashews and eucalyptus, among others, are major sources of investment by China in at least one of the three GMS countries. China's rising demand for natural rubber, for example, has already led its southern neighbours to convert large areas of land to rubber production. China is a major investor in rubber production in Laos, although less so in Cambodia. And while China's investment in Vietnam's rubber sector is presently negligible, China is already the principal market for its rubber exports.

Towards environmentally and socially sustainable Chinese investment

China's growing presence and role in the three Mekong countries raises new opportunities through foreign direct investment, trade and regional partnership. These new opportunities could play an important role in generating income for some of the poorest countries in Southeast Asia and building closer regional ties for both China and the countries in which they invest. But the vastly expanding demand for investment opportunities, the porous borders that facilitate informal movement of goods and people and the limited local capacity and resources to implement various regulations in the three countries presents considerable risks to these hoped for opportunities. These environmental and social risks can translate into significant impacts on riverine ecosystems, agricultural lands and communities.

China is starting to make efforts to improve its profile in the international arena by showing its willingness to take on board international best practices such as the Equator Principles for banks, public participation strategies and green credit policies, among others. However, many of the mainly state-owned Chinese companies operating in the mining and hydropower sectors continue to have a poor social and environmental track record abroad. China now has the chance to become a global leader in environmentally and socially sustainable investment by carefully monitoring Chinese overseas investments, strengthening its own investment regulations and adopting global best practices and principles. However, the onus cannot be on China alone. China will need to partner with governments within the countries it operates in order to help resource providers strengthen their own regulations, which does not necessarily have to come at the expense of investment inflows.

1 Introduction

China's relationship with Cambodia, Lao People's Democratic Republic (Lao PDR) and Vietnam is dynamic and complex. On one hand, relations have never been so good. Border and sea issues are handled peacefully, eclipsed by economic interests. Infrastructure improvements are connecting major regional cities, and borders are open for business through international gates. The future promises greater economic integration through the Association of Southeast Asian Nations (ASEAN)-China Free Trade Agreement (ACFTA), and activities associated with the Greater Mekong Subregion (GMS) Program.

But the relationship is far from even. China is gaining prominence as a bilateral trading partner and investor, while at the same time emerging as a strong competitor for global markets with its southern neighbours. China produces almost half of the East and Southeast Asian region's gross domestic product (GDP) and one third of the region's exports. While China and Vietnam compete for foreign direct investment (FDI) and markets around the world, China has also become Vietnam's leading trading partner. Further, China is the number one foreign investor in Laos and Cambodia. The competition FDI is uneven: Over the past decade, China's FDI inflows came close to $600 billion,[1] while ASEAN members combined received just over half that amount ($324 billion).[2]

The background to China's growing relationship with its southern neighbours is regional and global economic integration, which is increasingly interlinking different parts of the world in complex value-chain arrangements. This complex economic system connects countries belonging to the Organisation for Economic Co-operation and Development (OECD),[3] which are the main consumers of world products, with low-income countries, which provide the majority of natural resources on which the production of goods is based. The connection is made by producer countries that turn natural resources into inexpensive manufactured goods that are exported and sold on OECD markets. Within this global system, China has emerged over the past decade as one of the main global production and manufacturing hubs.

During the first half of 2005, Chinese enterprises invested $4.1 billion overseas, an increase of nearly 250 percent over the previous year. In 2005, the outward investments of Chinese non-financial enterprises amounted to $12.3 billion, a 20 percent increase over the previous year. In the first three quarters of 2006, China's total outward investment reached $14.1 billion, an increase of 80 percent year on year, and estimates pegged total outward investment at $16 billion by end of year. Given China's rapid industrial expansion and limited domestic natural resources, it is not surprising that mining and energy are key sectors in China's foreign direct investment portfolio.[4]

China's economic rise and consequent demand for reliable and inexpensive natural resources have led to a rapid increase in Chinese FDI, which stretches all the way to Africa and Latin America. In relation to the Greater Mekong Subregion, China is beginning to take advantage of the favourable investment climate of its immediate neighbours, with a focus on agribusiness, hydropower and mining. This new focus promises fundamental changes in the landscapes and societies of the GMS.

1 Unless otherwise specified, all dollar amounts are in US dollars.
2 UNCTAD, 2008.
3 OECD is an international organisation of 30 industrialised countries comprising the EU, Canada, Mexico, United States, Australia, New Zealand, Japan and Korea.
4 Pamlin and Long, 2007.

1.1 Scope and Methods

This scoping study provides an overview of investment, trade and aid flows from China to the three selected Mekong region countries (Cambodia, Lao PDR and Vietnam) with a focus on agribusiness, hydropower and mining industries. The study also analyses the investment policy environment and the regulatory and institutional frameworks currently in place in the three GMS countries.

The study involved several activities:

- development of an annotated bibliography
- in-country interviews with key stakeholders
- national consultations in Cambodia, Laos and Vietnam
- writing workshop

Each of the three authors carried out interviews with key stakeholders in the study countries with the support of local partner organisations (the National Economic Research Institute in Lao PDR, the Central Institute for Economic Management in Vietnam and the Cambodia Development Resource Institute in Cambodia). In addition to interviews, half-day consultative meetings were held in each country where the authors presented their initial findings and remaining questions, eliciting feedback and input from state and non-state participants. Follow-up correspondence with local partners helped fill remaining information gaps.

Much of the information provided in this report was generated through interviews with sources who requested anonymity, and is thus not cited. The subject matter of this report is considered sensitive by officials, researchers and civil society actors in the region. Furthermore, business and governance systems in the three countries, despite many improvements, remain opaque. Knowledge about investment actors and investment processes is blurry, making the conduct of this study difficult. Finally, given limitations of resources and time, a truly comprehensive understanding of the subject is beyond the scope of this study, and will require a more thorough and lengthy investigation.

2 Lao People's Democratic Republic

2.1 Introduction

Lao People's Democratic Republic (hereafter referred to as Lao PDR or Laos) is a landlocked country in Southeast Asia with a population of approximately 6.5 million.[5] Laos is bordered by Myanmar to the northeast, Vietnam to the east, Cambodia to the south, Thailand to the west and Yunnan province of the People's Republic of China to the northwest. Lao PDR became a communist state in 1975, and in the same year the government embraced a Soviet-style command economy system that replaced private enterprise with state enterprise and cooperatives. In 1986, following realisation that a command style economy was hampering growth and development, the Government of Laos (GOL) initiated an open door policy and all-round economic reforms. These were consecrated in the 1991 constitution, which proclaimed adoption of the New Economic Mechanism, decentralising economic control and promoting the development of private enterprise. Politically, Lao PDR is one of the few remaining one-party communist states in the world.

In 2006 Laos had a per capita GDP of $606. From 1988 to 2004, growth averaged 6 percent annually, apart from a sharp fall-off between 1997 and 1999 when the Asian economic crisis caused an economic slowdown. Major urban centres such as Vientiane, Luang Prabang and Savannakhet in particular have experienced significant booms in recent years. The economy is heavily dependent on investment and trade from neighbouring Thailand and Vietnam, but recently China surpassed Thailand and Vietnam as the largest investor.[6] Chinese investment has also boomed in Luang Namtha province in northern Laos where Chinese economic migrants have been recruited to work in Chinese-owned businesses or have set up their own small business activities.

The GOL's National Growth and Poverty Eradication Strategy (NGPES) views resource development initiatives as key strategies for further strengthening an enabling macro-economic environment. Hydropower along with mining, tourism and timber- and agro-processing industries have been identified as the highest priority sectors for investment given their potential to stimulate economic growth and lead to greater revenues. Revenues from these investment sectors comprise the bulk of the royalties and taxes going to the GOL.[7]

The GOL is striving to achieve a stronger national revenue base through 1) continuous improvement of revenue collection and modernisation of the tax system, 2) enhancement of private sector development, including foreign direct investment and 3) increased revenue flow to the Treasury from investments undertaken through valuation of the country's natural resource base (such as mining, hydropower and agribusiness).[8]

2.1.1 Foreign Direct Investment

Overall FDI inflows to Laos have been growing over the past few years. Most of the FDI inflow is directed to natural resource sectors, namely hydropower and mining. In 2006, about 70 percent of FDI came from three hydropower projects under construction (Nam Theun 2, Nam Ngum 2 and Xekamen 3) and the rest came from mining activities (Australian investments)

5 The World Fact Book maintained by the US Central Intelligence Agency shows a July 2008 population estimate of 6.67 million. The same source quoted a population estimate of 6.5 million for July 2007.
6 Vientiane Times, 2008a.
7 National Growth and Poverty Eradication Strategy, 2003.
8 Ibid.

as well as processing industries and agricultural plantations. Foreign direct investment in the hydropower sector made up nearly 50 percent of total FDI in 2007.

According to the Ministry of Planning and Investment (MPI), Laos approved foreign direct investment activities valued at nearly $6.5 billion between January 2001 and March 2008, representing 1,045 projects funded by 37 countries.[9] Table 1 shows the yearly investment values of the three top investment countries for the period of January 2001 and March 2008. It shows that China was second only to Thailand in total approved FDI for this period. Within the first three months of 2008, China surpassed Thailand as the most important investor in Laos, with Vietnam taking second place. Reports suggest that $278 million of FDI has been invested in Laos in the first six months of 2008, representing more than half of the $500 million the government hopes to attract for the year. It is not known what proportion of this FDI comes from China.[10]

Table 1: Approved FDI to Laos by top Countries: January 2001-March 2008 (millions of US dollars)

Country/Year	2001	2002	2003	2004	2005	2006	2007	2008*	Total
China	13.4	62.6	119.9	28.2	58.1	423.2	496.1	84	1,285
Vietnam	3.4	6.9	8.7	63.3	43.3	261.2	155.9	32.2	575
Thailand	3.3	6.3	96.3	57.2	450.9	655.2	92.7	18.5	1,380

* 2008 data is only for the first quarter of 2008 (January to March).

Source: Ministry of Planning and Investment, 2008.

2.1.2 Official Development Assistance

Foreign aid is extremely important to Laos, financing 87 percent of the capital expenditures budget and 41 percent of the GOL's total public expenditures in 2005-06.[11] ODA is regularly reported in the GOL's Foreign Aid Report, which aims to provide government agencies and development partners with information concerning the volume of official development assistance received by Laos from various sources, and its distribution by project, sector and province. Japan's ODA accounted for approximately 30 percent of bilateral ODA disbursements to Laos during 2005-06, followed by ODA from Vietnam, China, Sweden, Thailand, France, Australia, Norway, Germany and Luxembourg. China's contribution was $21.16 million or 9.5 percent of the total. Development assistance from China was concentrated in the transport, communications, health, education and human resource development sectors.[12]

In addition to reporting on ODA through the Foreign Aid Report, the GOL leads the Round Table Process (RTP). The goal of the RTP is to improve the effectiveness of aid in order to achieve the country's development objectives of improving the health and education of Lao people, expanding their income opportunities, preserving Lao culture and heritage and contributing to sustainable development.[13] The RTP comprises a series of meetings at the national and sectoral levels to promote in-depth dialogue on policy between the GOL and development partners. The objectives of the RTP meetings are to increase national ownership over the development

9 Data provided by MPI is for annual approved investment. The figures are reported for each year, and it is assumed that they are for a full year, though this is not explicitly stated in the MPI reports. The figure reported here was obtained in April 2008, the most up to date figure available from the MPI for the period beginning in 2001 (assumed to be January) and ending in March 2008.

10 Vientiane Times, 2008a.

11 Committee for Planning and Investment (CPI), 2007. The CPI is now the Ministry of Planning and Investment.

12 Ibid.

13 See www.rtm.org.la for more information.

process, build consensus over priorities and improve coordination of activities relating to these priorities. In November 2006, the GOL and 22 partner countries and organisations signed the Vientiane Declaration on Aid Effectiveness, a local version of the Paris Declaration. China is a signatory to the Vientiane Declaration. In 2007 the GOL and its development partners prepared a Country Action Plan to implement the Vientiane Declaration.

2.1.3 Trade

The trade reform process in Laos accelerated after the country's accession to ASEAN and the joining of the ASEAN Free Trade Area (AFTA) in July 1997. Laos began to implement the AFTA Common Effective Preferential Tariff (CEPT) scheme in January 1998, working on reducing its tariffs on imports from ASEAN countries to 0-20 percent by 2005 and 0-5 per cent by 2008.[14] In 2002, Laos together with other ASEAN-countries signed the ASEAN-China Free Trade Agreement (ACFTA). In addition, the government introduced in 2005 a pilot One Stop Shop programme at the customs border check-points to reduce bureaucratic procedures and provide better import and export services.[15]

Exports grew by 30 percent between 2004 and 2005, reaching $660 million in 2005, and by 50 percent the next year, reaching $950 million in 2006. As a result of the rapid growth in exports, Laos' trade deficit declined by more than 30 percent. The mining sector was the main driver of export growth in 2006, the result of massive expansion in copper production in the Australian-run Sepon mine. Exports of copper products grew to more than $400 million from about $100 million in 2005.[16] Agricultural exports grew by 70 percent per annum from $20 million in 2004 to $60 million in 2006. Exports of other products (garments, electricity and timber products) remained at similar level as in 2005, although there has been a declining trend in garments and timber products since 2004. In terms of export share in 2006, mining accounted for just over half of Lao exports in 2006, followed by garments, electricity and wood products (roughly 10 percent each) and agriculture (about 7 percent).

Between 2004 and 2006, imports grew steadily at around 13 percent per annum. The GOL classifies imports into three main product categories: investment, intermediate and consumption goods. Shares of imported investment goods (machinery and equipment) increased in recent years while shares of other investment groups declined. The expansion of large FDI projects in natural resources and other sectors has been the main reason for this change in the structure of imports.[17]

Laos' main trading partners over the past decade have been its neighbouring countries. In 2006, exports to ASEAN made up more than 60 percent of total exports (Thailand about 50%, Vietnam 10% and Malaysia 5%), with the rest going to China (5%), Australia (11%), the European Union (14%) and the United Kingdom (6%). Imports were also predominantly from Laos' traditional trading partners such as Thailand (about 60%), Vietnam (about 15%) and China (about 9%).[18]

The GOL and China plan to increase the volume and value of trade between the two countries to more than $1 billion in the coming years, a significant increase from trade value of just ten years ago (in 1998), which was about $26 million. According to the Ministry of Industry and Commerce, the value of exports from Laos to China grew from just under $10 million in fiscal year 2004-05 to more than $40 million in fiscal year 2005-06, while the value of Chinese imports into Laos remained steady at $80 million in fiscal year 2004-05 and about $85 million in fiscal year 2005-06.[19]

14 World Bank, 2006b.
15 Ibid.
16 World Bank, 2007a.
17 Ibid.
18 Ibid.
19 Ministry of Industry and Commerce and Leebouapao, 2007.

One factor contributing to the expansion of trade between Laos and China is the growing participation of Laos in annual trade exhibitions in China. According to the ASEAN-China Expo Secretariat, Lao laws and regulations have improved this year in line with obligations embedded in the Trade in Goods Agreement that forms part of the ACFTA. With such improvements, there is now considerable potential for increased trade and cooperation between Laos and China. One area with such potential is the garment and textiles sector, where Laos expects to reap large profits from the Chinese market.

2.2 Investment Regulations

Lao PDR has a number of laws, regulations and policies that govern foreign direct investment, as well as laws and regulations pertaining to the energy sector, environmental protection and natural resource management. Table 2 (see next page) outlines laws and regulations that are directly relevant to foreign direct investment. The Ministry of Planning and Investment (MPI) is the lead agency regulating foreign investment in Laos. In 2001, the GOL took steps towards simplifying the investment registration process and improving its transparency. A number of websites were set up to provide basic information about the country's legal framework, laws relating to business and investment as well as sector and industry-specific information.[20] In addition, the GOL set up a One Stop Shop within the MPI to expedite the investment application process. The 2001 Decree on the Implementation of the Law on the Promotion and Management of Foreign Investment provides basic guidelines for improving registration and speeding up approval processes for foreign investment projects.[21] The total registration and approval time has been reduced from 90-180 days to 45-60 days.

2.3 Stakeholders and Decision-making Processes

The MPI is in charge of investment decisions in Laos. In this regard, it is the most important agency facilitating foreign direct investment. The Department of Domestic and Foreign Investment (DDFI) is made up of over 50 officials who are responsible for the operational management of the investment procedures at the central level, and for directly negotiating and signing contracts with foreign investors. However, concerns have been raised that the Department has only a handful of individuals who are able to negotiate contract agreements with investors. As the process is complex and language issues abound, this is an area in which foreign investors (including those from China) have leverage over their Lao counterparts.

Another emerging player is the Laos-China Business Association, which has already more than 100 members, comprising mostly Chinese companies.

The decision-making process on new investments is complex although the recently set up One Stop Shop is intended to streamline and shorten the approval process. The application process is outlined in the Law on the Promotion of Foreign Investment (2004). With regards to investment in hydropower, mining and agribusiness, the following steps apply to the decision-making process:

1. Application for investment is submitted to MPI via the One Stop Shop under the Investment Promotion Department (IPD).[22] The investor application must include copies of the passport and resume of the foreign investor; feasibility study or business plan; information related to the business if the business is a legal entity; and a copy of a joint venture agreement, if applicable.

20 World Bank, 2007a. See also: www.invest.laopdr.org and www.moc.gov.la.
21 Decree No. 46/PM March 2001.
22 The Investment Promotion Department (IPD) is located within the Department of Domestic and Foreign Investment (DDFI).

Table 2: Important regulations for foreign investment in Laos

Law/Decree	Year	Role	Status
Law on the Promotion and Management of Foreign Investment	Promulgated in 1994 and amended in 2004	The law outlines three ways in which foreign investors can invest in Laos: a) business cooperation by contract; b) joint venture between foreign and domestic investors; and c) one hundred per cent foreign-owned enterprises (Article 5).	The law is currently being revised by an internal committee within the MPI and is expected to be submitted to the National Assembly in December 2008. The revision will result in a merger of the domestic and foreign investment laws.
Decree 64 on Decentralisation of Foreign Investment Management Power	2003	The decree provides local authorities the opportunities to attract investment to their governed territories as appropriate. The decree defines four classes of foreign investment based on value: 1) equal or less than $1 million, 2) more than $1 million up to and including $5 million, 3) more than $5 million up to and including $10 million, and 4) more than $10 million. Approval of FDI equal to or less than $1 million can be done at the provincial level. However, in larger provinces such as Vientiane Municipality, Savannakhet, Champasack and Luang Prabang, the ceiling for provincial approval is $2 million and less.	The decree has possibly been absorbed in the revisions taking place in the domestic and foreign investment laws (see above), although the decree is still widely quoted by government officials. Concerns were raised that the decree has allowed powerful provinces to make decisions on important natural resource investments, facilitating what is viewed as increasing degradation of the environment and the sell-off of Laos' precious resources.
Business Law	Promulgated in 1994	The law states that the agribusiness, hydropower and mining sectors are important to national security, the economy and society and must be closely controlled by the State (Article 13).	
Enterprise Law	Promulgated in 2005	The law represents a significant step forward with respect to easing private sector entry and streamlining regulations. Implementation of the law is coordinated by MOIC. Article 2 maintains a "Negative List," which defines highly sensitive business activities (e.g. those pertaining to national security, public order, cultural traditions and the environment). Entrepreneurs are subject to inspections by relevant sectoral agencies before they can register as a business.	This law is not yet effective due to lack of progress on a time-bound action plan for implementation, which was developed under Prime Minister's Order No. 37 issued in 2006.
Decree Pertaining to the Management and Use of Official Development Assistance	2004	The decree outlines the GOL's strategies for obtaining ODA and the relevant roles of the various ministries.	
Decree on Implementing the Prime Minister's Decree on the Management and Use of Official Development Assistance	2006	Similar as the above, this decree outlines the GOL's strategies for obtaining ODA and the relevant roles of the various ministries.	

2. IPD sends a letter and the investor application form to the concerned ministries and local authorities in the relevant province. The IPD is required to coordinate with the relevant sectors and local authorities to consider the application and respond in writing within a specified timeframe. The Investment Promotion Committee, chaired by the Vice Minister, meets every week. All officials from the One Stop Shop and concerned ministries are invited to the meetings where decisions are made on whether to move forward with proposed projects.
3. If a decision cannot be reached in such meetings, further time is taken to analyse and discuss the benefits of the proposed project and the company's investment performance.
4. Once a decision is reached, a summary report is prepared and submitted to the Prime Minister's Office (PMO).
5. The PMO calls a meeting and makes a decision on whether to approve the project in principle.
6. This gives the go-ahead for the IPD to organise a technical team to meet with the investor and discuss the drafting of the MOU.
7. After reaching consensus with the investor, a report is submitted back to the PMO asking for power of authority to sign the MOU.
8. Upon the granting of such authority, the MPI signs the MOU with the investor and gives the go-ahead to carry out feasibility, Environment Impact Assessment (EIA), Social Impact Assessment (SIA) and other studies. Usually the timeframe is 18 months; however, investors can ask for numerous extensions if needed.[23] The process of carrying out feasibility and other studies is overseen by the appropriate technical ministry: hydropower and mining projects are overseen by the Ministry of Energy and Mines (MEM), while agribusiness projects are overseen by the Ministry of Agriculture and Forestry (MAF). The Water Resources and Environment Administration (WREA) is also involved in the feasibility study process, in particular in relation to hydropower.
9. If the feasibility and EIA/SIA studies are approved, a Project Development Agreement (PDA) is signed, which allows the investor to study the market and find other partners.
10. A Concession Agreement is signed thereafter.
11. At this stage the MPI is required to present all relevant documents to the PMO. In some cases the agreement will be shared with the Politburo for approval and in others it will go to the National Assembly.

In the process outlined above, all projects are approved by the PMO. MPI signs the contracts and takes the ultimate responsibility; the technical ministries (MEM, WREA, MAF) play a role only in reviewing relevant documents and approving feasibility studies, EIAs and SIAs. In all cases, procedures are supposed to follow the law in terms of disclosure of information and consultation. However, in all investment projects that have been approved to date, consultations have taken place only at the governmental level and rarely included other stakeholders. In spite of clear guidelines, most projects are known to bypass official procedures for approval. In addition, documents are not placed in the public domain because the GOL has no mechanism for their dissemination.

Once foreign investors are approved under the guidelines of the Law on the Promotion of Foreign Investment, they are considered to be enterprises established in conformity with

23 Hydropower projects such as those planned on the Mekong River are expected to undergo 24-30 months of studies given the nature of their potential impacts.

the laws of the Lao PDR. Within 90 days from the receipt of the investment license, a foreign enterprise must commence business activities in accordance with the steps outlined in the feasibility study, as stipulated in the company's foreign investment license and in conformity with the laws and regulations of the Lao PDR. If such timeframe is not followed, the foreign investment license should be terminated.

2.4 Sectors

The top three investment sectors in the Lao PDR are electricity generation, agriculture and mining. Table 3 shows the number of investment projects and their associated combined value for each of the top investment sectors over the past seven years.

Table 3: Approved FDI to Laos by top Sectors: January 2001-March 2008 (millions of US dollars)

Sector/Year	2001	2002	2003	2004	2005	2006	2007	2008*	Total
Electricity generation	--	1	85.8	5.5	1,065	1,777	360.5	7	3,302
Agriculture	18.6	14	17.3	75.7	17.4	458.5	183.8	52.7	838
Mining	8.9	0.5	20.7	312.1	93.5	73.8	115.3	23	648

* 2008 data is only for the first quarter of 2008 (January to March).
Source: Ministry of Planning and Investment, 2008

2.4.1 Agribusiness

The GOL, with support from a number of donors, has adopted an agricultural development policy that is moving away from shifting cultivation and embracing technology-intensive methods to produce higher crop yields. Modernisation of the agricultural sector has led to the adoption of science-based methods of cultivation, which include the use of mechanised implements and infrastructure, the adoption of scientifically developed species and the use of chemical inputs (fertilisers and pesticides). It has also led to a shift from subsistence agriculture to market-oriented production. Many of these shifts in agricultural practices have been considered lamentable by development workers due to their negative impacts on the environment and local livelihoods.[24]

Under the ASEAN-China FTA (ACFTA) and particularly the ASEAN-China Early Harvest Program (EHP) (which forms part of the ACFTA), China offers Laos preferential tariff rates for a wide range of agricultural exports. Under the EHP, tariffs on Lao agricultural exports to China were eliminated by 2006, while Laos is allowed until 2009 to eliminate tariffs on qualified agricultural imports from China. China also agreed to offer zero tariffs to certain products from ASEAN's poorest members - Cambodia, Laos and Myanmar. For Laos, these include live animals and meat (of bovine animals, swine and poultry); fresh orchids and dried flowers; vegetables (cabbage, cassava/manioc and sweet potatoes); fruit (bananas); coffee; buckwheat (cereal) and some spices; non-timber forest products (cardamom, mace, nutmeg, ginger, bamboo and rattan) and oil seeds (soybeans and groundnuts). In total, China has offered Laos preferential tariffs on 202 additional products. These preferences are supplementary to the EHP, which includes only agricultural products and excludes cereals, coffee, spices, vegetable materials for plaiting and food preparation ingredients.[25]

24 Cornford, 2006.
25 Leebouapao, 2007.

The plantation industry and other agribusiness sectors have grown significantly in recent years, especially in northern Laos. What began as a modest way for upland farmers to supplement their incomes has expanded into a fast growing agro-industry. Companies, largely from China, are booming through deals made with small-scale farmers. One report indicates that some 150,000 hectares of land had been ceded to private investors for 30 to 50 years "at inconceivably low fee rates."[26] Land conflicts rise as plantations encroach on village fields and nearby forests, taking away traditional livelihoods with little or no compensation.

A significant concern is the lack of government monitoring of the development and growth of the agribusiness sector. In most cases concession agreements are made at the provincial level. At the central level the Ministry of Planning and Investment does not have data on accumulated plantation investments nor does it have information on the scope of the environmental and social impacts of such investments. Two recent reports look at these issues by examining the role of China in rubber and contract farming in northern Laos.[27]

The issues have not gone unnoticed at the central level. During National Assembly meetings in June 2007, assembly members presented concerns over the loss of natural resources and urged the government to improve land allocation and concession granting policies.[28] One month earlier, in response to lack of coordination and improper management in the process of granting land concessions, the GOL imposed a moratorium on new concessions for areas larger than 100 hectares.

Rubber

Investments in rubber plantations have amounted to more than $100 million over the last few years.[29] Despite concerns raised by researchers and central government officials, exports in rubber are expected to grow as a result of the proliferation of rubber investment projects in the northern provinces. This is largely due to the fact that provincial governments are promoting rubber as a way to stabilise shifting cultivation and alleviate poverty.

China's domestic production of natural rubber cannot meet its growing demand, which is fuelled by the country's rapid economic growth. To meet the demand of its industries, the Chinese government encourages rubber investments abroad by offering favourable policy incentives and generous subsidies through the Opium Replacement Special Fund, which is promoted within the context of China's Going Out Strategy (described in greater detail in Chapter 5).[30] In 2006, a special fund of 250 million Yuan was established by China's State Council to assist businesses in investing overseas through grants and interest reimbursements on loans.[31] Specific guidelines issued by the Chinese government on investment in Laos expanded the opium replacement scheme from cash crop plantations to other kinds of sectors such as forest resources, electric power generation, cash crop processing and mining.[32] Businesses qualifying for the opium replacement scheme receive various benefits from the Chinese government, including interest free loans and expanded credit access at domestic commercial banks; freedom in cross-border movements of labour, equipment, and vehicles; and exemption from tariff and import VAT on opium replacement products and outputs.[33]

26 Schuettler, 2008.
27 See Weiyi Shi's 2008 report, which provides extensive detail on Chinese investment in Laos and the cross-border influence that permeates every type of rubber investment. Also see Anotella Diana's 2008 report on contract farming.
28 Vientiane Times, 2007.
29 World Bank, 2006b.
30 Shi, 2008.
31 Shi, 2008 and Diana, 2008.
32 Shi, 2008.
33 Shi, 2008 and Diana, 2008.

Information on the amount of land under rubber cultivation is difficult to obtain and varies greatly by source. Shi (2008) reported that at the end of 2006 there were some 12,500 hectares of rubber plantations in Luang Namtha province, but since then the extent of rubber cultivation appears to have expanded greatly. Table 4, extracted from Shi (2008), provides information on nine Chinese companies presently involved in rubber production in Luang Namtha province. In spite of the significant size of the contracted areas noted in Table 4, the large companies listed here account for only 12 percent of rubber cultivation in the province. The majority of rubber plantations (88 percent) in Luang Namtha belong to local smallholders or informal investors, some from China and some from Laos.

Besides the initial promise of immediate success, it is not clear what information villagers are receiving regarding the length of time required for rubber to bear fruit and the environmental damage caused by rubber plantations around the world. There also appears to be a lack of interest among Chinese investors in long-term commitments (despite the fact that rubber production requires a long-term time horizon) as evidenced by the distribution of low quality seeds and the lack of encouragement for high value production.

Table 4: Chinese companies investing in rubber production in Luang Namtha Province

Company	Official date of registration	Districts of operation	Contracted area (ha)	Arrangements*
Yunnan Rubber	2006	Namtha, Long	166,667 in 4 provinces	Concessions (214 ha) and contract farming (v30%/c70%)
Ruifeng	2006	Long	300,000, possibly in multiple provinces	Concession through military
Diyuan	2006	Long	17,500	Contract farming (v30%/c70%)
Shengli	2004	Sing	2,000	Contract farming turned demonstration area
Tongly-Jinggu (Joint venture)	-	Sing, Long, Namtha, Viengphukha	6,350	Contract farming with varied percentage split
Zhenhua	2004	Viengphukha	3,000	Contract farming (v30%/c70%) or (v61%/c39%)
Jiachuang	2005	Nalee	2,000	Contract farming (v65%/c35%)
Taijiang	2006	Namtha	1,004	Contract farming (v65%/c35%)

* Percentages in parenthesis represent the profit sharing schemes between villagers (v) and companies (c).

Source: Extracted from Shi, 2008

Cassava

China has emerged as a major consumer of cassava. Similar to rubber, cassava is part of China's Going Out Strategy and Laos is seen as a target for significant Chinese investment to meet China's growing demand. Cassava is the third most widely grown crop in Laos after rice and corn. It was initially grown for human consumption and animal feed, but now it is mainly grown for the export market.[34]

The major Chinese company involved in cassava production in Laos is Chinese Yunnan Power Biological Products Co. Ltd., a state-run enterprise, which signed an agreement with the Luang Namtha provincial government in 2005. On the Lao side of the border, the company operates as the Lao-Yunnan Power Biological Products Co. Ltd., with sub-agencies at the district level managing local production. The cassava is planted, sliced and dried in Laos, and the dried product is then exported to China for further processing.[35]

Cassava is also produced is Bolikhamxay province, where the dried product is sold through middlemen and exported to China. Similar to Luang Namtha province, the stimulus for cassava production comes from the growth in cassava exports to China. Farmers in Bolikhamxay province believe they can improve their income by working in cassava production during the dry season, which reduces the need for seasonal migration to urban areas.[36]

Sugarcane

Sugarcane has mostly been grown for local consumption in the past, but recently sugarcane production has grown larger in scale, partly in response to China's Going Out Strategy under the Opium Replacement Scheme.[37]

The main Chinese company involved in sugarcane production is the Mengpeng Sugar Manufacturing Co. Ltd., which operates in northern Laos in collaboration with sugar refiners across the border in southern Xishuangbanna prefecture (in the south of Yunnan province). The company moved its entire sugarcane planting process from Xishuangbanna to Luang Namtha province in 2006, enrolling 1,500 households from 60 villages in Muang Sing district. Sugarcane is planted in Laos with Lao farmers' labour, and the harvested cane is transported across the border on the same day for pressing at the Mengpeng plant in Xishuangbanna.[38]

Corn

Corn is a major crop in Laos, in particular in Oudomxay province. The total area devoted to corn production was estimated to be 15,000 hectares in 2005.[39] The volume of corn production amounted to 73,000 tons in 2005, up from 45,781 tons in 2004.[40] According to Diana (2008), China was the main recipient of corn grown in northern Laos up until 2005, but since the introduction of a quota system on corn exports to China, most Lao corn is now exported to Vietnam and Thailand. Only a modest volume of corn is still being sold to China, most of which is exported by the Jingu Border Trade Cooperation Company Ltd.[41]

34 Diana, 2008.
35 Ibid.
36 Vientiane Times, 2008b.
37 Thailand is another important foreign investors in sugarcane production in Lao PDR (Baumüller, 2008).
38 Diana, 2008.
39 Ibid.
40 Phouyyavong, 2006.
41 Diana, 2008.

2.4.2 Hydropower

Laos' hydropower potential is considerable and the development of this potential is viewed as beneficial for the country. The hydropower sector is governed by the 2005 National Policy for Environmental and Social Sustainability of the Hydropower Sector in Lao PDR. The policy highlights the importance of sustainable hydropower development if Laos is to reap lasting benefits from this vast potential. Three key principles lay the foundation for sustainable development of hydropower:

- Economic sustainability relies upon the maintenance of the renewable resource base, and the use of non-renewable resources to support the development of other factors of production;
- Social sustainability is based upon principles of inclusiveness, mutual understanding and consensus; and
- Ecological sustainability relies upon the avoidance of irreversible environmental impacts such as the loss of biodiversity, accumulation of persistent pollutants or dis ruption of ecological cycles.

The development of the 2005 National Policy was shaped by the planning and design of the Nam Theun 2 hydropower dam, a complex project that raised a number of concerns among donors and non-governmental organisations (NGOs).[42] The Nam Theun project assisted the government in developing new policies and practices on hydropower development. As a result, the National Policy on the hydropower sector includes the following key practices:

- environmental impact assessments;
- environmental management plans;
- cumulative impact assessments and their mitigations;
- comprehensive monitoring and evaluation frameworks;
- plans to address the needs of project-affected people;
- watershed management and conservation strategies;
- prior and informed consultations with consent provided without coercion;
- disclosure of information; and
- compliance mechanisms.

While the national policy on hydropower is well crafted and addresses all relevant environmental and social issues, the implementation of the policy is seriously hampered by low capacity of technical staff, lack of resources and lack of political will. Most projects do not have the same level of funding as the Nam Theun 2 project did and therefore lack the necessary resources to adequately study their potential impacts. Studies that are carried out are usually done by foreign consultancy firms and often do not go through a rigorous review process within the government. The lack of enforcement of the national policy has enabled numerous projects to go forward without proper impact assessment and review, resulting in significant degradation of the environment and severe negative impacts on local communities.[43]

42 For specific details on the associated issues and concerns stemming from the planning, design and implementation of the Nam Theun 2 project see www.internationalrivers.org.

43 For more information see the International Rivers report entitled "Powering Progress: The Impacts of Hydro-Development in Laos." (1999).

The hydropower sector in Laos is viewed as serving two national priorities: 1) promotion of economic and social advancement through the provision of a reliable and affordable domestic power supply, and 2) increase in economic output, government revenues and export earnings. However, less than 10 percent of an estimated 26,000 megawatts (MW) of hydropower potential has so far been developed through 11 major and 36 smaller projects. The GOL sees the development of this potential as a key strategy for meeting its goal of reducing poverty by 2020. The GOL is also urging the construction of small and medium hydropower projects for local supply to reduce the need for electricity imports. Small and medium hydropower projects have an installation capacity ranging from 2-100 MW.[44]

As hydropower is one of the most important sectors for Laos with great investment potential, the GOL has plans for rapid developments in this sector. These include:

- Expanding generation, transmission, distribution and off-grid development to increase the electrification ratio for the country from the current level of about 60 percent to a target above 90 percent by 2020;
- Increasing government revenues from independent power plant export investments, and honouring power export commitments with Thailand and Vietnam by promoting development from the private sector;[45] and
- Promoting the development of a 500 Kilovolts (kV) grid within the GMS to integrate the power systems of Laos and its neighbours.[46]

According to the most recent Power Development Plan for Laos,[47] there are currently 77 hydropower projects in the works. Ten of these are operational, seven are under construction, 16 are under research and the remaining 44 have signed Memoranda of Understanding (MOUs) to move forward. Two of China's major state-owned enterprises, Sinohydro (see Box 1) and China Southern Power Grid Co., which are largely backed by the China Export-Import Bank, are vying for a number of the projects with signed MOUs. Roughly 15 hydropower projects have Chinese investors or developers, as outlined in Table 5, several already under construction. Five new MOUs were recently awarded to Sinohydro, including the Nam Ngum 5, which is backed by the World Bank's Multilateral Investment Guarantee Agency (MIGA), as well as the 1,100 MW cascade on the Nam Ou River.

44 Vongsay, 2008 and Phomsoupha, 2008.

45 The GOL signed an MOU with the Government of Thailand in 1993 to supply up to 1,500 MW of electricity to Thailand. The MOU has been extended several times, most recently in December 2007, to expand the supply of power to Thailand to 7,000 MW by 2020. In 1998 the GOL also signed an MOU with the Government of Vietnam for the supply of 2,000 MW of power to Vietnam. The MOU was extended in December 2006 to 3,000 MW of power by 2015. In addition, an agreement in principle was made in January 2008 to extend the amount of power supplied from Laos to Vietnam to 5,000 MW by 2020.

46 Phomsoupha, 2008.

47 Ministry of Energy and Mines, 2008.

Box 1: Who is Sinohydro?

Founded in 1988, Sinohydro is a Chinese state enterprise. In 2002 it was designated as a 'supplementary business' corporation alongside generation and grid companies. Currently Sinohydro comprises 23 subsidiary corporations and two shareholding companies in which Sinohydro has a controlling stake. The State Council maintains control of Sinohydro through a presidential responsibility system. The State Council appoints a board of supervisors who have responsibility for running, maintaining and expanding Sinohydro. The Ministry of Finance and the State Asset Supervision and Administration Commission (SASAC), which are tasked with exercising ownership responsibilities over state non-financial enterprises, have monitoring roles over Sinohydro's activities. Sinohydro has an extremely poor environmental and safety record within China. Improving that record will be critical if Sinohydro wishes to prevent further SASAC downgrades. The Sinohydro Engineering Bureau No. 1 has achieved ISO 14001 certification and is required to have an environmental policy.[48] According to Sinohydro, the company follows the regulations of the country in which it is operating regardless of its own policies. Due to China's Going Out Strategy, Sinohydro is seen as a major investor abroad, especially in Laos.

In addition to direct development or investment in hydropower projects, the China International Water and Electric Corporation (CWE) has signed contracts with Electricité de Laos (EDL) to establish transmission lines and extend substations to support electricity created by energy development projects in the north of Laos, including the Nam Lik 1 and 2 (CWE project), Nam Ngum 5, Nam Khan 2 and the Hongsa lignite-fired power plant project, among others. A Chinese investment bank will finance 80 percent of the project cost, with the remaining 20 percent financed by EDL. The transmission lines will include a 17 kilometre long single circuit 115 kV transmission line from the Ban Don substation in Meuangfeuang district to the Hineheup substation in Hineheup district, Vientiane province. A further 71.5 kilometre long double circuit 230 kV transmission line will also be installed. The project is expected to be completed by 2010.[49]

The first China Exim Bank-backed project in Laos was the Nam Mang 3 dam, commissioned in 2004 and constructed by CWE. According to International Rivers, the project affected an estimated 15,000 people, including 2,700 people who had to be resettled from the reservoir area.[50] Today, the Nam Mang 3 is not operational year round due to low water levels.

Hydropower projects have been studied the world over. The studies have shown that hydropower projects often cause serious negative impacts on the environment and on communities. In Laos there are mixed views about the effectiveness of hydropower planning. On one hand, the GOL strategy appears to be ad hoc, with powerful individuals within the government making decisions on projects without respecting the government's policies. Furthermore, no one has yet studied the long-term, cumulative impacts of all the hydropower projects (current and planned) on the ecology and geology of the Mekong River basin. On the other hand, a handful of government officials are very concerned about developments in the hydropower sector, and some consultants and government officials believe that many of the projects will not move beyond the feasibility study stage. Some also feel that the GOL should continue to work with International Financial Institutions (IFIs) since despite the rigorous processes required to meet ADB/WB conditions, the long-term benefits outweigh their costs.

48 International Rivers, 2008b, unpublished document.
49 Vongsay, 2008.
50 Middleton, 2008.

Table 5: Hydropower projects in Laos financed with Chinese investments

Project	Installed capacity (MW)	Status	Commercial Operation	Market	Status
Nam Mang 3	40	Operational	Since 2004	Laos/Thailand	China International Water and Electric Corporation (CWE) secured finance from China EXIM to build the project and turned it over to EDL. CWE's involvement also included the Appurtenance Works Transmission Lines and Substations built between 2004-2006.
Nam Leuk	60	Operational	Since 2000	Laos/Thailand	-
Nam Lik 1,2 (Vientiane)	100	Under construction	Expected May 2010	Laos	-
Nam Ngum 5	120	Under construction	Expected 2010	Supply to the EDL grid, Laos	Project costs $200 million: $140 million will come from the China Exim Bank and $60 million from Sinohydro. Within the 30% that Sinohydro will invest, 85% is from the company and 15% from EDL. Request was made to MIGA for political risk insurance. A livelihoods study is currently being conducted. This is one area where the EIA conducted by the Chinese investor did not meet MIGA standards. The project will go to the MIGA board in 2008.
Xeset 2 (Salavan)	76	Under construction	Expected August 2009	Laos, Thailand (20%) and Cambodia via a new transmission line supported by the WB	Estimated cost of $135 million, largely financed by China EXIM (about 80%). Project is estimated to affect approximately 20,000 people in the Xeset River Basin. Norconsult carried out the feasibility study.
Nam Ou Cascade (Phongsaly)	1100	MOU signed in 2005 and PDA signed on 18 October 2007	Expected 2013	Thailand – 90%	A feasibility study is currently under preparation by a Chinese team. The report will be available by end of December 2008. The cascade involves 7 projects. The 1st MOU was only for the Nam Ou 8, the largest of the proposed dams, which is expected to start construction in 2009 and be operational by 2015. Estimated cost for the cascade is $2 billion.
Nam Mang 1	60	MOU signed for feasibility study in February 2007	Expected 2012	Laos	-
Nam Tha 1 (Bokeo)	263	MOU signed for feasibility study in 2006	TBC	China	Feasibility study submitted in September 2007. Construction of access road and transmission lines has reportedly begun.

Nam Beng (Oudomxay)	50	MOU signed in 2006	TBC	Under research	-
Xepone 3 (Saravan)	70 with potential for another 35 MW	1st MOU signed in November 2005 2nd MOU signed on 21 April 2008	Laos and the Xepon gold and copper mine	Under research	Small power plant. Two preliminary reports were submitted to the Lao government in 2006 and 2007. Expected annual generation of 300Gwh of power.
Nam Khan 2 (Luang Prabang)	130	MOU signed in 2006. An EPC[51] was recently signed.	TBC	Under research	Feasibility study has not begun but will be carried out by a Chinese company. Sinohydro is the contractor for the project.
Nam Khan 3 (Luang Prabang)	95	MOU signed in 2006. An EPC was recently signed.	TBC	Under research	Feasibility study has not begun but will be carried out by a Chinese company. Sinohydro is the contractor for the project.
Nam Feuang (Vientiane)	60	MOU signed in April 2007	Laos	-	-
Pak Beng (Mekong mainstream – Luang Prabang)	1232	MOU signed for feasibility study in August 2007	TBC	Thailand	According to a 1994 Mekong Secretariat study, the project would displace approximately 1,670 people.
Pak Lay (Mekong mainstream –Xayabouri and Vientiane)	1320	MOU signed for feasibility study in June 2007	TBC	Laos/Thailand	Build-Operate-Transfer (BOT) project. Estimated cost $1.7 billion. According to a 1994 Mekong Secretariat study, the project would displace approximately 11,780 people. Norconsult is carrying out the Initial Environmental Examination with Earthsystems Lao. The study is almost finalised.
Xanakham (Mekong mainstream - Xayabouri)	570	MOU signed for feasibility study in December 2007	TBC	Thailand	-
Nam Ngum Downstream (Pak Ngum district, Vientiane)	110	MOU signed on 28 January 2008	-	Thailand and Vientiane	Feasibility study is currently being conducted. Planned operating period of 30 years. Power generation of 470GWh per year and annual utilisation of 4,273 hours.

Source: Adapted from DEPD (2008) and International Rivers (2008c).

2.4.3 Mining

Compared to most other countries, the mining industry in Laos is still in its infancy. However, the mining sector has been singled out as a priority investment sector in the National Growth and Poverty Eradication Strategy, because it is seen as having the potential to boost economic and social development, and enable Laos to graduate from the least developed country status by 2020. Key mineral resources found in Laos include gold, copper, tin, coal, potash and gypsum. In 2000, mining accounted for 0.5 percent of the GDP, and by 2006, the sector had grown to 5.5 percent. The Government of Laos projects that mining will account for 10 percent of GDP by 2010.[52]

In 1996 the government placed a moratorium on new licenses for gold mining. The major reason behind the moratorium was the administrative burden associated with negotiating complex agreements on a project-by-project basis, making it difficult for the Ministry of Energy and Mines (MEM) to regulate the sector.[53] It is expected that the moratorium on gold will continue until a new mining law is passed (see more on this below). Reviews of the effectiveness of the moratorium indicate that it is not solving the problems it set out to address, as many companies are obtaining licenses for other minerals and then prospecting for gold.[54]

In 2007 the government announced a slow-down/moratorium on granting new exploration and production licenses. This move was instigated by the government's desire to carry out a review of existing practices concerning taxation, operational requirements and other contractual obligations.[55] The government also planned to cancel agreements with non-performing companies. However, a major constraint came to light when it became clear that MEM was not in a position to cancel any agreements, as the responsibility for signing (and cancelling agreements) rests with the Ministry of Planning and Investment.

The current regulatory regime for the mining sector is not able to facilitate the achievement of the government's goal of generating income and reducing poverty, because it focuses on contract-by-contract negotiations with each investor. The government recognises this issue and aims to move to a legislative system to govern the mining sector in the future. The 1997 Mining Law is currently undergoing revisions with support from the International Finance Corporation and the World Bank. It is expected that the new law will be submitted to the National Assembly in December 2008.

The new law is expected to raise the bar in terms of screening standards for issuing new licenses; requiring potential investors to demonstrate at the application stage that they have sufficient funds for the proposed projects; reviewing the applicant's ability to adhere to technical standards; and examining the applicant's environmental credentials as well as plans for addressing social impacts.

China is becoming a major investor in the mining industry in Laos. Recently, the GOL accepted an offer from China to carry out a survey of potential mining deposits throughout the country. Currently there are 113 companies operating in the mining sector in Laos, of which 33 are from China. In the 2007 review carried out by MEM (described above), nine out of the 18 projects identified for cancellation were run by companies from China. Table 8 provides an overview of the licenses that have been awarded to overseas investors in the mining sector.

51 EPC is an Engineering Procurement and Construction basis, which allows the company to go ahead and purchase equipment for developing the project. The equipment will be purchased in Laos, China or Thailand, whichever is cheaper.
52 MPSDF, 2008.
53 Ibid.
54 Ibid.
55 World Bank, 2007a.

Table 6: Mining licenses awarded to international companies operating in Laos: 2006-08

	China	Vietnam	Thailand	Russia	Australia	Canada	North Korea	Korea	Total
No. of Companies	13	7	6	4	2	1	1	1	35
No. of licenses by mineral type	24	11	6	5	5	1	2	1	55
Coal	2	1	2	--	--	--	--	--	5
Gold/Copper	--	--	--	--	3	--	--	--	3
Alluvial gold	2	1	--	--	--	--	--	--	3
Gold	2	--	--	--	2	4	--	--	8
Copper	8	--	--	--	--	--	--	--	8
Lead, Lead/Zinc	2	1	2	--	--	--	--	--	5
Antimony	2	--	--	--	--	--	--	--	2
Tin	1	1	--	1	--	--	--	--	3
Iron	1	1	--	--	--	1	2	--	5
Aluminium	1	--	--	--	--	--	--	--	1
Sapphire	--	--	--	--	--	--	--	1	1
Gypsum	--	2	--	--	--	--	--	--	2
Limestone	1	1	2	--	--	--	--	--	4
Clay	1	1	--	--	--	--	--	--	2
Mudstone	--	1	--	--	--	--	--	--	1
Potash	1	1	--	--	--	--	--	--	2

Source: World Bank, 2006c.

There are numerous small-scale mine operators that often fall under the radar and are thus difficult to manage. Roughly 25 percent of these small-scale operators comprises private Lao-owned companies, while Lao state-owned companies account for about 40 percent of the total. The remainder of small-scale operators includes companies from neighbouring countries, mainly Thailand, China and Vietnam, which are sometimes involved in joint ventures with domestic companies.

Information is difficult to obtain on Chinese investments in small-scale mining, and the government has expressed concerns about its ability to properly manage such small-scale investments due to language constraints, low capacity and minimal resources. In addition, Chinese companies have also made efforts to invest in larger scale mining operations, as summarised in Table 9.

The Bolaven Plateau in southern Laos is slated for major development by a number of mining companies, including several from China. These projects are of significant environmental and social concern due to the Plateau's unique geological and geographic characteristics. The Plateau is an enormously fertile volcanic area that rises to over 1,000 metres. It is situated between the Annamite mountain chain and the Mekong River, and straddles the three provinces of Champasak, Xekong and Salavan. The climate on the Plateau is mild, which makes it an excellent place for crop production, most notably coffee. Furthermore, it is a significant tourist destination. Despite the expansion of logging and agricultural production, the Bolaven Plateau still retains a substantial degree of forest cover.[56] This is all likely to change in the future,

56 Cornford, 2006.

however, as a group of Chinese companies has recently received permission from the GOL to explore for bauxite, and found adequate deposits in a 24,600 hectares area. The companies are currently conducting an environmental impact assessment and if approved, they will start building a giant bauxite processing plant, slated to become the largest in Southeast Asia.

Table 7: Mining Projects in Laos supported by Chinese companies: 2007

Province	District	Company	Company origin	Area (Ha)	Mineral type	Activity
Phongsaly	Gnot Uo	Luithing Co. LTD	China China	996 1,496	Coal Coal	Exploration Exploration
	Phongsaly	Lao Yonzin Development Mineral	China	2,000	Copper	Prospection
	Gnot Uo	Yuxi Xuanglong Co. Ltd	China	2,000	Copper	Exploration
	Gnot Uo Phongsaly BounNeu	Yunnan Zhongshen Mining Co. Ltd	China China China	11,400 28,500 19,200	Zinc Zinc Copper	Prospection Prospection Prospection
	Gnot Uo	Mining Go, Ltd San Mou Oudomxay	Lao-China	14,000	Copper	Prospection
Luang Namtha	Sing	Mining Go, Ltd San Mou Oudomxay	Lao-China	1,800	Antimony	Prospection
	Muang Long Sing	Lao-China Oriental Minerals Development Co Ltd[57]	Lao-China Lao-China	425 450	Copper Antimony	Production Exploration
Oudomxay	Xay	Mining Go, Ltd San Mou Oudomxay	Lao-China Lao-China	200 750	Copper Copper	Exploration Prospection
	Namor	Mining Go, Ltd San Mou Oudomxay	Lao-China	8,950	Copper	Prospection
	Pakbeng	Dynastry	China	25,200	Copper	Prospection
	Namor	Lao Yonzin Development Mineral	China	2,000	Zinc	Prospection
	Namor	Holding Companies of Golden Elephant and Corporation	China	6,300	Coal (Antra-cite)	Prospection
	La	Eshan Dunhuang Mining Lao, Co. Ltd	China	8,000	Iron	Prospection
Luang Prabang	Pak Ou	Huajing Mining Co. Ltd	China	500	Gold	Prospection
	Ngoy	Yunnan Unitad Antimony Industries Co	China	10,020	Antimony	Prospection
Houphan	Viengxay	Hangzhou Jianthong Group	China	6,600	Iron	Prospection
	Xiengkho	Qing Long Pu Ying Iron Co. Ltd	China-Lao	48,050	Copper	Prospection
	Viengxay	US Asia	China China	1600 1040	Iron Iron	Prospection Prospection
	Vieng-thong	Do Nia	China	8,800	Copper	Prospection
Xiengkhouang	Khun	Autu Mind Capital Group	Canada-China	2,200	Iron	Prospection
	Pek	YongXieng Yunnan China	China	26,000	Iron	Prospection
Vientiane	Om	Lao-China Oriental Minerals Development Co Ltd	Lao-China	1,200	Copper	Prospection
	Xaysomboun	Qinhuangdao Xinhe Co. Ltd	China	80	Iron	Prospection
	Vang Vieng	Lao Cement Co. Ltd	Lao-China Lao-China Lao-China Lao-China	4.5 5.25 9 1.75	Lime-stone White clay Mud-stone Coal	Production Production Production Exploration

Capital	Santhong	Lao Chien Xinhoa	China	300	Gold	Prospection
		Yunnan Exploration Engineering Co. Ltd	China	7,800	Potash	Exploration
		Sinohydro	China	1,360	Potash	Prospection
		Union Co. Group	China	197,000	Potash	Prospection
	Xaythany	Sinohydro	China	136,000	Potash	Prospection
Bolikhamxay	Khamkeut	Lao-China Gold Mining Industry Co. Ltd	Lao China	797	Alluvial Gold	Exploration
			Lao China	299	Alluvial Gold	Prospection
	Pakading	Lao-China Tin Development	Lao China	4,800	Tin	Prospection
	Pakading	Construction and Promotion Agriculture	Lao China	1,340	Tin	Exploration
Khammoune	Nongbok	Chasy Co. Ltd	China	84	Potash	Exploration
	Hinboun	Tiane Ching Ching Chu Hong Xing	Chin	19,600	Iron	Prospection
	Hinboun	Union Co. Tiane Xin Co. Ltd	China	17.57	Iron	Prospection
Salavan	Salavan	Chongya Yuxi Cement Lao Ltd	China	500	Limestone	Exploration
				100	Clay	Exploration
				1,000	Coal	Exploration
				0.6	Coal	Production
Xekong	Duckjung	Lao Mining Industry Aluminum	China	2,500	Bauxite-Alumimium	Prospection
Champasak	Sakhuma	Lao-China Oriental Minerals Development Co. Ltd	Lao-China	59,000	Copper	Prospection
	Pakxong	China Non Material I.C.	China	146.51	Bauxite-Alumimium	Prospection
	Pakxong	Yugida S.A. (Peru)	China	588.9	Bauxite Alumimium	Prospection
	Pattsum-phone	Yunnan Ashan Mining Co. Ltd	China	10,000	Iron	Prospection
	Pakxong	South Asia Economic and Technical Cooperation Ltd	China	55,500	Bauxite-Alumimium	Prospection
Attapeu	Sanxai	Army Mining Unit	China	25,000	Alumimium	Prospection

Source: Data obtained from www.dgm.gov.la - the official website of the Department of Geology and Mines, which has since been split into two different departments.

57 The Oriental Minerals copper project in the Muang Long district of Luang Namtha province started construction in 2002 and commenced operation in 2005. In 2007, the tailings dam was damaged following seismic activity in the project area, which resulted in a leak from the dam wall and the release of untreated heavy metal tailings into the surrounding agricultural area.

3 Vietnam

3.1 Introduction

The Socialist Republic of Vietnam (hereafter referred to as Vietnam) is located on the eastern coast of the Indochina Peninsula. Vietnam is bordered to the north by China, to the west by Laos and Cambodia and to the south and east by the South China Sea. With a population of more than 85 million,[58] it is the thirteenth most populous country in the world. While one of the world's last one-party communist states, Vietnam has been on a path of economic liberalisation since the Doi Moi[59] economic restructuring policies began in 1986. Today it has one of the fastest growing economies in the world, with average real income growth of 7.3 percent per annum over the past ten years. Growth in real income has resulted in gradual reduction of the poverty rate, which has fallen from 58 percent in 1993 to less than 20 percent in 2004. Achievements in economic growth have had significant negative impacts on the environment, however, as Vietnam's infrastructure for environmental regulation lags far behind its economic infrastructure.

3.1.1 Foreign Direct Investment

In 2007 investment levels in Vietnam represented approximately 44 percent of GDP. Total committed capital stood at $21.3 billion, the highest since the country opened to investment in 1986.[60] Foreign direct investment was about 21 percent of total investment in 2007, the year that saw a boom in FDI, which grew by 77 percent from 2006. The domestic private sector accounted for 31.6 percent of total investment in 2007, up from 22.6 percent in 2001.

As of mid-2006, China had 377 directly invested projects in Vietnam, with total registered capital of $795.6 million, ranking China 15th among the 74 countries that had invested in Vietnam.[61] Mid-2007 data provided by the Foreign Direct Investment Bureau of the Ministry of Planning and Investment (MPI) shows 434 investment projects funded by Chinese FDI, with a total value of nearly $1.2 billion, as shown in Table 8. While the investment numbers from China are not large compared to other Asian countries like Taiwan and South Korea, the Chinese investment focus on natural resources, especially minerals, makes China's involvement more important than the raw numbers might suggest.

The mining and hydropower sectors in Vietnam are dominated by Vietnamese state-owned enterprises. Strictly speaking wholly foreign ownership is legally permissible, but never exists in reality. FDI in these sectors has until now been limited to low-stake joint ventures. However, the recent bid by a Chinese mining company giant for a 40 percent stake in a bauxite mine in the Central Highlands province of Dacnong might signal a change, as Vietnam's mining sector expands and upgrades (see section 3.4.3. below).

58 The World Fact Book shows a population estimate of more than 86 million as of July 2008; www.cia.gov.

59 Doi Moi ("renovation" in Vietnamese) is the name given to the economic reforms initiated by Vietnam in 1986 that abandoned a previous push to collectivise the industrial and agricultural operations in Vietnam, and permitted and encouraged free market enterprise.

60 Per communication with the Central Institute for Economic Management, Ministry of Planning and Investment (MPI), 2008.

61 John, 2006.

Table 8: China's FDI in Vietnam by form of Investment (value in millions of US dollars)

Order of total value	Form of Investment	No. of projects	Total capital investment value
1	Joint venture	137	600
2	100% Foreign owned company	262	524
3	BCC[62]	35	58
Total		**434**	**1,181**

Source: Foreign Direct Investment Bureau, Ministry of Planning and Investment – Report on China's FDI in Vietnam, May 2007.

3.1.2 Official Development Assistance

During the period of 1993-2003, donors committed $25.4 billion in official development assistance to Vietnam. ODA resources were mostly allocated in accordance with government priorities, with infrastructure being the largest beneficiary of ODA: 22.6 percent of ODA was allocated to transport, 20.3 percent to electricity generation and transmission and another 8.3 percent to water supply, drainage and urban infrastructure.[63] Official development assistance from China has been significant, reported at $312 million in the period of 1992-2004, but not in the three sectors examined in this report (although ODA from China did include loans for copper mining in Lao Cai).[64] Overall, ODA from China was more political in nature and focused on cultural exchange and support.

3.1.3 Trade

Trade with China is far more significant for Vietnam than investment from China, and this is especially true of the three sectors examined in this study. China is today Vietnam's main trading partner, having surpassed Japan, the EU and the US by mid-decade.

Trade between the two countries – which share a 1,643 kilometre border – has more than tripled in the past few years, from $3 billion in 2000 to $10.4 billion in 2006. These are the official trade statistics; the so-called 'informal' trade across the border could equal or surpass these figures.

During the period of 2000-06, China outperformed Vietnam in both the quantity and structure of trade. In 2000 Vietnam had a slight trade surplus with China when it exported $1.5 billion in goods and imported $1.4 billion. By 2006 the trend had changed markedly and Vietnam registered a trade deficit with China of more than $4 billion when it exported $3 billion to China's $7.4 billion.

Regarding the structure of trade, by 2007 Vietnam exported mainly raw materials to China, while China exported mainly manufactured goods to Vietnam. The main exports from Vietnam to China were of four general categories:

1. raw materials (coal, oil, rubber, iron ore)
2. agricultural products (vegetables, tea, cashew nuts)
3. fresh and frozen seafood
4. consumer goods

62 Business co-operation contract (i.e. partnership signed by two or more parties with the objective of conducting jointly one or more business operations in Vietnam, on the basis of mutual allocation or responsibilities and sharing of profits or losses, without creating or forming a legal entity in Vietnam).
63 Pham Thu Hien, 2008.
64 Dinh, 2005.

The first three categories comprised more than 90 percent of total exports to China. In terms of exports to the rest of the world, raw materials and farm products combined accounted for about 50 percent of the total.[65]

China's exports to Vietnam are more diverse than those of Vietnam to China, and include machinery, consumer goods, electronic goods and fertilizers. Concerns have been raised over the quality of these goods, however, arguing that while China is transferring technology and products at a very low price, many of these are outmoded or inferior in quality. This is not the case with Chinese equipment for small hydropower plants, however, which is considered to be of reasonable quality. But for large hydropower projects, European turbines and other equipment are preferred over Chinese brands.

Various reasons are given for market acceptance of the supposedly inferior products from China. Price is important of course, as is proximity. The border between the two countries is long, porous and replete with trading relationships, which have been assisted by improvements in infrastructure. Much of the trade in minerals and farm products is reported to be 'informal.' Even if officials want to encourage better technologies or sources of finished products, the complex system of trading is out of their control. There are also concerns that corrupt practices are responsible for Chinese suppliers out-competing companies in Vietnam where prices on bids are lower but do not justify the purchase of inferior equipment. The success of Chinese companies winning bids to supply materials is attributed to under-the-table deals with Vietnamese officials.

3.2 Investment Regulations

The Doi Moi policies of economic renovation initiated in the late 1980s began a trend of economic liberalisation that has resulted in world-leading rates of GDP growth, but has also led to serious environmental degradation. The last two decades and especially more recent years have seen the emergence of regulations designed to simultaneously liberalise the economy and protect the environment. These are summarised in Table 9.

Since 2000, changes in investment law have seen a trend away from joint ventures towards 100 percent foreign ownership. This has been largely the case in manufacturing of textiles, for instance, but not in the three sectors examined in this study. There has been little FDI in large-scale hydropower development, as Vietnam itself is seen as a major regional player and emerging financier.[66] In mining, 100 percent foreign ownership is legally permitted but impossible in practice, as the government recommends joint ventures for investment projects that are land-intensive. Joint ventures make the process of land certification far less cumbersome than other ownership arrangements. The existence of large and influential Vietnamese state-owned enterprises means that in practice an investor must partner with a Vietnamese firm in order to obtain investment permission.

The Investment Law of 2005 replaced the previous Foreign Investment Law and Domestic Investment Encouragement Law. It was followed in September 2006 by Decree No. 108,[67] which provides detailed guidelines for a number of the articles in the Investment Law. The law details the rights and obligations of investors and deals with such issues as business investment autonomy; the right to approach investment sources; the use of credit capital sources; land and resources; labour; the right to open accounts and buy foreign currency; and the right to export, import, advertise, process and reprocess.[68]

65 Coxhead, 2007.
66 International Rivers, 2008a.
67 Decree No. 108/2006/ND-CP, promulgated on 22 September 22 2006.
68 Do Nhat Hoang, undated.

The decentralisation of investment approval procedures to provincial People's Committees and management boards is a key policy for administrative reform in economic management. These bodies are direct management agencies of investment resources such as land, labour and natural resources, and they control the implementation of investment projects at the local level.

The Vietnamese government is working with its three neighbouring countries to develop special economic zones (SEZs) in border areas. The aim of the policy for promotion of SEZs is to provide a favourable environment for investment in poor border areas inhabited mainly by ethnic minorities. But there are concerns about the impacts and sustainability of this policy in light of reports that Chinese authorities might be offering incentives to Chinese businesses to export polluting industries south of the border in order to improve China's own environment.[69]

Vietnam's environmental regulations are progressive. The 2006 Environment Law is in general a good law with detailed provisions for environmental impact assessments. The problem, however, lies in its implementation. Challenges in implementation stem mainly from limited human resources as well as complex central/local government relations. The staff of the Ministry of Natural Resources and Environment (MONRE) is spread very thinly in a large and populous country. For instance, the Office of Environmental Protection has only 80 officials countrywide, while in each of the provincial Natural Resource and Environment Offices there are only four or five officials. These officials are taxed with a broad range of duties, which include handling land disputes. At the provincial level and below, especially along the border, officials have broad informal latitude to make decisions on awarding concessions, respond to violations and sometimes facilitate informal trade. A recent development of note is the creation of 'environmental police' in Vietnam, which is under MONRE and has a mandate to supervise the implementation of environmental regulations.

Table 9: Important regulations for foreign investment in Vietnam

Law/Policy	Year of promulgation
Enterprise Law	2005, plus decrees
Land Law	revised 2003
Vietnam unified law on investment, which combined:	2005
- Law on Foreign Investment	2000
- Law on Domestic Investment Promotion	1998
Mineral Law	1996, amended 2005
Law on Electricity	2004
Environment Law	2006
Sixth Power Master Plan for period 2006-2015 with view to 2025	

3.3 Stakeholders and Decision-making Processes

There are many state agencies and state-owned enterprises that are important to the sectors examined in this study. The two that are most relevant are the Ministry of Planning and Investment (MPI), which is responsible for administering regulations about foreign direct investment, and the Ministry of Natural Resources and the Environment (MONRE), which is responsible for environmental regulations, land management and mining activities.

69 Goodman, 2005.

The formal process for foreign investors to apply for an investment license in Vietnam differs depending on the size and type of investment.[70] For projects that are worth less than VND 300 billion and fall outside either the list of conditional investment sectors[71] or the list of projects that are subject to Prime Minister's approval, companies simply need to register for investment certificates. For any project worth more than VND 300 billion or falling under the two lists, the process is as follows:

1. The investor presents an application to the MPI's Department of Planning and Investment (DPI). The application file must contain:
   - Documents to show the legal identity of the investor, as well as the objective, scope and location of the investment project, and a business plan with commitments for bank loans, identified needs for land and articulated commitment to environmental protection, etc.
   - Application for preferential investment (if any); and
   - Report of financial capacity.
2. Upon submission of application, the potential investor receives a document certifying that s/he has provided all needed documents for license registration.
3. DPI management considers the documents and issues a certificate on investment. DPI has 15 days to consider the documents.
4. Appraising investment:
   - MPI/DPI consult related ministries/sectors or departments. In case of any problems, the MPI/DPI informs the potential investor in written form to request additional information or clarification of documents;
   - Related ministries, including MONRE and its EIA department, provide their appraisal in written form;
   - For projects that require the Prime Minister's approval, MPI prepares an appraisal report and submits it to the Prime Minister (via the Office of Government). For projects that do not require central-level approval, DPI prepares the appraisal report and submits it to the appropriate Provincial People's Committee for its decision.
5. The Office of the Government issues written notice on the decision. Based on this, DPI makes its decision on the investment project.
6. In case a project is not approved, MPI/DPI has to inform the potential investor in writing, stating clearly the reasons for not approving the project.

Once approved, investors must follow the regulations that are relevant to their projects. For example, in the case of FDI in mining, the investor has to follow the Mining Law and the Environment Law.

The formal investment process outlined above notwithstanding, corruption renders the system malleable. For instance, World Bank's 2006 investment climate assessment for Vietnam found that more than 40 percent of companies surveyed provided 'gifts' or other informal payments in order to obtain land use document certificates.[72] The World Bank assessment found evidence of widespread and blatant smuggling along the northern border, where truckloads of commodities like coal and rubber are illegally exported. Survey respondents in the World Bank study ranked the Customs Department as one of the most corrupt agencies in Vietnam (second only to the traffic police), with more than 70 percent of companies surveyed citing isolated or widespread corruption by the Customs Department.

70 See www.fia.mpi.gov.vn.
71 The list covers 14 sectors in which investment is conditional to foreign investors (including exploration and exploitation of minerals).
72 World Bank, 2006d.

The Ministry of Natural Resources and the Environment (MONRE) holds many responsibilities pertaining to the sectors examined in this study. Established in 2002, MONRE is perceived as under-resourced and struggling in its establishment. One of MONRE's main responsibilities is the administration of the environmental impact assessment process, which gives it the legal means to refuse project approval for environmentally destructive activities. Unfortunately, the ministry is over-stretched, especially at the local level, and thus unable to fulfil its administrative obligations for the implementation of the regulations embedded in the 2006 Environment Law.

Land use is fundamental to the three economic sectors considered in this study. Land in Vietnam is officially the property of the people and it is administered by the state. Although there is no formal system of private land ownership, land is leased for long-term economic use. In practice, a de facto land market exists, though one limited by special stipulations and conditions determined by the state.[73]

The land administration system is a four-tier system that includes MONRE at the central level, provincial Departments of Natural Resources and Environment (DONRE) under the control of provincial People's Committees (provincial government), divisions of natural resources and environment at district levels belonging to the district People's Committees (district government) and one or two land officers in each commune.[74] In recent years there has been a strong move towards decentralisation, with People's Committees gaining more power to determine land use arrangements at the provincial and district levels.

Within MONRE, the Department of Land and the Department of Land Registration and Statistics are responsible for managing state land. Specifically, the Department of Land is responsible for land policy and regulation while the Department of Land Registration and Statistics is in charge of managing land surveys, assessment, valuation and classification; land use planning, land allocation, leasing and reclamation; and land inspection and mapping.

MONRE also oversees the management of geological and mineral resources, a role it inherited from the Ministry of Industry when MONRE was established in 2002. In the same year the Department of Geology and Minerals was also moved from the Ministry of Industry to MONRE.[75]

MONRE coordinates with the Ministry of Public Security, Ministry of Finance, the General Department of Customs, and the provincial and municipal People's Committees to organise and control the mining and export of natural resources. MONRE can revoke mining licenses if operators are found to have violated regulations concerning mining operations, including duration, acreage, mineral processing procedures and safety and environmental standards.

Provincial People's Committees may issue individual mining licenses to survey, explore, mine and process ordinary construction minerals, and licenses for mining and processing minerals in areas excluded from the national master mineral plan or national mineral reserve areas. MONRE has the authority to issue licenses to survey, explore, mine and process minerals that are not under the authority of the provincial People's Committees. The issuer of a license has the power to approve the extension, revocation, return and assignment of that license.

73 Dinh Duc Truong, 2007.
74 Ibid.
75 Ibid.

3.4 Sectors

3.4.1 Agribusiness

Vietnam's growing agricultural sector accounts for over 27 percent of the country's combined GDP, and employs over 70 percent of its workforce.[76] Agriculture and fisheries make up about 25 percent of Vietnam's total world exports.

With its favourable climate and rich soil, Vietnam is a major exporter of a variety of agricultural commodities and products, including rice, coffee, rubber, tea, vegetables, fruits, coconuts, sugarcane, cashew nuts, soybeans, groundnuts, cassava and pepper. Vietnam's agricultural production system derives from several concentrated commodity areas, which include:

- Rice production in the Mekong River Delta and the Red River Delta;
- Coffee production in Central Highlands and in the northeast and the south;
- Tea production in the northeast and the northwest;
- Rubber production in the northeast and the south; and
- Fruit cultivation in the northeast, the south and the Mekong River Delta.

Levels of cultivation as well as livestock and aquaculture production have been upgraded in recent years through the application of intensive farming techniques and advanced technologies. The shrimp area alone has more than doubled since 1995 to more than 530,000 hectares in 2003. Concomitantly, shrimp production in Vietnam has increased by 13 percent per year from 1990 to 2003, and now accounts for about one-fourth of total regional production.

In terms of overall investment, the most important sub-sector of agribusiness is animal feed processing, especially for fish and shrimp production. The following sub-sectors were the leaders in terms of 2007 export turnover: aquaculture products (shrimp, fish), $3.7 billion; coffee, $1.9 billion; rice, $1.5 billion; rubber, $1.4 billion and cashews, $650 million, followed by fruit, vegetables, pepper and tea. Much of the demand for these products, especially rubber, cashews and vegetables, comes from China.

The Vietnamese government has an agricultural development plan for the next 10 years that includes:[77]

- Maintaining the average annual agricultural growth rate at 4–4.5 percent;
- Increasing livestock ratio in total agricultural production to 25 percent from the current 18 percent level;
- Increasing total paddy output to 40 million tonnes from the current 35.6 million tonnes; and
- Increasing total export value from the agricultural sector to $10 billion from the current level of $3.2 billion.

China is important to Vietnamese agriculture principally as a market for goods, rather than as a source of investment capital. Agricultural products account for 35 percent of Vietnam's total exports to China.[78] Table 10 shows total export values for a variety of agricultural products exported to China over the period of 1996-2006.

76 Austrade, undated.
77 Ibid.
78 Coxhead, 2007.

Table 10: Agricultural exports from Vietnam to China: 1996-2006 (millions of US dollars)

Products/Year	1996	2001	2002	2003	2004	2005	2006
Rubber	60	51.6	89	160	358	519	851.8
Cashew	1.1	30.3	38	54	70	97	94.5
Seafood	0.09	253	174	174	48	62	65
Vegetables	5.1	145	78	87	138	35	24.6
Coffee	27.3	2.6	4	7	6	7.6	15.9
Rice	24.1	0.5	1.7	0.3	19.2	12	12.4
Tea	0.19	0.8	0.6	0.8	3.5	6	7.6

Source: Vietnam General Customs

3.4.2 Hydropower

Power supply is of chief concern in Vietnam's drive to further develop one of the world's fastest growing economies. According to the 6th Power Master Development Plan and the World Bank,[79] the capacity of Vietnam's power system will need to double between 2006 and 2010 to meet its growth in demand, which is projected at 16 percent per year for the period 2006-10. The high growth in demand is being driven by industrial load growth, increased residential access to electricity[80] and a concomitant increase in residential use, which is driven by rising incomes. To accommodate such growth in demand, the system must add some 2,000 MW annually in the period of 2006-10, from 11,340 MW at the end of 2005 to over 25,400 MW in 2010. Demand growth is expected to reduce slightly to 10-12 percent per year for the period of 2011-15.

By the end of 2005, the total installed generation capacity of 11,340 MW was dominated by hydropower (39 percent) and gas-fired plants (38 percent), with the rest supplied by coal-fired (14 percent) and oil-fired plants (5 percent) and diesel generators (6 percent). Load forecasts and the projected future mix of power sources vary by source.[81] According to the World Bank, the Vietnamese government aims for hydropower dominance (at 40 percent of total power generation) by the year 2015, while also aggressively developing gas-fired plants to a share of 40 percent and coal-fired plants to 18 percent.[82] Projections developed by the Vietnam Union of Science and Technology Associations (VUSTA), shown in Table 11, present a different scenario. VUSTA anticipates a dramatic increase in coal power generation by 2015 (28 percent), with hydropower declining to 33 percent. VUSTA also projects that by 2025 coal will jump to nearly 42 percent as the main power generation source, with hydropower dropping to 29 percent and gas declining to less than 20 percent.[83]

79 "Vietnam and Energy" analysis on the World Bank website.
80 Approximately 51 percent of households had access to electricity in 1995, compared to 90 percent in 2005.
81 VUSTA, 2007.
82 World Bank, 2006d.
83 VUSTA, 2007.

Table 11: 6th Power Master Plan Base Power Source Projections[84] (based on basic load forecast)

Source	2015		2020		2025	
	MW	%	MW	%	MW	%
Hydro power	13,500	33.2	17,200	28.5	21,300	29.2
Gas fuelled power	12,500	30.6	16,100	26.7	16,900	19.8
Coal fuelled power	11,500	28.2	18,200	30.2	35,600	41.8
Imported power	2,000	4.9	5,100	8.5	5,100	6
Renewable power	1,270	4	1,700	2.8	2,300	2.7
Nuclear power	--	--	2,000	3.3	4,000	4.7
Total installed capacity	40,700	100	60,300	100	85,100	100

Source: VUSTA, 2007

Of the existing power plants in Vietnam, 11 are large hydropower plants, as detailed in Table 12. The hydropower potential is mainly concentrated on three rivers: 6258 MW on the Da River in the north, 1485 MW on the Sesan River in central Vietnam and 2500 MW on the Dongmai River in the south. Seventeen medium and large dams with a total installed capacity of 2,952 MW began to be built between 2002 and 2004.[85]

Table 12: Existing Hydropower Plants in Vietnam (capacity in megawatts)

Power Plant	Installed Capacity	Feasible Capacity
Large Hydropower		
Thac Ba	108	120
Hoa Binh	1,920	1,920
Yaly	720	720
Vinh Son	66	66
Song Hinh	70	70
Da Nhim	160	160
Tri An	400	440
Thac Mo	150	150
Ham Thuan	300	300
Da Mi	175	175
Can Don	78	78
Small Hydropower	51	51
Total Hydropower	4,198	4,250

Source: Vietnam National Power Development Plan VI. Courtesy of Consultancy on Development (CODE).

Projections for the development of large-scale hydropower include both a large increase in installed capacity and a diminution of hydropower's role as a lead source for electricity generation. VUSTA's analysis of the 6th Power Master Plan suggests that Vietnam will have 48 operational hydropower stations exceeding 50 MW each by 2025 with total expected capacity

84 There are slight discrepancies between the sum of the individual source values for 2015 and 2025 versus the totals reported, but the numbers presented in this table are the same as those provided by the source. The discrepancies are very slight and do not take away from the overall information.

85 Greacen and Palettu, 2007.

of 21,300 MW, as detailed in Tables 13 and 14. However, the ratio of hydropower in total energy production will fall over time from 40 percent in 2005 to 29 percent by 2025. The projected decline of hydropower's share in total electricity production will be shaped by rising demand working against the limited (and falling) economic reserves of large-scale hydropower.[86]

Table 13: Plan for the construction and operation of hydropower plants in Vietnam with capacity exceeding 50MW: 2003-2010

Project name	Capacity (MW)	Estimated completion
Sê San 3	260	2005-06
Tuyên Quang	342	2006-07
Đại Ninh	300	2007-08
A V'o'ng I	210	2007
Thác Mo'	75	2008
Quảng Trị	70	2007
Đăk Rinh	100	2007
PleiKrong	100	2008
Bản Lả	300	2008
Đồng Nai 3+4	510	2009-10
Sông Tranh 2	162	2009
Sông Côn 2	57	2009
Buôn Kuốp	280	2008-09
Sông Ba Hạ	220	2010-11
Th'ợng Kon Tum	220	2010-11
Bản Chát	200	2010
An Khê + Ka Năk	173	2009
So'n La	2400	2009-10
Buôn Tua Sha	85	2009
Srêpôc-3	180	2009-10
Sê San 4	330	2011
Cần Đo'n	72	2003
Sê San 3A	108	2006
Spok Phu Miêng	54	2006
Đakr Tih	72	2007
Thác Muối	53	2007
Na Le	90	2007
Cốc San - Chu Linh	70	2007
EakRông Hnăng	65	2008

Source: VUSTA, 2007

86 VUSTA, 2007.

Table 14: Plan for the construction and operation of hydropower plants in Vietnam with capacity Exceeding 50MW after 2010

Project name	Capacity (MW)
Huội Quảng	560
Lai Châu	1200
Dăk My -4	210
Nậm Chiến	175
Hua Na	195
Sông Bung -4	200
Bản Uôn	250
Đồng Nai 2	80
Đồng Nai 5	100
Sông Bung 2	126
Bắc Mê	280
Đăk My I	210
Đứ'c Xuyên	100

Source: VUSTA, 2007

Besides large-scale hydropower, the Vietnamese government encourages domestic and foreign enterprises to build small and medium-scale hydropower plants. The 6th Power Master Plan calls for hundreds of hydropower plants with capacity from 1 to hundreds of megawatts to be built by domestic and foreign companies. The plan estimates the combined potential of small-sized hydropower plants (under 30MW) to be 2,300 MW, with generation potential of 8,000 gigawatt hours of electric power.[87]

According to the World Bank, the Vietnam Electricity Group, the successor of the state-owned power utility Electricity of Vietnam (EVN), is a profitable company with the capacity to make investment contributions without subsidies from the government. But the utility can only meet about 40-50 percent of the power sector's investment needs for the period of 2004-10, which translate to about $1.5 billion in additional investment required per year.

Several steps have been taken by the Vietnamese government to attract additional power sector financing, including:

- The government has developed a programme to restructure the power sector, which is expected to gain momentum in the coming years. The programme includes increasing reliance on independent power generation (financed by a variety of partners, not only foreign companies), equitisation[88] of EVN's main generating facilities into independent power generation units and gradual equitisation of distribution companies. EVN has already completed equitisation of several power plants and a distribution company. It will accelerate this process in the coming years.[89]
- The 2004 Electricity Law requires the setting up of an electricity market in Vietnam.
- The Ministry of Industry has developed a road map for the electricity market comprised of two phases, which will be implemented from 2006 to 2025 in order to develop a fully competitive electricity market in Vietnam.

87 VUSTA, 2007.
88 Equitisation is the process by which the economic benefits of ownership of a tangible asset, such as real estate, are divided among numerous investors and represented in the form of publicly traded securities.
89 World Bank, 2006d.

- Under the 2004 Electricity Law, Vietnam has established a new power sector regulator, the Electricity Regulatory Agency of Vietnam (ERAV). The government hopes that this regulatory agency will help mobilise independent financing and attract up to 20 percent of the required investments from the private sector.
- The Ministry of Industry signed a mandate on 21 July 2006 to allow the International Finance Corporation to "use its global advisory expertise, commercial investment experience and local presence in Vietnam to help the government structure an efficient framework for the power sector that will attract increased international investment."[90] The Ministry of Industry aims to increase private participation and investment in the country's power sector, and hopes to increase purchases from independent power producers from 14 percent in 2005 to 33 percent by 2010.

Despite large investments in the past, the World Bank and other international financial institutions are hesitant to invest in high-impact hydropower projects in Vietnam. Although there is interest on the part of the Vietnamese government for the World Bank to re-engage in hydropower investment support, the World Bank feels that "considerable caution needs to be taken concerning potential cross-border water use issues, and social and environmental risks, especially given Vietnam's recent launching of the development of the 2400 MW Son La Project, using its own resources. [World] Bank investment support, even for a relatively small project with low social and environmental impact, would have to involve scrutiny of environmental and social impact mitigation practices in the hydropower sub-sector more broadly."[91]

China's current role in hydropower in Vietnam appears to be quite minor. There are no joint-ventures, with most hydropower development carried out by Vietnamese firms, and formerly dominated by Electricity of Vietnam. China's current role is limited to the following:

- China supplies most of the turbines and other equipment for small and medium hydropower.
- Vietnam currently imports 200MW of electricity from southern China. This is expected to increase tenfold by 2015, with projected imports of about 2,000MW.[92]

Most of the information available on hydropower development in Vietnam focuses on the past and the present. But the high demand for investment in the power sector, demonstrated in the steps that have been taken by the Vietnamese government to attract financing, raise a question about the role of 'new financiers' such as China. It is not clear at this time what role Chinese capital has played in financing past or present hydropower development projects and what role it may play in the future. It is also not clear whether Chinese companies are active bidders in the current push by the Vietnamese government to diversify sources of investment finance. While we known that China's Southern Power Grid Corporation won a contract in 2007 to conduct a feasibility study for a 1,200 MW thermoelectric plant in central Binh Thuan province, more research is necessary to develop a broader understanding of the role of Chinese FDI in Vietnam's hydropower sector.

3.4.3 Mining

Vietnam is a country rich in mineral resources. It has some of the world's largest deposits of phosphate, bauxite and rare earths and large, commercially viable deposits of oil, coal, gold, gems, copper, zinc, tin, chromite, manganese, titanium (mineral sands), graphite and other minerals.[93] Also, resources of tungsten had been assessed as significant by world standards.

90 IFC, 2006.
91 World Bank, 2006d.
92 VUSTA, 2007.
93 Kusnir, 2000.

Exports of crude petroleum and coal accounted for 23.4 percent of Vietnam's total export earnings ($39.6 billion) in 2006. In the same year, Vietnam was one of the world's leading producers and exporters of anthracite coal.[94]

In 2006, the Ministry of Industry drafted a policy to encourage the development of five key industries during the five-year period of 2006-10. Bauxite mining, aluminium processing and steel manufacturing were among the key industries.[95]

More than 50 percent of Vietnam's exports to China consist of raw and semi-processed natural resources. This represents about 20 percent of Vietnam's total exports.[96] According to official figures, Vietnam's coal exports to China were valued at nearly $595 million in 2006.[97] Given the reported high levels of illegal coal exports to China, the actual value of coal exports is significantly higher.

Prior to 2000, most of Vietnam's exploration, production and trade of minerals were carried out by state-owned enterprises such as the Vietnam National Coal Corporation. Expert analysis described the sector as under-developed, small-scale and unregulated. There were some joint ventures, especially in oil and gas, and there was also some Chinese investment and purchased equipment in cement production.

Since 2000, foreign multinationals, including Chinese companies, have been involved in exploration that is likely to diversify exploitation into high-potential minerals like bauxite and copper. Table 15 provides available information on the engagement of Chinese companies in copper, bauxite and iron ore mining.

Table 15: Chinese investments in Vietnam's mining sector (investment values in US dollars)

Mineral	Company	Location	Chinese role	Plan
Copper	Lao Cai Copper Complex (VIMICO subsidiary)	Lao Cai	40.5 million loan from China to buy equipment	Loan taken in 2006 for mining, milling, smelting and refining; 10,000 tons/year
Bauxite	Second round of bid process: two Chinese companies were short listed	Dacnong (Central Highlands)	300 million; 40 % Chinese; 60 % Viacomin	Chinese company to hold share of 60 percent in the 1.1 billion alumina refinery; expected to produce 1.9 million tons of alumina in the first phase and four million tons in the second phase.
Iron	Joint venture: Sino-Vietnam mining and metallurgical Corporation (SVmmC)[98]	Lao Cai	Capacity: 1.5 metric tons (mt)/yr: 1 mt/yr for export to China; .5mt/yr to steel plant to be built in Lao Cai province	Loan taken in 2006 for mining, milling, smelting, refining; 10,000 ton/year.

Source: Central Institute for Economic Management

94 Wu, 2007.
95 Ibid.
96 Coxhead, 2007.
97 Communication with Vietnam General Customs.
98 Formed in 2006 by Kunming Iron & Steel Co. of China (kiSCO), Lao Cai mineral Co. (LCmC), and Vietnam National Steel Corporation.

Two areas of interest have emerged with respect to Chinese investment in the Vietnamese mining industry. The first is in relation to plans for a massive bauxite mine in the Central Highlands, for which a Chinese company has been short-listed as an investor. The sheer size of the bauxite plan, which will strip-mine two-thirds of the land area of Dacnong province, requires a great deal of attention. The deal for the massive bauxite plan had not been finalised at the time of writing. The earlier likelihood that a Chinese company would win the final bid is no longer certain, as the Prime Minister authorised the state-owned enterprise Vinacomin to cooperate with three world leaders in aluminium processing: Chalco (China), Alcoa (USA) and BHP-Billiton (Australia). Negotiations continued at the time of writing.

The second area of interest pertains to small-scale mining along the northern border with China. Illegal coal exports into China have been reported as rampant by current and former Vietnamese state officials, who estimate that up to 90 percent of the coal produced in Quang Ninh province in northeastern Vietnam is exported into China informally. The rising demand for coal from China has stimulated small-scale, unregulated coal mining throughout the province, with farmers digging up farmland to strip-mine for coal. This process involves a great deal of corruption with local government and border authorities.

4 Cambodia

4.1 Introduction

Cambodia is a small, predominately rural country of 14.21 million people,[99] bordered by Vietnam to the east and southeast, the Gulf of Thailand to the southwest, Thailand to the west and northwest and Laos to the northwest. Governed as a multiparty democracy under a constitutional monarchy, Cambodia has enjoyed a period of relative political stability and impressive economic expansion over the last ten years. GDP growth rates in real terms were 6.2 percent in 2002, 8.6 percent in 2003, 10 percent in 2004, 13.5 percent in 2005 and 10.6 percent in 2006.[100] In 2006 GDP stood at roughly $6.1 billion, which translated into per capita income of $441.[101] The poverty rate in Cambodia is estimated at about 30 percent, and Cambodia ranks 131 out of 177 countries on the 2007/2008 Human Development Index. Cambodia joined ASEAN in 1999 and the WTO in 2004.

4.1.1 Foreign Direct Investment

According to the Council for the Development of Cambodia (CDC), the government agency charged with overseeing investment activities, investment flows into Cambodia topped $4 billion in 2006, a significant jump from just over $1 billion in 2005.[102] In 2007 total investment slid to $2.7 billion, although the number of foreign investment projects increased year on year. According to the CDC, FDI inflows in 2007 went to tourism ($1.2 billion), infrastructure and 'other' sectors ($708 million), industry and manufacturing ($374 million) and agriculture and agro-industry ($363 million). In 2007 China led all foreign investors with investments of $461 million, followed by Thailand at $174 million, South Korea at $152 million and Japan at $122 million.

The textiles, clothing and footwear sectors, which account for roughly 70 percent of Cambodia's exports and employ some 355,000 workers, continue to receive foreign investment, despite worries that the industry could collapse after the expiration of the Multi-Fibre Arrangement, which ended on 1 January 2005. With the abolition of trade quotas on garments, and the potential implications this could have for the garment sector, the Cambodian government has moved to diversify its economy with strong focus on tourism, construction and agribusiness. Although the economy remains narrowly focused, the discovery of onshore mineral and oil deposits and offshore oil and gas reserves could help Cambodia broaden its economic base.

Several Chinese companies are involved in projects in the agro-industry sector, although the full extent of their involvement and the number of concessions awarded in recent years is unclear. Chinese mining companies, meanwhile, have been granted exploration rights in various parts of the country and are in competition with mining companies from other countries, especially the Australian mining giants Oxiana, Southern Gold and BHP Billiton.

China is also a dominant player in hydropower investment. Since 2006, the Royal Government of Cambodia (RGC) has approved at least four Chinese-financed hydropower projects.[103] The $260 million Kamchay dam, led by the Chinese developer Sinohydro corporation (highlighted in section 2.4.2.), is the country's largest foreign investment project. The three other dam sites – Trung Atay, Kirirom 3 and Russey Chrum –have received financial commitments from Chinese

99 The World Fact Book.
100 Council for the Development of Cambodia, 2006.
101 International Monetary Fund, 2006.
102 Associated Press, 2008.
103 Middleton, 2008.

investors, and some are under construction. A special provision to protect Chinese investment in these dam projects was endorsed by the National Assembly. In addition, there are a number of hydropower development projects proposed for the northeast of Cambodia that have been awarded to Chinese companies for pre-feasibility and feasibility studies, including the Sambor dam (on the Mekong mainstream), the Lower Se San 2 dam and the Lower Srepok 2, 3 and 4 dams. Recently, a Memorandum of Understanding was signed between the Ministry of Industry, Mines and Energy (MIME) and the Guangxi Guiguan Electric Power Company to conduct pre-feasibility and feasibility studies on the proposed Lower Srepok 3 and 4 dam.[104]

4.1.2 Official Development Assistance

As with Chinese capital, Chinese diplomacy plays an increasingly important role in Cambodia. To mark 50 years of diplomatic relations and to elevate bilateral cooperation, China and Cambodia proclaimed the year 2008 as the Sino-Cambodia Friendship Year.[105] China has been a key source of foreign aid in recent years, donating $6 million worth of steel bridges in 2001, waiving outstanding loans in 2002 and more recently pledging to provide naval vessels and other military assistance to the Royal Cambodian Armed Forces.[106] The greatest pledge came in 2006, when China's Premier Wen Jiabao during a visit to Cambodia promised $600 million in aid and grants to the RGC, prompting Cambodia's Prime Minister Hun Sen to describe China as Cambodia's 'most trustworthy friend.' Almost half of the aid package will go towards supporting the development of Cambodia's first large dam – the Kamchay dam being built by Sinohydro – with much of the rest earmarked for the construction of bridges and government offices.

In 2007 China participated for the first time in the annual Cambodia Development Cooperation Forum, which brings together government and development partners, with input from civil society groups, to review progress in domestic reforms and discuss development strategies for the future. China contributed $91.5 million of the $689 million pledged at the meeting, making it the third largest donor after the EU ($170.2 million) and Japan ($112.2 million).

4.1.3 Trade

China is also an important trading partner for Cambodia. In 2007, Cambodia imported $881 million worth of goods from China, a more than four-fold increase since 2001 ($204 million).[107] Various fabrics, cotton and machinery dominated imports, most of which were used as inputs into the largely Chinese-run garment industry. In comparison, Cambodian export volume to China was small at $51 million in 2007, up from $35 million in 2001. Timber and timber products made up almost half of exported goods, while apparel articles as well as natural resource-based/agricultural products (including rubber, cotton and fish) constituted the rest.

104 China Securities News, 2008.
105 Xinhua News Agency, 2008.
106 The Nation, 2007.
107 Cambodia Development Resource Institute, 2008.

4.2 Investment Regulations

Cambodia has passed various laws, regulations, policies, and decrees that govern investment, the energy sector, environmental protection and natural resources management, among others. The most relevant law governing foreign investment is the Law on the Investment of the Kingdom of Cambodia,[108] which assigns the CDC the responsibility for the rehabilitation, development and oversight of investment activities. Table 16 provides an overview of recently enacted laws and regulations that are relevant to investment and trade in Cambodia.

Table 16: Recently enacted trade and investment laws and regulations in Cambodia

Laws/Regulations	Year Enacted
Law on Insolvency	2007
Law on Secured Transaction	2007
Law on Concessions	2007
Sub-Decree No. 84 on Creation of Anti-Corruption Entity	2006
Law on Commercial Arbitration	2006
Law on Management of Factories and Handicrafts	2006
Sub-Decree on Economic Land Concessions	2005
Sub-Decree No. 148 on the Establishment and Management of the Special Economic Zone	2005
Sub-Decree No. 111 on the Implementation of the Amendment to the Law on Investment	2005
Law on Commercial Enterprise	2005
Law on WTO Accession	2004
Law on the Patents, Utility Model Certificates and Industrial Design	2003
Law on the Copyright and Related Rights	2003
Law on the Amendment to the Law on Investment	2003
Law on the Amendment to the Law on Taxation	2003
Law on Marks, Trade Names and Acts of Unfair Competition	2002
Law on Land	2001

Source: Adapted from Council for the Development of Cambodia, Cambodia Investment Guidebook, 2006

4.3 Stakeholders and Decision-making Processes

The process for approving an investment project is governed by the CDC and relevant line ministries, which review the project proposal and make a decision on whether to approve or reject the proposed activity. The CDC was established by the 1994 Law on Investment 1994 as a One Stop Service organisation for local and foreign investors. It is responsible for the evaluation and decision-making on all rehabilitation, development and investment project activities in Cambodia. The CDC is also authorised to grant various duty exemptions and tax holidays, to process registration for companies and to grant visas and work permits to individuals. The fast-track concept, however, is only recently becoming a reality as the government streamlines its investment regime and the CDC improves its capacity. The CDC's chairman is the Prime Minister; vice chairpersons include the Minister of Economy and Finance and the Minister of Commerce, as well as the first secretary of the Ministry of Economy and Finance (MEF).

The CDC consists of the Cambodian Rehabilitation Development Board (CRDB), which is responsible for infrastructure and public sector projects, and the Cambodian Investment Board (CIB), which handles applications from the private sector. Another agency that handles private investment is the Cambodian Special Economic Zone Board. This is also a One Stop Service, chaired by the Prime Minister, and responsible for investments in Special Economic Zones (SEZ), which offer investors various tax privileges and the free movement of goods and capital.

108 Adopted by the National Assembly in August 1994 and amended in March 2003.

The duties of the relevant line ministries are as follows:

1. The CDC is the coordinating body for setting development strategies and public investment policies;
2. The Ministry of Foreign Affairs and International Cooperation is the diplomatic window;
3. The Ministry of Planning prepares and monitors five-year plans and public investment programs, in cooperation with relevant ministries and institutions;
4. The Ministry of Economy and Finance develops the macroeconomic framework for the medium-term and budgets for implementing annual public investment programs, and controls the allocation of financing; and
5. Line ministries prepare and implement public investment projects and programmes by sector in cooperation with the Ministry of Planning and the CDC.

The Office of the Council of Ministers, line ministries and institutions are tasked with monitoring the implementation of projects in coordination with the One Stop Service mechanism. The Council of Ministers, or the cabinet, is the country's top executive agency, and facilitates and guides the activities of individual ministries and local agencies. It is chaired by the Prime Minister, with two Deputy Prime Ministers serving as vice chairpersons. There are roughly twenty-five additional ministers on the Council.

The Provincial/Municipal Investment Sub-committees were established in 2005 to oversee provincial investment activities and to work with district offices to implement national policies.[109] The Sub-committees are chaired by the provincial governor while the vice governors hold the positions of vice chairpersons. A representative of the CDC/CIB is appointed as a permanent vice chairperson. Representatives of ten local ministries are also members of the Sub-committees. The Sub-committees can accept registration of investment proposals for projects with investment capital of less than $2 million, and must submit relevant documents to the CDC/CIB for review. Projects with investment capital exceeding $2 million or located in at least two provinces or municipalities fall under the jurisdiction of the CDC/CIB.

The procedure and requirements for an investment project application are as follows:

1. A completed and signed investment proposal is submitted to the CDC or the Provincial Investment Sub-committee. The application must include a letter stating the intention of the investment project and identifying the investors; the technical, financial and operational qualifications of the applicants; any requests to the CDC regarding the project and an application fee. The feasibility study must include the following components:
   - Proposed market for products;
   - Production and pricing techniques;
   - Proposed import-export ratios;
   - Employment rations for Cambodian and foreign nationals;
   - Expected earnings in local and foreign currency, and a strategy for meeting foreign exchange requirements;
   - Environmental impact study; and
   - Human resource development plan.
2. Following submission of the application, the CDC issues a Conditional Registration Certificate to the applicant;

109 The Sub-committees were established by Sub-decree No. 17 on the Establishment of the Sub-Committee on Investment of the Provinces-Municipalities, February 2005.

3. The applicant must register with the Ministry of Commerce and obtain relevant licenses, as appropriate, from the Ministry of Industry, Mines and Energy, Ministry of Tourism, Ministry of Health, Ministry of Agriculture, Forestry and Fisheries (MAFF) or other relevant ministries depending on the investment activity;
4. Local authorities and/or the Ministry of Land Management, Urban Planning and Construction review the project construction plans;
5. The Ministry of Environment conducts an initial Environmental Impact Assessment;
6. The applicant registers with the Tax Department at the Ministry of Economy and Finance;
7. If the application is successful in all steps, the CDC issues a final Registration Certificate to the applicant.

The CDC shall notify the applicant of its decision to approve or reject the investment application within 45 business days from receiving a completed application. Once the CDC issues conditional approval, the review process should take a maximum of 31 business days before a final decision is reached.

Projects with investment capital exceeding $50 million must be reviewed by the Council of Ministers, as must be projects in the build-own-transfer, build-own-operate-transfer, build-operate-own and build-lease-transfer project categories, as well as sensitive projects that may impact on the environment or exploit natural resources.[110] Any projects that are to be located in one of Cambodia's SEZs need to be reviewed by the Management Board of the SEZ.

The Cambodian government grants two types of land concessions for investment projects that require land: 1) economic land concessions, which enable beneficiaries to clear land for industrial or agricultural use (regulated under the 2001 Land Law and the 2005 Sub-Decree on Economic Land Concessions); and (2) other land concessions including mining, fishing, industrial development and port concessions (these fall outside the scope of the 2001 Land Law). As foreigners are barred from owning land, land concessions only grant land rights for the time fixed by the concession contract. If a joint venture "owns, or intends to own land, or an interest in land," the foreign holding in such venture must not exceed 49 percent.[111]

Economic land concessions cannot exceed 10,000 hectares, must be exploited within 12 months of being granted and can last for a maximum of 99 years. MAFF grants economic land concessions that exceed 1,000 hectares or have a total investment value of 10 billion Riels (ca. $2.5 million). Provincial and municipal governors can grant concessions below these limits.

Some projects, however, appear to sidestep these regulations.[112] For example, some individuals have acquired several land concessions through the use of different companies, which jointly exceed the legal limit of 10,000 hectares. Many concessions have been granted over forested areas, which are state public lands and therefore cannot be granted as economic land concessions, or over former forest concessions (in violation of the Sub-decree on the Management of Forest Concessions). Also, many concessions have not been exploited within 12 months of being granted, as legally required.

Development projects implemented through loans from bilateral and multilateral partners are examined by the CRDB to ensure that they meet the country's development priorities. MEF is tasked with reviewing investment proposals and financing conditions, and is the designated government signatory for all loan agreements and the depository of all loan documents.

110 Sok, 2006.
111 Chapter 4, Article 13, Sub-decree No. 111 on the Implementation of the Law on the Amendment to the Law on Investment of the Kingdom of Cambodia.
112 The NGO Forum on Cambodia, 2006, UNOHCHR, 2007.

While regulations for the review of investment project proposals are well-defined, in practice the procedures for the approval of proposed projects are commonly bypassed.[113] The CDC acknowledges that "some development partners do not adhere to the provisions of the existing rules and regulations," and adds that some partners enter into agreements with individual government ministries and agencies without any prior coordination through the CDRB. This, the CDC says, "is a serious problem that hampers RGC's efforts to efficiently manage its coordination functions."[114]

According to the World Bank, Cambodia's investment climate is marked "by a high degree of informality, which denies the government the revenue base needed to improve public performance, which in turn contributes to weaknesses in the investment climate."[115] The World Bank also notes that Cambodian firms have singled out corruption as the leading constraint on the growth potential of the economy, followed by crime and anti-competitive practices, as well as regulatory concerns such as policy uncertainty, customs, trade and tax regulations, business licensing and operating permits.[116] The US-based Heritage Foundation, a conservative think-tank, calls Cambodia's regulatory transparency "very poor," nothing that "corruption contributes to the high costs of entrepreneurial activities."[117]

4.4 Sectors

4.4.1 Agribusiness

At the annual government-donor consultative group meeting in 2004, Prime Minister Hun Sen announced that Cambodia would modernise its agriculture sector, which employs 70 percent of the country's workforce and contributes about one third of GDP.[118] With an average annual growth rate of 3 percent between 1994 and 2004, agriculture lags significantly behind industry, tourism and garment sectors, which all recorded double-digit growth over the same period.[119] Improvement to the rural economy is a key component of the RGC's Rectangular Strategy for economic growth and poverty reduction.[120] Towards that end, the Ministry of Agriculture, Forestry and Fisheries (MAFF) has developed the Agricultural Sector Strategic Development Plan (2006-2010), which aims to boost production in rice, livestock, fish, forest products and rubber.[121]

Agriculture and agro-industry in Cambodia are governed by several ministries. MAFF is the principal ministry responsible for agricultural development and for overseeing economic land concessions. The Ministry of Land Management, Urban Planning and Construction is responsible for developing land policy and a regulatory framework for property rights, land registration and taxation. The Ministry of Environment is tasked with assessing and mitigating potential environmental impacts.[122] The Ministry of Interior is also involved through its provincial governors' offices, which are authorized to approve land concessions of up to 1,000 hectares and investments of up to $2 million.

113 UNOHCHR, 2007.
114 www.cdc-crdb.gov.kh
115 World Bank, 2004.
116 Ibid.
117 The Heritage Foundation, 2008.
118 World Bank, 2006a.
119 Economic Institute of Cambodia, 2006.
120 "The Rectangular Strategy for Growth, Employment, Equity and Efficiency in Cambodia," address by Samdech Hun Sen, Prime Minister at the Office of the Council of Ministers, July 2004. The Rectangular Strategy's four "growth rectangles" are: 1) enhancement of the agricultural sector; 2) private sector growth and employment; 3) continued rehabilitation and construction of physical infrastructure; and 4) capacity building and human resource development.
121 MAFF, 2006.
122 UNOHCHR, 2007.

Precise data on agricultural investments and the extent and ownership of economic land concessions in Cambodia is difficult to access. What is known, however, is that various types of agro-industry plantations have been awarded or have already been established in so-called fast woods such as acacia and eucalyptus, and in palm oil, cassava, sugarcane, corn, rubber, teak and cashew nuts.[123] According to MAFF, at least 57 economic land concessions covering 1,000 hectares or more were allocated as of 31 December 2006, covering an area of 943,069 hectares or just under 15 percent of arable land in Cambodia. Information on concessions covering less than 1,000 hectares was not available.

China is a key investor in some of the agricultural products noted above. Although the full extent of its involvement is not known, several Chinese nationals are reportedly involved in various agricultural plantation projects. As of the end of 2006, Chinese nationals owned 13 of the 26 foreign-owned economic land concessions covering some 188,000 hectares, as detailed in Table 17. Crops targeted for cultivation included several tree species (teak, sandalwood, fang lean, fruit, pine and acacia), oil palm and unspecified agricultural crops.

In addition, like Laos, Cambodia benefits from preferential access to the Chinese market for certain agricultural products under the ACFTA's Early Harvest Programme and special concessions for ASEAN's least-developed countries (see section 2.4.1).

123 The NGO Forum on Cambodia, 2006.

Table 17: Known economic land concessions owned by Chinese nationals in Cambodia (as of December 2006)

Company name	Location	Description	Crop cultivation
GG World Group (Cambodia) Development Ltd.	Stung Treng district, Stung Treng province	**5,000 ha** - Teak, sandalwood, fruit trees Date of contract: 18/05/05	No
Grand Land Agriculture Development (Cambodia) Co Ltd.	Sesan district, Stung Treng province	**9,854 ha** - Indigenous teak & other trees Includes areas of dense evergreen forest Date of contract: 23/01/06	Yes
Phou Mady Investment Group	Sesan district, Stung Treng province	**9,854 ha** - Indigenous teak & other trees Includes areas of dense evergreen forest Date of contract: 24/01/06	Yes
Asia World Agricultural Development (Cambodia) Co Ltd.	Sambo district, Stung Treng province	**10,000 ha** - Indigenous teak Date of contract: 15/03/06	Yes
Great Asset Agricultural Development (Cambodia) Ltd.	Sambo district, Kratie province	**8,985 ha** - Indigenous fang lean tree Date of contract: 11/08/06	Yes
Great Wonder Agricultural Development (Cambodia) Ltd.	Sambo district, Kratie province	**9,231 ha** - Indigenous fang lean tree Date of contract: 11/08/06	Yes
Wuzhishan LS Group Co Ltd.	O'Reang district, Mondulkiri province	**10,000 ha** - Indigenous pine Date of contract: 30/12/05	Yes
Kimsville Corp.	Phnom Srouch district, Kompong Speu province	**3,200 ha** - Cassava Date of contract: 24/10/00	No
Henan (Cambodia) Economic & Trade Development Zone	Phnom Srouch district, Kompong Speu province	**4,100 ha** - Agricultural crops & animal husbandry Date of contract: 29/07/99	No
Cambodia Haining Group Co Ltd.	Aural & Phnom Srouch districts, Kompong Speu province	**23,000 ha** - Castor oil plant & multi-agriculture Date of contract: 23/07/98	Experi-menting
Cambo Victor Investing and Developing Co Ltd.	Aural & Phnom Srouch districts, Kompong Speu province	**26,550 ha** - Agricultural crops Date of contract: 13/08/01	No
China National Corporation for Overseas Economic Cooperation Laostar Development Co Ltd.	Phnom Srouch district, Kompong Speu province	**8,000 ha** - Agro-industrial crops Date of contract: 26/09/00	No
The Green Rich Co Ltd.	Koh Kong district, Koh Kong province	**60,200 ha** - Oil palm & acacia Date of contract: 25/11/98	No

Source: UNOHCHR, 2007

4.4.2 Hydropower

Hydropower is playing an increasingly important role in Cambodia, both for domestic power consumption as well as export earnings. Only 30 percent of Cambodia's 14 million people have access to electricity, paying some of the highest electricity tariffs in the world.[124] The vast majority of the annual electricity generation of 230 MW is produced by outdated diesel generators using imported fuel oil. With demand for electricity expected to grow at about 13 percent per year between 2003 and 2008, the government plans to triple hydropower output in the next ten years.

In 2001, the Cambodian government promulgated the Electricity Law, which established the Electricity Authority of Cambodia (EAC) as the industry regulator. The law clarifies and segregates the government's role as regulator, policymaker, electricity supplier and investor.[125] The EAC is tasked with granting licenses to independent power producers and approving tariffs and other terms of electricity services. The Department of Hydropower at the Ministry of Industry, Mines and Energy (MIME) is the chief agency responsible for policies and investments related to hydropower. The Ministry of Water Resources and Meteorology issues hydropower project licenses and is tasked with managing the country's water supply. The Ministry of Environment evaluates EIAs for major projects and monitors their implementation.[126]

The Asian Development Bank is backing Cambodia's electricity sector reforms through its Mekong Power Grid Plan, which "envisages an interconnected power grid across the region, where Cambodia eventually becomes a net electricity exporter, once the country's full hydropower potential is realised."[127] That energy generating potential, according to a 2003 plan developed by MIME with the support of the Mekong River Commission, is estimated at 10,000 MW, with nearly half of that coming from projects along the mainstream of the Mekong River.

China's role in Cambodia's hydropower sector is significant, as detailed in Table 18. China strongly supports Cambodia's domestic hydropower development through the initiatives of Chinese state enterprises, backed by Chinese financiers such as the China Exim Bank and the China Development Bank. The RGC has already approved the construction of two major hydropower projects by Chinese developers – the Kamchay dam, which at some $260 million is currently the country's largest foreign investment project, and the Stung Atay dam at $200 million. Additional six projects are currently being studied on the Sesan River, four by Chinese developers and two by Vietnamese developers.[128] Most recently, in August 2008, the government granted permission to the Chinese company Guangxi Guiguan Electric Power Co. Ltd. to carry out feasibility studies for two hydropower dams on the Sre Pok River.[129] Civil society groups have warned that Cambodia's hydropower developments could displace thousands of people and seriously damage the environment unless effort are stepped up to effectively assess and address the dams' social and environmental impacts in consultation with the public.[130]

124 World Bank, 2007b.
125 Asian Development Bank, 2003.
126 Middleton, 2008.
127 Ibid.
128 Middleton, 2008.
129 Cambodia Daily, 2008.
130 International Rivers, 2008d.

Table 18: Chinese-led hydropower Projects in Cambodia (as of January 2008)

Project name	Installed capacity (MW)	Status	Sponsor	Commercial operation	Market
Kamchay	193	Under construction	Sinohydro	2010	Domestic
Sambor	465 or 3,300	Feasibility study	China Southern Power Grid Co Ltd.	2016	Unknown
Stung Chay Areng	260	Feasibility study	China Southern Power Grid Co Ltd.	2015	Domestic
Stung Atay	110	Construction	Yunnan Corporation for Int'l Techno-Economic Cooperation (CYC)	2012	Domestic
Lower Stung Russey Chrum	235	Feasibility study	CYC and Yunnan Southeast Asia Economy and Technology Investment Industrial Co Ltd.	2015	Domestic
Kirirom III	18	Feasibility study	State-run China Electric Power Technology Import and Export Corporation	2010/11	Domestic
Stung Tatay	80	Feasibility study	China National Heavy Machinery Corporation	2010	Domestic

Source: Middleton, 2008

4.4.3 Mining

Cambodia's mineral resources remain largely unexplored and untapped. In 2006, the mining sector contributed just 0.41 percent to the country's GDP.[131] However, over the past few years investors from Australia, China, South Korea, Thailand and the US have expressed interest in the country's mineral potential. Land-based metallic minerals such as bauxite, copper, gold and iron ore; industrial minerals such as gemstones and limestone; and offshore oil and gas reserves as well as significant onshore reserves around the Tonle Sap Lake could all play an increasingly important role in Cambodia's economy.[132]

The outlook for Cambodia's mining sector is primarily dependent on the development of Cambodia's oil and gas reserves in the Gulf of Thailand, which are expected to come on-stream by 2009 or 2010, although the date is speculative. The reserves contain at least 700 million barrels of crude oil by some estimates,[133] and could earn the government between $1 billion to $2 billion annually in revenues, though the production amounts and revenues remain unclear at this stage.[134]

The mining industry is governed by the 2001 Law on Mineral Resource Management and Exploitation, which is currently under review. The law regulates mines and all activities related to mining (except for the mining operation of petroleum and gas, which will be governed under a separate oil and gas management law). It stipulates that developers must attain the necessary licenses and permits from MIME. For developers to obtain a mineral exploration license or

131 Wu, 2008.
132 Ibid.
133 Xinhua News Agency, 2007.
134 Crispin, 2007.

an industrial mining license, they must first present detailed information about exploration, environmental impact assessments, restoration and management plans and their plan for the recruitment of Cambodian employees.[135]

Initial exploration licenses are granted by the CDC. If exploration is successful, developers are required to present a project plan to MIME as outlined in Sub-decrees No. 8 and No. 113 of the Law on Mineral Resource Management and Exploitation.[136] Mineral resources mined in Cambodia are prohibited from leaving the country, reserved to meet and supply the demands of domestic factories. Only finished products can be exported.[137]

In 2006, CDC approved mining projects worth $403 million.[138] Among overseas companies, the government signed agreements for gold prospecting with firms from Australia, Canada and Malaysia.[139] In addition to the activities of overseas firms, there were also many small-scale gold mines in operation, given the existence of at least 19 gold deposits in the country.[140]

Of the 35 licenses granted by MIME as of June 2007, 14 were awarded to foreign companies, 13 to joint ventures and the rest to local companies.[141] Most of the mining projects were awarded to Chinese, South Korean and local firms.[142] The projects cover bauxite, coal, gemstones, gold, granite, iron ore, limestone, metallic minerals, natural gas and crude petroleum, and most are still in the exploratory stage.

Information on the extent of Chinese mining investment is very limited and often based on newspaper sources rather than official government statistics. A number of Chinese companies have been licensed for mining exploration in Cambodia's north and northeast, including exploration of metallic minerals in the provinces of Mondulkiri and Kratie and gold in Ratanakiri province (see Table 19). Also, the Chinese company Mirach Energy Limited is involved in the exploration of offshore natural gas and petroleum. Finally, anecdotal evidence suggests that the number of Chinese mining concessions might be more extensive.

135 Chea, 2006.
136 Sub-decree No. 8 on the Determination of Principles of Investments in Mineral Resources, enacted on January 31, 2005 and Sub-decree No. 113 on the Amendment of Article 1 of the Sub-decree No. 8, enacted on 29 September, 2005.
137 Ministry of Industry, Mines and Energy, 2006.
138 Wu, 2008.
139 Council for the Development of Cambodia, undated.
140 Oxfam, 2004.
141 Wu, 2008.
142 Prospectors and Developers Association of Canada, 2008

Table 19: Known mineral operations by Chinese companies in Cambodia

Company	Status	Location	Comments
Zhong Xin Industrial Investment (Cambodia) Co. Ltd.	Licensed in 2004 to explore for metallic minerals	Mondulkiri and Kratie	-
Anquing (Cambodia) Invest Co. Ltd.	Licensed in 2005 to explore for metallic minerals	Mondulkiri	-
China Forwin International Investment Phnom Penh Mining Co. Ltd.	Licensed in 2005 to explore for metallic minerals	Mondulkiri	-
Yeah Boh	Geological survey of Prey Meas gold deposit area	Ratanakiri	Joint Chinese-Cambodian company, signed MOU with MIME in early 2003.
Wuhan Steel (50%), Baosteel Group (20%), Anshan Iron & Steel Group (15%), and Shougang Iron & Steel Group (15%)[143]	Awarded a joint-venture license in May 2007 to explore and develop iron ore mines	Preah Vihear	Exploration by China's National Machinery and Equipment Group found that the region may have 2.5 billion tons of iron ore reserves.
Mirach Energy Limited (formerly China Petrotech Holdings Ltd.) (48%), CPHL (Cambodia) Co. Ltd.	Cambodia Offshore Oil & Gas Block D, 7 years exploration and 30 years production right	Northeast of the Khmer basin in the Gulf of Thailand, 150 sea miles from Sihanoukville	Completed survey in 2007, which estimated Block D to contain 227 million barrels of recoverable reserves of crude petroleum and ca. 14 billion cubic meters of natural gas.

Source: Wu, 2008; Kurtenbach, 2007; Mirach Energy, 2008

143 According to unconfirmed reports, this concession has been sold to Korean investors.

5 China's Policies for Overseas Investment

China's economic relationship with the world is undergoing a rapid transformation. China acceded to the World Trade Organization in December 2001, and its WTO membership has laid a stage for Chinese enterprises to develop internationally. Since 2004, the country's Going Global Strategy (often referred to as Going Out) and a range of related initiatives have also helped spur outward investment. The strategy and its related initiatives include the promulgation of guidelines on outward FDI by countries and sectors, information regarding foreign countries' investment environments and opportunities, delegation of authority by the central government to certain provinces and municipalities, further relaxation of foreign exchange controls for outward investment and financial subsidies to companies investing in overseas natural resources acquisition.

The State Asset Supervision and Administration Commission was established in April 2003 to turn around the country's top state-owned enterprises under its control into 50 global multinational corporations that feature on the global Fortune 500 list. All companies that want to invest overseas must get regulatory approval, but as of 2003 all overseas investments of less than $3 million can be approved at the local government level rather than going through the lengthy and complicated process of applying through the central government.

According to the 10th Five-Year Plan for National Economic and Social Development, China will proactively make use of overseas natural resources, establish overseas supply bases for both oil and gas, diversify oil imports, build up a strategic petroleum reserve and maintain national energy security. The government's strategy of overseas natural resource acquisition is further demonstrated through the introduction in 2004 of a policy to subsidise investment by Chinese companies in overseas natural resources. China's export credit and guarantee agencies, in particular the China Exim Bank and Sinosure, have played an important role in fostering the rapid expansion of Chinese trade and re-thinking China's southward investment flows. In 2005, China Exim Bank approved loans to the value of RMB 158.6 billion (approximately $20 billion). Established only in 1994, the institution has grown to become the world's second or third largest export credit agency.

In line with its promotion for growth of FDI, the Chinese government has started to develop policies for regulating outward investment. The government's policies on environmental protection are encoded in the 1989 Environmental Protection Law, and the State Environmental Protection Agency (SEPA) is responsible for its implementation. SEPA has been working closely with the Global Environment Institute (GEI) and other relevant government agencies to develop guidelines for Chinese companies operating overseas. GEI has drafted the Environmental Guidelines for Overseas Aid and Investment and these have been endorsed by SEPA's Policy and Law Department.[144] Furthermore, GEI, the University of International Business and Economics and the Chinese Academy for Environmental Planning have collaborated to develop guidelines for Chinese enterprises involved in the forestry sector overseas. The guidelines were nationally televised on China Central Television (CCTV), and acknowledged by President Hu Jintao at the 15th Asia-Pacific Economic Cooperation meeting. In addition, there is growing interest in the Equator Principles, a voluntary set of guidelines based on International Finance Corporation (IFC) policies for incorporating social and environmental considerations in project financing. In early 2008, SEPA signed a deal with the IFC to introduce the Equator Principles in China.

144 Global Environment Institute, 2008.

Many challenges remain, however, in regulating overseas activities of Chinese companies. For example, the guidelines for Chinese overseas investments in silviculture operations stipulate that Chinese companies should adhere to the laws of the countries in which they operate. However, in many of the countries where Chinese companies invest, laws and regulations are poorly implemented. Were Chinese companies to operate as loosely as many national companies in Cambodia, Laos, and Vietnam, this would hardly be an improvement in practice. The real leverage promised by the regulations under development is the fact that they would hold Chinese companies accountable not only to the laws of the host countries, but also to the laws of China. Accountability to the laws of China is far more serious business, offering a more powerful deterrent to potentially destructive business practices.

6 Conclusions

The scoping study found that Cambodia, Lao PDR and Vietnam share certain commonalities but also some important differences in their relationship with China and its role as a financier and a market for exports. The key findings of this study are presented in this section.

Commonalities

China's emerging role as a financier

In the three GMS countries explored in this study, recent years have seen two related trends working in opposite directions. The first is the partial withdrawal of International Financial Institutions like the World Bank and the Asian Development Bank, which have become hesitant to invest in environmentally and socially controversial mega-projects. This has left an investment vacuum that has been gradually filled by Asian financiers, China among them. In recent years the IFIs have developed international standards and best practices for investment in projects with potentially large social and environmental impacts, such as hydropower, mining and industrial agriculture. These standards are often criticised by host governments as being onerous and cumbersome. The new financiers, including Chinese investment banks and companies, are not yet bound by such standards in their overseas activities, even though they may be required to follow them in their home countries. The new financiers are seen as bringing a different kind of investment package to the table: one that does not have benchmarks of compliance with human rights, democratic ideals and environmental protection regulations, but is built on relationships and friendship.

China is seen as a soft power of culture and ideas, one making friends all across the region, with friendship spearheading business activities. For example, the Chinese government has supported the construction of several important cultural and state buildings, such as the National Cultural Hall in Laos and the new office of the Council of Ministers in Cambodia.

China's demand for natural resources

The natural resource sectors of the three GMS countries have long been described as under-developed. In spite of its high potential, hydropower has remained largely untapped, and mineral extraction has been small in scale and intensive in labour. Until recently, agricultural production was largely for local consumption, and lacked intensive inputs and practices. But those days are over. China's rising demand for natural rubber, for example, has already led its southern neighbours to convert large areas of land to rubber production. China is a major investor in rubber production in Laos, although less so in Cambodia. And while China's investment in Vietnam's rubber sector is presently negligible, China is already the principal market for Vietnam's rubber exports.

Commodity prices are rising around the globe. Investments in extractive industries that were once prohibitive are now making economic sense. China's growing demand for natural resources from around the world is documented in many reports and press articles. In 2002, China became the world's largest consumer of copper, and it is now one of the largest consumers of alumina, zinc and nickel. In 2002 China also became the world's largest consumer of natural rubber, bypassing the US at 3.45 million tons, or 18.2 percent of total world consumption. China's demand for natural rubber is estimated to reach 11.5 million tons per annum by 2020, about 30 percent of the world's total production. This increase is directly linked to China's growing demand for vehicles, which is estimated to reach 200 million vehicles by 2020, a vast increase from the 10 million vehicles that traversed the country in 2005.

China's 'Going Global' (or 'Going Out') Strategy intends to meet its growing demand for natural resources, both regionally as well as globally. Arrangements are being made on investments and purchases of commodities from Latin America to Africa and neighbouring Southeast Asia. The infrastructure for transporting commodities is improving, in part through the ADB's GMS Economic Corridor Development strategy, which includes a network of roads connecting all countries in the GMS (e.g. Kunming to Bangkok and Hanoi), as well as a regional power grid and planned railway links from Kunming to Singapore, funded in part through development assistance and investment from China.

China's trade structure with its neighbours – importing resources, exporting manufactured goods

China's trade structure with Cambodia, Laos and Vietnam is presently dominated by China's imports of natural resources and exports of manufactured goods. More than 90 percent of exports from the three GMS countries to China comprise agricultural goods and raw materials. This stands in marked contrast to the structure of trade between China and some other Southeast Asian countries such as Malaysia, the Philippines and Thailand, where the trade structure is more complex and exports to China are less resource-intensive. While the relative importance of investment and trade with China varies among the three countries examined in this study, what they do sell to their large neighbour to the north is overwhelmingly commodities. And what they buy is mostly Chinese technology, machinery and consumer goods, many of which are of low quality, but within reach of poorer consumers in Cambodia, Laos and Vietnam.

Challenges in the implementation of regulatory policies and guidelines

The three countries surveyed in this study have progressive and well-crafted investment policies and regulations, but in many cases these policies and regulations are not being implemented as intended. Many factors contribute to this, including the vastly expanding demand for investment opportunities, the porous borders that facilitate movement of goods and people and the limited local capacity and resources to implement various regulations.

Informal trade

Informal (or illegal) trade in commodities is widespread in the countries examined in this study. For instance, some state officials in Vietnam estimate that the majority of the coal and rubber exported to China is informal, with no duties paid to the state and no records of the exported tonnage and value. In northern Laos it is widely known that companies from China are setting up informal operations for commodities such as sugar, cassava, corn and timber, which are then transported across the border. In parts of Cambodia it is widely suspected, though not confirmed, that several Chinese companies are involved in informal ventures in timber, gold and other minerals destined for markets in China.

Official development assistance

The Chinese government provides considerable foreign aid to Cambodia, Laos and Vietnam. Much of it is in sectors other than the three examined in this study, except in Cambodia, where the Chinese government has earmarked assistance for hydropower development projects. Besides hydropower in Cambodia, other sectors receiving official development assistance (ODA) from China include transport; communications; health, education and human resources development; and construction (of sports, culture and government building complexes).

Multinational companies

Chinese multinational companies are becoming investment players in Cambodia, Laos and Vietnam. For instance, the China Nonferrous Metal Industry Corporation (CNMIC) is active in copper mining in Vietnam and bauxite mining in Laos. The Sinohydro Corporation is

developing hydropower projects in both Laos and Cambodia. And the China Southern Power Grid Co. Ltd. is either active or exploring opportunities in all three countries.

Outward investment policies

The Chinese government has begun to develop policies and guidelines to govern overseas aid and foreign direct investment. While this is still a nascent process, it has great potential for addressing and mitigating potential conflicts over investments in sensitive projects like hydropower dams, strip mines and large-scale plantations. However, many challenges remain, as demonstrated by the stipulations in the draft guidelines for the forestry sector, which require Chinese companies to adhere to the laws of the countries in which they operate. In the case of Cambodia, Laos and Vietnam, these laws are widely recognised as being poorly implemented. Were Chinese companies to operate as loosely as national companies when it comes to forestry or environmental regulations, this would not make for an improvement in business practices. The real leverage promised by the new regulations is that Chinese companies that bypass local regulations would not only be in violation of the laws of the host countries, but would in fact be in violation of the laws of China. That is far more serious business, offering far more powerful deterrent to unregulated and potentially destructive business practices.

Differences

Variance in the relative importance of FDI, trade and ODA

The principal difference among the three countries in their relationship with China is in the relative importance of investment and foreign assistance versus trade in relation to agribusiness, hydropower and mining. In Cambodia and Laos, Chinese investment in all three sectors is considerable, with China ranked as the number one investor. In Laos, out of 77 planned hydropower projects, 16 have Chinese investors or developers including Sinohydro, a major Chinese state-owned enterprise that recently signed five Memoranda of Understanding with the Lao government. In Cambodia, Sinohydro is currently building the $260 million Kamchay Dam and approval has been granted by Cambodian authorities for at least four other major Chinese dam projects, including the Sambor Dam on the mainstream of the Mekong. For Vietnam, on the other hand, China is only the fifteenth largest overall investor, and Chinese investment and development assistance is considerable only in the mining sector. Vietnam itself is a regional leader in hydropower and mining, with its own investments in Laos and Cambodia, and it has extensive experience in growing rubber, also with investments in neighbouring countries. For Vietnam, trade with China, its largest trading partner, is most significant in the three surveyed sectors.

Friend or former colonial power?

The role of China is perceived differently in the three countries as well as across different social strata. Vietnam, naturally, carries the collective memory of China as a historical colonial power. The Cambodian government is welcoming of Chinese influence and capital, but there are concerns in the countryside about dams and other investment projects funded by the Chinese government or Chinese companies. The divergence between the perspectives of the elite and the grassroots on the growing influence of China presents considerable challenges for Cambodian, Lao and Vietnamese leaders. Where a civil society is emerging, as in Vietnam, people have begun to voice opposition to Chinese investment interests, as in the case of the Spratly Islands, an oil-rich area in the South China Sea. In Laos, where there are no formal civil society institutions, there has so far been no public outcry against the influx of Chinese immigrants who accompany investments. However, public concern over the proposed construction of a Chinatown satellite city in Vientiane has been widely documented in various newspapers, newswires and listserves. Official statistics indicate that at least 30,000 Chinese immigrants live in Laos, but in reality the figure could be ten times greater. The large number

of Chinese immigrants in Laos is a common subject of discussion on the streets of Vientiane. That being said, the question of Chinese ethnicity is a complex and sensitive subject, with millions of people who were born and raised in the three lower Mekong countries claiming Chinese heritage.

Towards environmentally and socially sustainable Chinese investment

China's growing presence and role in the three Mekong countries raises new opportunities through foreign direct investment, trade and regional partnership. These new opportunities could play an important role in generating income for some of the poorest countries in Southeast Asia and building closer regional ties for both China and the countries in which they invest. But the vastly expanding demand for investment opportunities, the porous borders that facilitate informal movement of goods and people and the limited local capacity and resources to implement various regulations in the three countries presents considerable risks to these hoped for opportunities. These environmental and social risks can translate into significant impacts on riverine ecosystems, agricultural lands and communities.

China is starting to make efforts to improve its profile in the international arena by showing its willingness to take on board international best practices such as the Equator Principles for banks, public participation strategies and green credit policies, among others. However, many of the mainly state-owned Chinese companies operating in the mining and hydropower sectors continue to have a poor social and environmental track record abroad. China now has the chance to become a global leader in environmentally and socially sustainable investment by carefully monitoring Chinese overseas investments, strengthening its own investment regulations and adopting global best practices and principles. However, the onus cannot be on China alone. China will need to partner with governments within the countries it operates in to help resource providers strengthen their own regulations, which does not necessarily have to come at the expense of investment inflows.

7 References

Asian Development Bank (2003) *Technical assistance to the Kingdom of Cambodia for capacity building of the Electricity Authority of Cambodia*. Asian Development Bank, Manila, The Philippines.

Associated Press (2008) "Foreign investment in Cambodia in 2007 down by nearly half." 27 February.

Austrade (undated) "Agribusiness to Vietnam: Trends and opportunities." Australian Trade Commission. http://www.austrade.gov.au/Agribusiness-to-Vietnam/default.aspx, accessed 19 April 2008.

Baumüller, H. (2008) *Prospects and drivers for agricultural change in the Mekong region: The case of rubber, rice and sugar*. WWF Greater Mekong Programme, Vientiane, Lao PDR.

Cambodia Daily (2008) "Cambodia Approves Srepok Dam Study." 14 August.

Chea, S. H. (2006) "Mining Law and related regulation for mineral development in Cambodia." Presented at the Conference on Mining Opportunities in the Greater Mekong Subregion, Vientiane, Lao PDR, 16-17 June 2006.

China Securities News. Accessed 3 June 2008. http://stock.hexun.com/2008-06-03/106408388.html

Committee for Planning and Investment (2007) *Foreign Aid Report FY 2005/2006*. Government of Lao PDR, Vientiane, Lao PDR.

Cornford, J. (2006) *Globalisation and Change in Southern Laos.* Oxfam Australia, Carlton, Australia.

Council for the Development of Cambodia (undated) *Mining*. Royal Government of Cambodia. http://www.cambodiainvestment.gov.kh/?q=industry_03, accessed 18 September 2008.

Council for the Development of Cambodia (2006) *Cambodia Investment Guidebook 2006*. Royal Government of Cambodia, Phnom Penh, Cambodia.

Coxhead, I. (2007) "A new resource curse? Impacts of China's boom on comparative advantage and resource dependence in Southeast Asia." *World Development* Vol. 35 No. 7, pp. 1099-1119.

Crispin, S. W. (2007) "Cambodia's coming energy bonanza." *Asia Times Online*, 26 January.

Dean, J. and Lovely, M. (2008) "Trade growth, production fragmentation and China's environment." NBER working paper series, National Bureau of Economic Research, Cambridge, USA

DEPD (2008) *Power Projects in Lao PDR (Updated on 29/5/2008)*. Department of Energy Promotion and Development, Government of Lao PDR, Vientiane, Lao PDR.

Diana, A. (2008) *Navigating the way through the market: A first assessment of contract farming in Luang Namtha*. Prepared for Gesellschaft für Technische Zusammenarbeit (Germany), Vientiane, Lao PDR.

Dinh Duc Truong (2007) *Institutional and regulatory context of natural resource management in Vietnam*. Consultant report submitted to Danish International Development Agency.

Dinh Van An (2005) *Vietnam-China Economic relations: Progress and problems*, Presented at "New Opportunity for the Furtherance of Regional Economic Integration", Nanning, 24-25 November 2005.

Do Nhat Hoang (Undated) "Legal framework on foreign investment in Vietnam." *Foreign Investment Review*. Obtained from CIEM.

Economic Institute of Cambodia (2006) *Cambodia Agriculture Development Report*. Economic Institute of Cambodia, Phnom Penh, Cambodia.

The Economist (2008) "The new colonialists: Special report on China's thirst for resources." 13 March.

Global Environment Institute (2008) "SEPA issues support for Environmental Guidelines for Overseas Aid and Investment." Press Release, 13 March, Global Environment Institute, Beijing, China.

Goodman, P. S. (2005) "China ventures southward: In search of cheaper labor, firms invest in Vietnam." *Washington Post Foreign Service.* 6 December.

The Government of Lao PDR (2003) "National Growth and Poverty Eradication Strategy."

Greacen, C. and Palettu, A. (2007) "Electricity sector planning and hydropower." In Lebel, L. et. al. (eds.), *Democratizing water governance in the Mekong Region*. (Chiang Mai: Mekong Press).

The Heritage Foundation (2008) *Index of Economic Freedom 2008*. The Heritage Foundation, Washington D.C., USA.

Hing, V. and Jalilian, H. (2008) *Environmental Impacts of the ASEAN-China Free Trade Agreement on the Greater Mekong Sub-Region*. International Institute for Sustainable Development, Winnipeg, Canada.

International Finance Corporation (undated) *IFC to mobilise private sector investment in Vietnam's power sector.* http://www.ifc.org/ifcext/media.nsf/Content/Vietnam_Power_Sector, accessed on 9 November 2008.

International Monetary Fund (2006) "Statement by IMF Staff Mission to Cambodia". Press Release No. 06/96, 11 May.

International Rivers (2008a) *New Financiers and the environment: Ten perspectives on how financial institutions can protect the environment*. International Rivers, Berkeley, USA.

International Rivers (2008b) *Sinohydro research*. (unpublished) International Rivers, Berkeley, USA.

International Rivers (2008c) *Existing and planned Lao hydropower projects*. International Rivers, Berkeley, USA.

International Rivers (2008d) "Cambodia: Hydropower projects lack transparency, could displace thousands." Press Release, 27 August.

John, K.D. (2006) "China and Vietnam put business first." *Asia Times Online*. 25 October.

Kurtenbach, E. (2007) "China steelmakers plan Cambodia investment." *Associated Press*. 25 May.

Kušnír, I. (2000) "Mineral resources of Vietnam." *Acta Montanistica Slovaca* Vol. 5 No. 2, pp. 165-172.

Leebouapao, L. (2007) *Economic and social effects of agriculture liberalization: A case study on Lao PDR – China Early Harvest Arrangement*. National Economic Research Institute, Vientiane, Lao PDR.

Ministry of Agriculture, Forestry and Fisheries. *Agricultural Sector Strategic Development Plan (2006-2010).* Royal Government of Cambodia, Phnom Penh, Cambodia.

McCartan, B. (2007) "China rubber demand stretches Laos." *Asia Times Online.* 19 December.

Mekong Private Sector Development Facility (2008) "Improving the investment climate for the mining sector in Lao PDR." *Business Issues Bulletin*, 6 March.

Middleton, C. (2008) *Cambodia's hydropower development and China's involvemen*t. International Rivers and the Rivers Coalition of Cambodia, Berkeley, USA and Phnom Penh, Cambodia

Ministry of Industry, Mines and Energy (2006) "Mining Law and related regulation for mineral development in Cambodia." Presentation to the GMS Business Forum Mining Conference in Vientiane, Laos.

Ministry of Planning and Investment (2008) *Approved foreign investment by country and sector 2001-January 2008 in Lao PDR*. Government of Lao PDR, Vientiane, Lao PDR.

Mirach Energy (2008) *Annual Report 2007*. Mirach Energy Ltd./China Petrotech Holdings Ltd.

The Nation [Thailand] (2007) "China invests heavily in Vietnam, Cambodia, Laos." 3 December.

The NGO Forum on Cambodia (2006) *Fast-wood plantations, economic concessions, and local livelihoods in Cambodia: Field investigations in Koh Kong, Kampong Speu, Pursat, Kampong Chhnang, Mondolkiri, Prey Veng and Svay Rieng provinces*. The NGO Forum on Cambodia, Phnom Penh, Cambodia.

Oxfam (2004) *Small-scale gold mining in Cambodia: A situation assessment.* Oxfam America, Phnom Penh, Cambodia.

Pamlin, D. and Long B. (2007) *Rethink: China's outward investment flows*. WWF, Gland, Switzerland.

Pham Thu Hien (2008) *The effects of ODA in infrastructure on FDI inflows in provinces of Vietnam, 2002-2004*. Vietnam Development Forum, Working paper 089.

Phomsoupha, X. (2008) *Power sector development in Lao PDR*. Power Point presentation, Vientiane, Lao PDR, 7 May 2008.

Phouyyavong, K. and Talje, D. (2006) *Case study on production and market conditions for corn in Namor district, Oudomxay province*. Progress Report for NAFRI, Ministry of Agriculture and Forestry. LSU/AFRP Field Report No. 06/02.

Prospectors and Developers Association of Canada (undated) "Cambodia's Mining Sector, 2008." Prospectors and Developers Association of Canada, Toronto, Canada. http://www.pdac.ca/pdac/publications/na/07035-cambodia-minig-sector.htm, accessed 18 September 2008.

Schuettler, D. (2008) "Laos faces thorny land issues in Asia's orchard." *Reuters*, 9 April.

Shi, W. (2008) *Rubber boom in Luang Namtha: A transnational perspective*. Prepared for Gesellschaft für Technische Zusammenarbeit (Germany), Vientiane, Lao PDR.

Sok, C. S. (2006) *Business and investment opportunities in Cambodia*. Powerpoint Presentation in Nagoya, Japan, 15 November 2006.

Sullivan, M. (2008) "Neighbours feel China's expanding power." *National Public Radio. USA*, 3 April.

UNCTAD (2008) *World Investment Report 2008*, United Nations Conference on Trade and Development, Geneva, Switzerland.

UNOHCHR (2007) *Land concessions for economic purposes in Cambodia: A human rights perspective*. Special Representative of the Secretary General for Human Rights in Cambodia, United Nations Office of the High Commissioner for Human Rights.

Vientiane Times (2008a) "China becomes largest investor in Laos." 28 May.

Vientiane Times (2008b) "Cassava puts more money in farmers' pockets." 12 April.

Vientiane Times (2007) "Lao-China trade value rises." 13 October.

Financial Publishing House. *Vietnam's Economy in 2007*.

Vietnam News Agency (2006) "Cambodia asks Chinese bank to provide development loans." 2 August.

Vongsay, P. (2008) "US$65 million electricity project goes ahead." *Vientiane Times*. 9 April.

VUSTA (2007) *Assessment of Vietnam Power Development Plan*. Vietnamese Union of Science and Technology Associations, Hanoi, Vietnam.

World Bank (2007a) *Lao economic monitor*. World Bank Lao PDR Country Office, Vientiane, Lao PDR.

World Bank (2007b) *Sharing growth: equity and development in Cambodia*. World Bank, Washington D.C., USA.

World Bank (2006a) *Cambodia – Poverty assessment 2006*. World Bank, Washington D.C., USA.

World Bank (2006b) *Lao economic monitor*. World Bank Lao PDR Country Office, Vientiane, Lao PDR.

World Bank (2006c) "Final report for economic geology." *FR-2: Sector Plan for Sustainable Development of the Mining Sector in the Lao PDR*. World Bank Lao PDR Country Office, Vientiane, Lao PDR.

World Bank (2006d) "Investment climate assessment, Vietnam 2006." From Workshop on Investment Climate and Foreign Direct Investment in CLMV Countries, Hanoi, May 2006.

World Bank (2004) *Seizing the global opportunity: Investment climate assessment and reform strategy for Cambodia*. World Bank Cambodia Country Office, Phnom Penh, Cambodia.

World Bank (undated) *"Cambodia and energy."* http://go.worldbank.org/NNLRAV8ED0, Accessed 18 September 2008.

Wu, J. C. (2008) "The mineral industry of Cambodia." *2007 Minerals Yearbook: Cambodia*. US Geological Survey, Reston, USA.

Wu, J. C. (2007) "The mineral industry of Vietnam." *2006 Minerals Yearbook: Vietnam*. US Geological Survey, Reston, USA.

Xinhua News Agency (2008) "Chinese FM meets Cambodian PM, foreign minister." 3 February.

Xinhua News Agency (2007) "Cambodia prepares oil, gas law." 11 April.