

CHAPTER 3

China's Foreign Economic Cooperation for CLMV : Contact Engineering in CLMV

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INTRODUCTION

China's foreign economic cooperation includes foreign direct investment, foreign contract engineering, foreign labor service, foreign economic aid and recipient aid. For this paper, the discussion focuses mainly on China's foreign contract engineering, especially in Cambodia, Laos, Myanmar and Vietnam (CLMV).

Foreign contract engineering is one of the major modes in China's "go global" strategy. It began in the late 1970s on the basis of foreign economic-assisted projects. As a new form of foreign economic cooperation, foreign contract engineering has increasingly developed during the period of China's reform and opening up process over the past 30 years. It can be said that foreign contract engineering is an outcome and result of China's reform and opening up, and has become a relatively ripe business in China's foreign economic cooperation. With its development, foreign contract engineering enterprises have been able to train more managers and skilled workers, thereby improving the general level of manpower competence in China. China's foreign contract engineering business has therefore become one of the most important components of foreign economic cooperation and has increasingly played an important role in the development of China's national economy. It is in this context that it becomes useful and relevant to know more about this business and to examine its various features and characteristics. Hence, this paper looks deeper into this issue.

1. DEVELOPMENT COURSE OF CHINA'S FOREIGN CONTRACT

ENGINEERING

1.1. Beginning stage (1979-1982)

By the end of 1978, China began its historic path towards reform and opening up. One of the first decisions of the Chinese government in this regard was to set up the China Construction Company to carry out the business of foreign contract engineering. The Chinese government approved 29 enterprises from all over the country to be involved in the business of foreign contract engineering and foreign labor service, and signed 755 contracts with foreign countries, with the total amount reaching USD 1.2 billion during this period. Most of the projects contracted by Chinese enterprises during this period were in the areas of house and road construction, with West Asia and North Africa as their major markets.

1.2. Developing stage (1983-1989)

In the second stage, China's foreign contract market gradually expanded. Apart from funding the enterprises, the Chinese government also supported them in terms of the State policy necessary to carry out foreign contract engineering. Based on global developments, the Chinese government made strategic moves that transferred some foreign contract engineering projects from the Middle East and North Africa to Asia and other countries. South Asia, Southeast Asia, America and West Europe thus became new markets, thereby diversifying the Chinese foreign contract engineering market. Construction of houses and roads remained as the major projects but Chinese enterprises also began to be involved in contract work on some engineering and more

technical projects such as power stations and fertilizer plants. During this period, 88 enterprises obtained the right to operate foreign contract engineering work, with a total amount of contracts reaching USD 9.8 billion.

1.3. Rapid development stage (1990-2001)

When the Gulf War broke out, China's foreign contract engineering markets were deeply affected. Because of this, China had to adjust its market setup and turned its focus from West Asia and North Africa to the East Asian and Southeast Asian markets. Meanwhile, China also actively explored and tapped opportunities in the former Soviet Union, Europe and other markets, and achieved remarkable progress.

During this period, China also began to carry out its "go global" strategy. In this regard, the State Council of China published a document in 2000 regarding the development of foreign contract engineering on a bigger scale. With the government's support, China's foreign contract engineering therefore rapidly developed.

As of 2001, 1400 enterprises have obtained the right to operate foreign contract engineering projects. For the period 1990-1998, the total amount of foreign contract engineering agreements reached USD 54 billion.

1.4. Massive development stage (2002-present)

China's foreign contract engineering entered new heights during this stage, with foreign contract engineering becoming one of the key elements of China's foreign economic relations and one of the major modes of its "go global" strategy.

By the end of 2007, 3000 enterprises obtained the right of operation for foreign

contract engineering, of which 51 companies were selected as among the top 225 contractors in the world, with 13 entering the list of the top 100 enterprises in the world.

Based on data from the Chinese Ministry of Commerce, by the end of October 2009, the total amount of the signed contracts with foreign countries reached USD 534.2 billion, with USD 320 billion worth of projects that were completed and turned over to the host country.

2. MANAGEMENT AND POLICY SYSTEMS OF CHINA'S FOREIGN CONTRACT ENGINEERING

The principles of equality, mutual benefit, pursuit of practical results, and adoption of various ways in seeking common development goals, along with the Eight -Word principles, constitute the basic policy of China's foreign contract engineering.

Based on these and on developments affecting China's foreign contract engineering, the government departments involved in the operation of this business reformed their management system and regulations, with China's former Ministry of Foreign Trade drafting a document in the 1990s titled "Regulations of Management of Foreign Contract Engineering and Labor Service of the People's Republic of China". The document consolidated the business order and outlined the principles for quality assurance and for gaining success.

According also to the document, the Ministry of Commerce (former Ministry of Foreign Trade) will be the major management department handling China's foreign economic cooperation, with local foreign trade offices or bureaus taking charge of the management of foreign economic cooperation at the local level. It should be noted

that governments do not deal directly with companies and enterprises.

Meanwhile, in 2000, the State Council published a document on “Suggestions of Devote Major Efforts to Developing Foreign Contract Engineering” which put some measure of support for foreign contract engineering. This was followed later in 2004 by the State Council’s publication of the document “Suggestions of Strengthening Economic Diplomacy Work to Developing Countries” which this time provided support to enterprises for foreign contract engineering in terms of policy. Then in 2006, the permanent meeting of the State Council adopted a “Suggestion of Encouragement and Specifications of Foreign Investment Cooperation of Our Enterprises” which emphatically pointed out that enterprises must “abide by local law and regulation, adhere to open justice and transparency of projects of contracting engineering, keep a promise, fulfill necessary social responsibility, ensure lawful rights and interests of local staff and workers, attach importance to the protection of the environment, and show concern to and support facilities of local social and the people’s livelihood.” Again, this was followed on May 7, 2008 by the adoption by the Eighth Permanent Meeting of the State Council of a document concerning the Regulation of Management of Foreign Contract Engineering. The regulation focused on the key qualifications of enterprises that are engaged in foreign contract engineering and stipulated the concrete and exact conditions required of enterprises to be engaged in foreign contract engineering. The regulation’s main contents include the following: (1) that the government should encourage and support foreign contract engineering, with the State Council’s concerned departments making policies and measures to promote foreign contract engineering, establish service and risk guarantee systems of foreign contract engineering, (2) that the

State Council's concerned departments should establish reporting systems and provide free information to enterprises engaged in foreign contract engineering, facilitate and ensure a fair and fast customs inspection service system of for goods and people, and (3) that associations and chambers concerned must make clear specifications of trade for enterprises engaged in foreign contract engineering and uphold fair competition and members' interests.

The regulation stipulates that if enterprises engaged in foreign contract engineering do not meet the conditions required to continue carrying out foreign contract engineering, then the concerned government departments must order them to address and correct these within a definite time. And if the enterprises cannot do this within the required time, their certificates or licenses will then be revoked.

3. CHARACTERISTICS OF CHINA'S FOREIGN CONTRACT ENGINEERING

Since China embarked on its reform and opening up program, it had participated in numerous international competition bids and opened international markets of contract engineering. In due time, certain features have begun to characterize and reflect the way that China carries out its foreign contract engineering. Among these are:

(1). Adherence to the principles of equality, mutual benefit, pursuit of practical results, and adoption of various ways in seeking common development goals, and to the Eight -Word Principles of abiding by a contract, guaranteeing quality, making small profits, and putting high value on friendship. The ultimate goal is to value friendship highly and just make small profits.

(2). Definitive shaping of the market setup of China's foreign contract engineering.

Over the years, China's foreign contract engineering market setup took on a new shape as China gives priority to Asia, develops contracts in Africa , resumes activities in the Middle East, and explores opportunities in Europe, America and the South Pacific.

(3). Steady growth of China's foreign contract engineering. At present, more and more enterprises are entering the market of foreign contract engineering. But in order to uphold order in the business' operations and guarantee the quality of projects, the departments responsible for foreign contract engineering continue to examine and accordingly approve qualifications of enterprises that will carry out foreign contract engineering. At present, it is the Ministry of Commerce which approves and grants the certificate for Chinese enterprises to be engaged in and develop foreign contract engineering.

(4). Strong competitive advantage in foreign contract engineering. At present, China's foreign contract engineering has covered almost all areas in the international contract engineering market, and has developed advantages in some fields such as construction of houses and roads, transportation, power stations, dams, water conservancy and others.

(5). Expansion of the scale of foreign contract engineering. China's enterprises constantly obtain large contract projects in international invitations to bid. In 2006 alone, China's enterprises won 6 projects in international bids, with the amount of contracts exceeding USD 1billion.

4. CHINA'S CONTRACT ENGINEERING IN CLMV

ASEAN is China's most important market for foreign contract engineering. Since the 1990s, China's enterprises have attached importance to opening markets of foreign contract engineering in ASEAN because of the latter's abundant resources, cheap labor, convenient transport, similar cultural traditions and friendly relations with China. As of this date, China has signed many foreign contract engineering in ASEAN, the total amount of which has reached close to USD 50 billion. China's foreign contract engineering in ASEAN continues to expand and its competition increasingly becomes stronger in the international market.

CLMV (Cambodia, Laos, Myanmar and Vietnam) have become a major market of China's foreign contract engineering since China's enterprises entered CLMV in the 1990s. And although the number of China's foreign contract engineering in CLMV is not that many, most of the projects have a bearing on the national economy and the people's livelihood. The following are some of the major projects in CLMV.

4.1. Myanmar

Myanmar is China's neighbor. The two countries have kept close ties and enjoy a long history of economic relations and technical cooperation. After its opening up by the end of 1988, Myanmar strengthened trade and economic and technical cooperation with China. Especially after suffering sanctions in the 1990s from the western countries, Myanmar further strengthened economic cooperation with China and China's enterprises participated more in infrastructure projects in Myanmar.

By March 2009, China has signed many foreign contract engineering agreements

with Myanmar, the total amount of which reached USD 5.83 billion. Of this, China had completed and turned over about USD 3.91 billion worth of projects.

The major contract engineering projects undertaken by China's enterprises in Myanmar are:

(1) Paung Laung Hydropower Station

The Paung Laung hydropower project is situated in the center of Myanmar, between the two big cities of Yangon and Mandalay, it is 12 miles from Pyinmana Township. Paung Laung Hydropower Station's installed capacity is 280MW with its scope of power supply covering about 90 percent of the country. The conditions for the construction of the Paung Laung Hydropower Station were very positive since the Myanmar government placed the project in the top priority list of the Special Project Committee. With its completion, the installed capacity of power supply increased to about 34.2 percent of the country. The station has the function of irrigation and can cover a total irrigation area of 21520 hectares. The reservoir's highest water level deposit can reach to about 690 million/cubic meters. Consequently, the project's completion greatly eased the power supply shortage in Myanmar, and became conducive to the development of Myanmar industry, agriculture, communication, culture and education, and medical care and hotel tourism. It also helped to improve people's lives and solve the problem of unemployment for a large number of people.

The Paung Laung Hydropower Project is the largest in terms of foreign economic and technical cooperation in Yunnan Province and also the largest export of the complete set of equipment and technology. It was built by Yunnan Machinery and Equipment Import & Export Co., Ltd, with a total contract value of USD 170 million

provided by the Chinese Government on a seller's credit basis. The first generating unit began to generate electricity in December 2003 and the full completion took place in 2006. Myanmar Premier Soe Win cut the ribbon during the opening ceremony of the completed Paung Laung Hydropower Station in 2006.

(2) Hydropower Station in Ruili (Shweli) River

This particular Hydropower Station is located in the Shan State of North Myanmar and is a first grade cascade hydropower station in the upper - middle reaches of the Ruili River. The installed power generating capacity reached 600,000 KW and the designed output of generated electricity is 4 billion KWh. It is so far the largest Hydropower Station in Myanmar with a total investment amount of about 3.2 billion RMB (about USD 47million). Yunnan United Power Co., Ltd undertook its construction. In June 2007, Sino-hydro Bureau 14 Co., Ltd signed a construction contract engineering with Myanmar with an amount of construction contract of RMB 850 million Yuan. On May 16, 2009, the final generating unit of the First Grade Cascade Hydropower Station in Ruili River made a test run for 72 hours and then went into operation. The Hydropower Station was completed on schedule, with Myanmar Premier Tien Sen cutting the ribbon during the opening ceremony.

(3) Mintha Hydropower Station (in Magway Province)

China Gezhouba Group Company Limited signed an agreement to undertake the construction of Mintha Hydropower Station with the irrigation department of Myanmar's Ministry of Agriculture. The installed power generating capacity reached

40000 KW and the amount of contract was USD 14 million.

(4) Diversion tunnel works of Baluchaung No.3 Hydropower Station

China Gezhouba Group Company Limited signed an agreement with Myanmar Future Emerge Co., Ltd for the building of the diversion tunnel works of Baluchaung No.3 Hydropower Station in September 2009. Baluchaung No.3 Hydropower Station is a third grade cascade hydropower station in Baluchaung River. The installed power generating capacity reached 52000 KW, with an amount of USD 21 million.

4.2. Vietnam

Vietnam is another important market of China's foreign contract engineering. Since Vietnam carried out its innovation and opening up policies, it has stepped up its economic development. At the start of the 21st century, it embarked on a lot of infrastructure projects, thereby providing business opportunities for Chinese enterprises. China's enterprises participated in contract engineering projects in Vietnam soon after the normalization of the China-Vietnam relationship. Contract engineering cooperation rapidly developed and became a bright spot in the economic cooperation between China and Vietnam. As of September 2006, the total amount of contract engineering agreements signed by China with Vietnam has reached USD 3.94 billion while the amount of completed and turned over projects reached USD 1.63 billion. Data also show that in the period January–October 2008, China's enterprises signed a new several contract engineering agreements, with an amount totaling USD 3.1 billion. Vietnam has thus become the second largest market of China's contract engineering in Southeast Asia and contract engineering has become a highlight of economic cooperation between

China and Vietnam.

The major contract engineering projects undertaken by China's enterprises in Vietnam are as follows:

(1) Con Giang River 2 Hydropower Station

The construction of the Con Giang River 2 Hydropower Station is the first EPC (or General Contract) project in Vietnam undertaken by Chinese enterprises. The Con Giang River 2 Hydropower Station is located in Quang Nam Province . It is a two grade cascade hydropower station with an installed power generating capacity of around 60000 KW. The project started in June 2006 and the first generating unit began to generate electricity in June 2009. The final generating units of the second grade cascade hydropower station had a test run for 72 hours and went into operation on August 5, 2009. This meant that 5 sets of generating units of the two grade cascade hydropower station went into full operation by then. The project was undertaken by the Bureau 6 of China Railway Engineering Company and Guangxi Guineng Engineering and Consultation Co., LTD.

(2) City Track Project in Hanoi

In August 2009, the City Track Project in Hanoi from Cat Linh to Ha Dong started. The project was undertaken by Bureau 6 of China Railway Engineering Company which, as the general contractor, was in charge of the design, supply of materials, equipment and rolling stock, construction, and transmission. The city track's length is 13.08 kilometers, with a total investment of USD 553 million, of which the contract

amount was USD 436 million. The Chinese government provided a concessional loan of RMB 1200 million Yuan and a buyer's credit of USD 250 million.

(3) South-North Expressway 1A in Ho Chi Minh City

The construction of the South-North Expressway 1A in Ho Chi Minh City was a bid project, with China's enterprises winning the bid in July 2009. This is the first time that a Chinese enterprise won a construction bid for expressways in Vietnam. On August 5, 2009, China Road and Bridge Company signed the contract with Vietnam Expressway Investment and Development Company, with a contract amount of 138 million VND (about USD 78 million) and a timeframe of 32 months. The length of the expressway is 51 kilometers with 4 lanes and the full speed for vehicles is 120 kilometers per hour.

(4) Construction of a Beer Plant in Hai Duong Province

The beer plant is located in the Dai An Industry Park in Hai Duong Province 80 kilometers to the east of Hanoi. The plant's designed annual output is 100 thousand tons in the first phase and shall be increased to 200 thousand tons in the second building phase. The project was undertaken by Yunnan Machinery and Equipment Import & Export Co., Ltd. After several mutual visits and communication, the owner finally recognized the techniques, experience and reputation of the contractor and appointed it as the general contractor on EPC basis not only in terms of supplying the complete sets of equipment but also in carrying out the civil construction of the project. The two sides signed the contract of intention in 2007 and the technical agreement in May 2008. On

October 23, 2008, Vietnamese Premier Nguyen Tan Don participated in the signing ceremony of the contract framework agreement. After untiring efforts exerted for over one and a half years, the EPC (General Contract) for the building of the beer plant by Yunnan Machinery and Equipment Import & Export Co., Ltd in Hai Duong Province, Vietnam was finally signed in Hanoi on February 20, 2009.

(5) Cam Pha Electric Power Plant

In March 2006, China's Harbin Power Station Engineering Limited Company signed an engineering general contract with Vietnam's Cam Pha Electric Power Joint-Stock Company. According to the contract, Harbin Power Station Engineering Limited Company will undertake the construction of the first phase of the project of Cam Pha Electric Power Plant .The total investment of the first project phase is USD 349 million. The project started in 2006 and based on the contract terms, should be completed by the end of 2009.

(6) Quang Ninh Heat and Power Plant

The project is one of a number of cooperation programs between China and Vietnam. It was signed when Chinese President Hu Jintao visited Vietnam in 2005.The investors of the project are Vietnam Power Corporation, Vietnam Coal and Minerals Group and Vietnam Construction Imports and Exports Corporation. The total amount of capital invested was USD 591 million, with the first project phase contracted by China's Shanghai Electric Group in the amount of USD 452 million. By negotiated bidding, the Vietnamese government decided on Shanghai Electricity Group as the contractor.

China provided a buyer's credit of USD 407 million. The project started in April 2006.

(7) Ninh Binh Nitrogenous Fertilize Plant

In November 2007, China Huangqiu Contracting & Engineering Corp signed a contract agreement of General Contract (EPC) with Vietnam Chemical Corporation. China Huangqiu Contracting & Engineering Corp undertook the construction of Ninh Binh Nitrogenous Fertilize Plant with a total amount of investment of about USD 550 million and China provided USD 500 million of buyer credit.

(8) Hai Phong Heat and Power Plant

In November 2006, Vietnam's Hai Phong Power Joint-Stock Company signed a contract with China's Shanghai Eastern Electric Group. According to the contract, Shanghai Eastern Electric Group would contract the second phase of the project of Hai Phong Heat and Power Plant. The total amount of capital invested is USD 624 million while the amount of the contract is USD 453 million. The plant's output after its completion will be 3.6 billion kwh per annum.

(9) Reclamation of land from the sea in Can Gio County, Ho Chi Minh City

The project is so far the largest reclamation work in Vietnam with a contract cost of construction of USD 170 million. The area of reclamation is 250 hectares. China's Guangzhou Limited Company of Bureau of Waterway undertakes the construction of the project which started in December 2007.

(10) Tay Ninh Cement Plant

The Tay Ninh Cement Plant is built by China's Tianjin Cement Designing Institute. Total amount of capital invested is USD 178 million, with the project starting in 2007. The investor of the project is the First Construction Material Corporation (Fico), Ministry of Construction of Vietnam. It is estimated that the plant will go into operation in 2009 and the plant will produce clinker 4000 ton per day.

4.3. Cambodia

With the realization of peace in Cambodia in the 1990s, Chinese-Cambodian relations entered a new stage. Economic and trade relations between the two countries rapidly developed and the fields of cooperation continue to broaden. After the two sides signed the Agreement for Promotion and Protection of Investment in 1996 and especially after China carried out its "go global" strategy, China's enterprises stepped up their investments in Cambodia. In 2006, China and Cambodia declared the establishment of relations as overall cooperation partners. This further promoted the development of economic and trade relations between the two. China's enterprises began to enter the Cambodian market of contract engineering in the late 1990s and today, the business of contract engineering has made remarkable results in China's economic cooperation with Cambodia. As of August 2006, the total amount of engineering contracts signed by China in Cambodia reached USD 870 million, with completed and turned over projects in the amount of USD 440 million. Moreover, based on statistics from the Economic and Commercial Counselor's Office of the Embassy of the People's Republic of China in the Kingdom of Cambodia, by 2008, China's

enterprises have invested in 21 projects in Cambodia and poured in an amount of contract investments reaching USD 3.9 billion.

The major contract engineering projects undertaken by China's enterprises in Cambodia are as follows:

(1) Kam Chay Hydropower Station

In 2005, the Cambodian government published notices of invitation to bid. The specifications listed a general installed capacity for the power station of 193 thousand kilowatt, the generation of power of 498 million KWh on an annual average, and the gross project investment of USD 280 million. Finally, China's Sinohydro Corporation won the bid on a Build-Operate-Transfer (BOT) basis. The Corporation is a comprehensive large enterprise managed by the Chinese central government. The Sinohydro Corporation is also one of the biggest fully reinforced water conservancy and hydroelectricity enterprises in China.

According to the contract, the Sinohydro Corporation needs to build 114 meters of RCC gravity dam, intakes, diversion tunnel, surge tank, switch station, transmission and substation lines, tailwater weir and diversion closure. At present, the project of Kam Chay power station is the largest hydroelectricity engineering in Cambodia with generation, irrigation and water supply functions. In April 2006, Chinese Premier Wen Jiabao and Cambodian Premier Hun Sen represented China and Cambodia, respectively, in the unveiling ceremony of the project. The project started operation in September 2007. In December 2009, the first generating unit of Kam Chay Hydropower Station began operation. The celebration ceremony for the generation of the Kam Chay

Hydropower Station was held on December 7, 2009 with Cambodian Premier Hun Sen in attendance.

Based on plans, all generating units will go into operation in January 2011.

(2) Improvement of Route 3762

Route 3762 is located in the eastern Mondul Kiri Province with a length of 26 kilometers and is a major section of the highway network in Mondul Kiri Province. According to the EPC contract signed by China Communication Construction Group with the Cambodian Ministry of Engineering, the former will undertake the improvement of Route 3762 for a contract amount of USD 14.8million. The China Export and Import Bank provides the concessional loan. The project will facilitate economic and social development in the triangle areas of Cambodia, Laos and Vietnam.

(3) Looped network power transmission and substation in Phnom Penh

In November 2009, China National Heavy Machinery Corporation under the China National Machinery Industry Corporation signed an EPC with the Cambodian Ministry of Economy and Finance and Cambodia National Power Corporation on looped network power transmission and substation in Phnom Penh. The project started in 2007 and included new construction and extension of four 115kV and 230kV converting stations, new construction of four sections of 115kV and 230kV same tower double-circuit transmission lines. The project's timeframe is 3years.

The project will greatly improve the supply of electricity in the Phnom Penh area and link up the power stations included in the project. The project is a major component

of the Cambodian national development strategy and will play an important role in promoting Cambodian economic and social development.

(4) Takdai hydropower station, Kok Kong Province

China National Heavy Machinery Corporation under the China National Machinery Industry Corporation also signed an agreement with the Cambodian government in May 2009 to build the Takdai hydropower station located in Takdai River, Kok Kong Province. Its installed capacity is 246 MW and its generation will reach 858 million KWh on an annual average. The total investment for the project is USD 505 million. So far, said amount represents the highest from China's enterprises. The project started in 2009 and will be completed in 2013. Power reaching 230kV will be transmitted through the transmission and substation lines from Phnom Penh to Battambang.

(5) Thermo-power generating plant

This is the first EPC project of China Huadian Corporation in Cambodia. Per the contract it signed with Cambodia Energy Limited Company, China Huadian Corporation will undertake the building of the thermo-power generating plant whose scale is 2 x 50MW.

(6) Boleithama Mekon River Bridge

This project is one of the major cooperation projects between China and Cambodia. The Boleithama Mekon River Bridge is currently the longest bridge in Cambodia. The

project was undertaken by the Shanghai Construction Engineering Group and started in 2007.

(7) Phnom Penh –Pursat-Battambang power grid

Per its contract provisions, the project is to build transmission and distribution lines from Phnom Penh to Battambang, the length of which is 302 kilometers. The undertaking includes three projects of transmission and distribution in Battambang, Pursat and Kompong Cham provinces plus the extension of the Phnom Penh converting station and costs USD 113 million.

(8) Stuneotai hydropower station and the Phnom Penh –Pursat-Battambang power grid

The project is located in Pursat province with an installed capacity of 120 thousand KW. It consists of a two-grade power station whose total investment reaches USD 255 million. The groundbreaking ceremony for the Stunoutai hydropower station project and for the laying of the transmission and distribution lines from Phnom Penh -Pursat-Battambang was held in Pursat province on May 8, 2008. The Cambodian Minister of Industry represented Cambodian Premier Hun Sen in presiding over the ceremony.

4.4. Laos

China's enterprises made their presence felt in the Lao contract engineering market in the early 1990s after years of tireless efforts to enter the market. From the first batch

of Chinese enterprises approved by the Lao government to engage in contract engineering, the number has since increased and their market share has remarkably risen. Today, China is the third largest investor country in Laos and China's enterprises continue to actively participate in contract engineering and occupy one-fourth of the Lao contract engineering market. At present, Tianjin Corporation for International Techno-Economic Cooperation, China Road and Bridge Corporation (CRBC), Sinohydro Corporation and many others have occupied a small but respectable space in the contract engineering market in Laos.

The major contract engineering projects undertaken by China's enterprises in Laos are as follows:

(1) Tonchan Palace

Tonchan Palace is a famous five-star hotel in Vientiane, the capital of Laos. Its construction was contracted by China Yunnan Construction Engineering Corporation. The Palace consists of a fourteen-storey building and two -storey meeting hall. The built-up area of Tonchan Palace is 36000 square meters costing USD 22 million. The project was completed in 2004 just in time to serve as the venue of the 2004 ASEAN Summit. Up to this writing, Tonchan Palace remains as the best and most splendid hotel in Laos.

(2) Lao National Stadium

The construction of the Lao National Stadium was intended for the 25th Southeast Asia Games (SEAG). China National Development Bank provided financing assistance

while the China Yunann Construction Engineering Group Corporation was contracted to build the stadium. The built-up area of the National Stadium reached 94298 square meters and the investment cost reached USD 7996 million. Besides the main stadium which can accommodate an audience of 20000, there are also 6 gymnasiums. Completion and inauguration of the stadium took place in Vientiane on September 22, 2009.

(3) Vang Vieng Cement Factory

The Vang Vieng Cement Factory is a joint China-Laos venture, the first modernization enterprise in Laos. Construction of the factory was undertaken by China Yunnan Corporation for International Techno-Economic Cooperation. With an expected annual output of 200,000 tons, the factory went into operation in 2003. Its operation is considered as history in Laos since there is no cement factory in Laos before and after the Vang Vieng Cement Factory was established.

(4) Nam Kam 2, Nam Kam 3 Hydropower Station

According to statistics, the China Sinohydro Corporation signed an engineering contract with the Lao National Power Corporation on August 11, 2009 indicating that it (Sinohydro Corporation) will undertake the construction of Laos's Nam Kam 2, Nam Kam 3 Hydropower Station and 230KW transmission and substation lines in Luang Prabang. The total amount of the contract is about USD 559 million and the installed capacity of Nam Kam 2 Hydropower Station is 126000KW while that of the Nam Kam 3 Hydropower Station is 47000 KW. The transmission and substation lines project in

Luang Prabang includes the 230 KW transmission and substation lines, whose length is 164 kilometers that of the converting station in Luang Prabang and other supporting projects.

(5) Power network in Phongsaly Province

Yunnan Power Grid under the China Southern Power Grid signed an EPC on rural electrification project in Phongsaly Province with the Lao National Power Corporation on June 5, 2009. The project includes the 35 KV transmission and substation project in the Lao section which connects the power network with China's Jiangcheng County, and the 22 KV/400V transmission and substation project in Phongsaly Province, Laos.

5. BASIC CHARACTERISTICS OF CHINA'S CONTRACT ENGINEERING IN CLMV

Based on the above cases, certain characteristics of China's contract engineering in CLMV may be discerned as follows:

(1) China's business of contract engineering in CLMV started late but developed quite fast. Most of China's contract engineering in CLMV started in the very early 1990s. Through efforts and hard work for over 20 years, China has become an important contractor for contract engineering projects in CLMV.

(2) The scale of China's contract engineering projects in CLMV is still small, with most of China's undertakings considered as small and medium projects. Except for some large projects, most of the projects' contract amounts cost several million US dollars

(3) China's contract engineering work in CLMV focuses mainly on infrastructure, especially the construction of houses and roads, power stations, dams, and some small and medium sized factories such as sugar refinery, fertilizer plant and others.

(4) China's enterprises obtain contract projects through public invitations to bid as well as negotiated bidding in CLMV. China's major style of contract engineering in CLMV is for China's enterprises to provide seller's credit as an accompanying offer to their bids. Owing to CLMV's lack of funds, China's enterprises often take seller's credit and offer the BOT scheme for their bids in CLMV. Meanwhile, negotiated bidding is a way by which China's enterprises obtain contract projects in CLMV.

(5) State-owned-enterprises remain as the main force in China's contract engineering in CLMV. Up to now, China's state-owned enterprises play an important role in China's contract engineering in CLMV due largely to the nature of most of China's contract engineering in CLMV which is infrastructure. Infrastructure projects require huge amounts of funds, equipment and technology for inputs, and take quite a long time to complete. Ordinary medium- and small-sized enterprises therefore usually find it difficult to undertake such heavy tasks.

(6) Yunnan's enterprises occupy an important position and role in China's foreign contract engineering in CLMV. Some landmark buildings in Laos, Myanmar and Cambodia were done by Yunnan's enterprises such as the Paung Laung Hydropower Station in Myanmar, the Tonchan Palace and the National Stadium (for the 25th SEAG) in Laos as well as the office building of the Royal Government of Cambodia.

(7) China's contract engineering in CLMV leads to a marked effect on the national economic and social landscape. For instance, the construction of the Tonchan Palace in

Laos contributed to a successful conduct of the ASEAN Summit while the completion of the Lao National Stadium ahead of time guaranteed the holding of the 25th SEAG on schedule.

6. YUNNAN'S ENTERPRISE AND CONTRACT ENGINEERING IN CLMV

6.1. Development of Yunnan's contract engineering

Yunnan Province is located at the southwest frontier areas of China, bordering Laos, Myanmar and Vietnam in the west and in the south, with a boundary line of 4,060 km. It is close to Thailand, Cambodia, Bangladesh and India. Yunnan is also in the upper stream of three international rivers, namely: Mekong, Irrawaddy and Honghe Rivers. Yunnan Province has 128 counties, 27 counties of which border on Myanmar, Laos and Vietnam. Based on these, Yunnan Province is called a bridge and passageway of China to Southeast Asia and South Asia by land.

Owing to its special geographical location, Yunnan has close ties with CLMV. After China carried out its policies of reform and opening up, Yunnan got the rare opportunity of being a beneficiary to development. In 1992, for instance, the Asian Development Bank (ADB) initiated the Greater Mekong Subregional (GMS) cooperation. And because Yunnan is in the upper reaches of the Lancang-Mekong River, it became natural and a matter of course for it to participate in the GMS cooperation. Under China's "go global" strategy, Yunnan's enterprises actively participated in international competition bids and strengthened its economic cooperation with neighbouring countries. Foreign contract engineering became a major part of Yunnan enterprises' participation in subregional cooperation.

In 1984, the State Council approved the setting up of the Yunnan Corporation for International Techno-Economic Cooperation .This is the first large state-owned enterprise designed especially to run foreign economic and technical cooperation in Yunnan Province. The Corporation has since then carried out the business of foreign contract engineering. But although Yunnan's enterprises began to run the business of foreign contract engineering in 1985, from 1985 to 1993, only one enterprise -- the Yunnan Corporation for International Techno-Economic Cooperation -- was engaged in foreign contract engineering.

As the process of reform of China's economic system deepened, it began to approve more and more enterprises to be engaged in foreign economic and technical cooperation. After 1993, such enterprises began to appear one after another and developed rapidly. ASEAN countries, especially CLMV, became their first choice for carrying out foreign economic and technical cooperation because of the favorable geographical position and convenient transportation in said locations. And through the years and hard work, Yunnan's enterprises have succeeded in penetrating the front ranks of foreign contract engineering.

By November 2009, Yunnan province had undertaken 1366 projects of foreign contract engineering and had a turnover of projects worth USD 4.45 billion.

At present, Yunnan province ranks 15th nationwide among China's foreign contract engineers,¹ and is in the middle or upper ranks in the business of foreign contract engineering in general in the country.

¹ The rank is based on turnover. see wenweipo (Hong Kong)
<http://yn.wenweipo.com/Article/ShowArticle.asp?ArticleID=357>

Some landmark buildings and projects in CLMV were done by Yunnan's enterprises such as the above mentioned Paung Laung Hydropower Station, Ruili River Hydropower Station (Myanmar), Tonchan Palace (Laos), Vang Vieng Cement Factory (Laos), Lao National Stadium (Laos), and the office building of the Royal Government of Cambodia (Cambodia). Yunnan has the competitive advantage and has won an international reputation in foreign contract engineering.

6.2. Yunnan's major enterprises in foreign contract engineering

(1) Yunnan Corporation for International Techno-Economic Cooperation

This corporation was established in 1984 as the first large state-owned enterprise specially designed to run foreign economic and technical cooperation in Yunnan Province. The Corporation undertook the construction of the Myanmar sugar plant, the Lao cement factory, the Lao National Cultural Center, airport track and many others.

(2) Yunnan Construction Engineering Group Corporation

Yunnan Construction Engineering Group Corporation was founded in 1953 and then restructured itself in 1993. As a state-owned backbone enterprise, Yunnan Construction Engineering Group Corporation has been striving actively and effectively both in domestic and overseas construction markets and has established itself as the No.1 construction conglomerate in Yunnan province, with increasing power and improved comprehensive capability since its founding.

So far, more than 100 projects ranging from airports, hotels, hospitals, schools, office buildings, highways, power stations, sports stadium, water treatment plants and

residential buildings have been completed successfully by the corporation in different countries and regions such as Cambodia, Laos, Maldives, South Africa, Mauritius, Cameron, Uganda, Equatorial Guinea, and others.

(3) Yunnan Machinery and Equipment Import & Export Co., Ltd.

Yunnan Machinery & Equipment Import & Export Company Limited (YMEC) is an enterprise of foreign trade and economic & technical cooperation, which engages in contracting international engineering projects, importing and exporting complete plants as well as mechanical and electrical products. YMEC was ranked No.285 in the top 500 Import and Export Enterprises of China and one of the top 100 Export Enterprises for machinery and electrical products of China.

YMEC has contracted dozens of large projects in Southeast Asia and American countries. These projects involved transportation, energy resources, building industry, light industry, and environmental protection. So far, YMEC has built 24 hydropower stations in America, Myanmar and Vietnam. The whole installed capacity totals 1088MW, including the successfully completed Paung Laung Hydropower Station (4x70MW), In addition, Shweli Hydropower Station (6x100MW) and Paung Laung Hydropower Station Phase II (2 x 70MW) are under construction by YMEC.

(4) China Yunnan Road and Bridge Corporation

The Corporation is a large-scale, state-owned foreign trade and economic cooperation enterprise that focuses on construction of roads, bridges, tunnels, ports and other transport infrastructures for its primary operation. In 1993, Yunnan Road and

Bridge Corporation registered in Malaysia and established a branch office there. It contracted to build some road and bridge projects in Malaysia and obtained “4A”² qualification from Malaysia in contract engineering of road construction projects, thereby opening more market for contract engineering in Malaysia.

After that, Yunnan Road and Bridge Corporation won the trust of local clients and opened more markets for contract engineering in Southeast Asia. At present, Yunnan Road and Bridge Corporation undertakes some road and bridge projects in CLMV.

6.3. Yunnan enterprises’ advantages and disadvantages in foreign contract engineering in CLMV

Yunnan’s enterprises have some advantages in contract engineering in CLMV. First, Yunnan borders on three countries of CLMV, thus creating a convenient condition to open markets for contract engineering in CLMV.

Second, Yunnan has comparative advantages in industry and technology with CLMV countries. In the past 30 years, Yunnan’s engagement in a lot of industries such as the tobacco industry, biological industry, minerals industry, energy (hydropower development) industry, tourist industry, chemical industry, machinery-manufacturing industry, building materials industry, and construction industry has rapidly risen. These industries have become an important force that supports Yunnan enterprises’ open markets of contract engineering in CLMV. Yunnan’s enterprises are not first-rate in construction design and operation technology in China but they suit the needs of the markets of contract engineering in CLMV.

² 4A is the highest grade in qualification of engineering construction.

Third, Yunnan's enterprises have a lot of experience in foreign contract engineering. Through hard work and effort, Yunnan's enterprises have greatly improved their capability levels in design, construction and management. The evidence may be gleaned from the various projects – let alone the large-scale projects -- that it has completed such as Myanmar's Paung Laung Hydropower Station (4x70MW), Shweli Hydropower Station (6x100MW), Laos's National Cultural Center, Tonchan Palace, the National Stadium (for the 25th SEAG), the Cambodian government office building and others.

Fourth, the Chinese government encourages its enterprises "going global" to contract projects and invest in CLMV and other countries. In particular, the government provided some preferential policies and terms for enterprises engaged in foreign economic cooperation.

Of course, Yunnan's enterprises also have some disadvantages in carrying out contract engineering in CLMV and other countries. First, their economic strength is not very high since Yunnan's enterprises and their operational scale are small compared with enterprises in the inland and coastal regions. When contracting large-scale projects in CLMV, they often need to put in more supporting funds since CLMV do not have as much funds as Yunnan enterprises. In the process, it gives Yunnan's enterprises more problems.

Second, though Yunnan enterprises' capability level has greatly improved in design, construction and management, their technology content, however, is not high and their integrated competitive capacity is not strong. It thus restricts the enterprises' development in contract engineering and other economic cooperation.

Third, the number of qualified people to meet the needs of foreign economic cooperation is not sufficient. Foreign contract engineering needs a lot of qualified people, especially those who possess special knowledge in both management and foreign language. This kind of qualified people, however, is very rare.

Fourth, the management system and model remains a problem. Most of Yunnan's enterprises engaged in contract engineering in CLMV are state-owned enterprises but they separately belong to different professional groups and possess full management authority. Thus, the government departments concerned face difficulties in coordination. Sometimes they bid against each other in international bids for projects and thus weaken their combined competitive capacity.

The above problems are being given attention by the government and enterprises so that improvement measures are discussed and new regulations may be issued.

7. CHINA'S ENTERPRISES FACE DIFFICULTIES AND PROBLEMS IN FOREIGN CONTRACT ENGINEERING IN CLMV

Under the guidance of China's "go global" strategy, the participation of Chinese enterprises in international competition had achieved remarkable results. In the Mekong subregion most specially, China's enterprises have become major contractors in contract engineering. In the CLMV market of contract engineering, China's enterprises have an upper hand in the competition. Still, China's enterprises face a lot of difficulties and problems in foreign contract engineering in CLMV. Some of the difficulties and problems are from the outside environment and some are from within. The next sections look into these problems, beginning with those from the outside environment.

External environment problems

First, owing to a host country's lack of perfect laws and regulations, black operations inside of invitations to bid remain and are not transparent. This is largely because of the fact that CLMV are in a turning point of their respective histories, making a lot of the international norms and practices new matters to them. They need to be briefed and given a full understanding of these. As time passes on, though, it is expected that their programs of reform and opening up will make them more exposed to said practices, thereby allowing them to keep pace with the times and international regulations and practices.

Second, generally speaking, CLMV still lack skilled labor. China's enterprises have to send more skilled workers when they carry out contract engineering, sometimes leading to increased costs on the part of China's enterprises, on the one hand, and causing the locals, on the other hand, to think that China's workers are there to compete for jobs.

Third, the infrastructure and work environment in CLMV are relatively poor, thus causing China's enterprises to face more difficulties in the construction phase.

Fourth, the host country often cannot pay cash on schedule because of their shortage of funds and so China's enterprises find it difficult at times to recover debts.

Internal/domestic problems

On China's side, meanwhile, the challenges faced by China's enterprises arise from domestic enterprise issues.

First, compared with China, the scale of contract engineering market in CLMV is small. In the wake of the development of economic relations between China and

ASEAN, a lot of China's enterprises have developed business in ASEAN. This has led to increased competition among China's enterprises to bid for contracts in the region. And in the market of contract engineering in CLMV, competition among China's enterprises is even more keen and prominent.

Second, China's statistics are not perfect. For example, although one can consult detailed statistics of foreign trade, one cannot find systematic statistics about foreign contract engineering published by the concerned government departments. Thus, enterprises and researchers find it difficult to get and understand the exact information.

Third, the ties between the departments of government and the enterprises are not strong enough for government departments that are supposed to serve the enterprises to provide complete information that are needed.

Fourth, most of the medium and small enterprises' capacity to participate in international competition is not very strong and the general level in contract engineering remains low. The enterprises' management capacity does not seem to fit in with the needs of foreign contract engineering. Hence, engineering quality needs to further improve.

8. CONCLUSION

Foreign contract engineering is one of the major modes in China's "go global" strategy and is a fixed policy of the Chinese government.

In view of this, the Chinese government will continue to encourage qualified enterprises to participate in foreign contract engineering. It will also further improve its work in policy and management in foreign contract engineering.

ASEAN remains as China's major market for foreign contract engineering.

Although China's enterprises face difficulties and problems in foreign contract engineering in CLMV and other countries in ASEAN, for most of China's enterprises, CLMV still remain as a strong potential market for its contract engineering. China's cooperation in contract engineering with CLMV thus faces bright prospects.

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