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Mekong:

River of Friendship



SEC SOCIO-ECONOMIC CONSULTANTS CO, LTD.

1. Introduction

This photographic report is one of the outcomes of a research project conducted to develop a strategic framework for technological and economic cooperation between Thailand and China, focusing on locations and geographical links (CTC). The project was sponsored by the Office of Thailand Research Funds (TRF), the Embassy of Thailand in Beijing, Department of Technical and Economic Cooperation, the Department of International Affairs, the Ministry of Foreign Affairs, and Yunnan International Culture Exchange Center in China (CYICEC).

Logistic concepts were used to analyze the data obtained from this research. It was found that effective transportation plays a vital role in cooperation between these two countries. Furthermore, products or services while development logistics must have value added to them by cooperation between Thailand and China. As a result, a *Value Chain* can be built.

This system complementarity additionally relies on goodwill on the part of each country. An increase in the use of logistics can also make the *Supply Chain* more effective. This results in cheaper capital for products and services compared to the added value; both of the countries therefore have a

greater potential to compete in the world market. In 2003 Thailand and China signed a Free Trading Area agreement, which can clearly boost the flow of goods traded between the two countries. Logistics has become more significant. Within the scope of this project, apart from the air and the sea logistics systems passing through Laem Chabang Port, there are also the river and the land logistics systems. The river connection passes through the Mekong River joining Chiang Saen in Thailand and Jinghong in China. Overland, there is no direct connection: Laos or Burma have to be crossed. It is known that the cheapest logistics system is the river system and the Mekong River is the one river that can link Thailand and China. Thus the Mekong River plays a vital role in the study of Thai-Chinese cooperation.

The photographs in this report were taken by Mr. Chen Yunfen, a Chinese researcher specialising in tourism. The main purpose of the photographs is to record details of interest to tourists. However, not only do these beautiful photographs show the different cultures, from the past to the present, of the Mekong River communities but their aesthetic qualities manage to disguise the causes of conflict among the countries that were so important historically and will continue to be important in the future.

Qinghai



3



1-2 Sources of Three Rivers
3.No mans Land

Tibet-Yunnan



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7

- 4. The Mekong River running through Tibet to Yunnan
- 5. The elevated agricultural area along the Tibet border
- 6. A temple along the Tibet border
- 7. A religious ceremony at the Tibet border



Dechang



10

8. The Mekong River running through a gorge, Dechang

9. The Mekong River in Dechang

10. A village in Dechang

11. An Ancient bridge in Dechang



11



2. Hydro-Electric Energy (Dams)

China has planned to build 15 large dams to dam the upper the Mekong River, or Lancang River, in China and Yunnan. So far, starting from 1995, three dams have been completed: Hi Er He, Man Wan and Da Chao Shan. Nine further dams are planned for the future, of which the following three are presently under construction:

Xia Wan, started in 2002 and due for completion in 2012.

Jinghong, started in 2003. In fact, this dam was scheduled to start in 2004, but the Electricity Generating Authority of Thailand (EGAT) signed a contract to purchase electricity produced by this dam, and so construction was started ahead of schedule.

Nuo Zha Du, a large dam, which can produce up to 5,500 MKW of electricity. At present, the site is being prepared and a road is being constructed to the construction site.

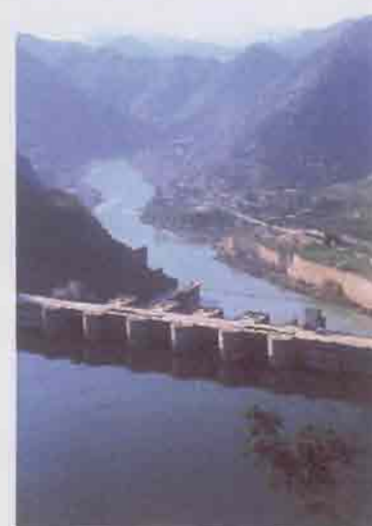


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2-14 Man Wan Dam



14

In fact, China has built in total 22,000 large dams for the purposes of producing electricity, for flood prevention and for irrigation. As a result, 40 million people have been displaced from the flooded areas. Currently, China is building other 280 dams to meet the needs for hydro-electric energy (at present 19% of total electricity production, due to increase to 40% in 2015). China has just recently built several hydro-electric dams along the Mekong River. The country has built 8 dams out of a total of 14 on the Lancang River: Man Wan (completed in 1995 with a capacity of 15,000 MKW), Da Chao Shan, Xia Wan, Jinghong, Nuo Zha Du, Kon Kai Kiew, Kun Lun Pa and Meng Song. Out of these, Man Wan and Da Chao Shan have been completed, Xia Wan and Jinghong have just been started and Nuo Zha Du is about to be built. If they all are completed, a population of at least 68,000 is expected to be displaced, and the resulting flooded area will cover 65,000 hectares.



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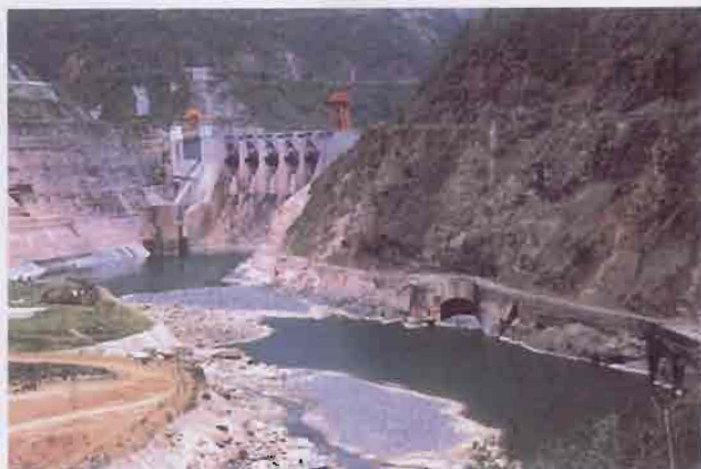


17

15-17 Tao Chao Xan Dam

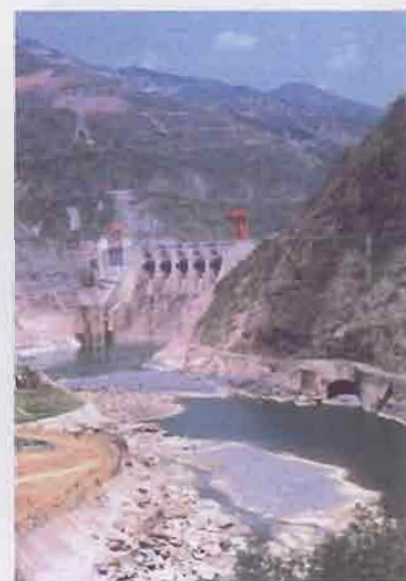
Apart from the dams mentioned above, five other dams have also been completed along the Mekong River in Laos: Nam Ngum, Xeset, Theun Hinboun, Houng Ho and Nam Leuk. Together they can produce 615 MKW. In Thailand, there are 4 dams, Sirindhorn, Chulabhorn, Ubonrath, and Pak Moon, which in total can produce 212 MKW. In Vietnam, there are two dams: Dray Ling and Laly. Together they can produce 733 MKW, which is more than either Thailand or Laos but still much less than China. China may have to find other ways to produce more electricity in the next decade since it will need more than 16 Gigawatts of energy. China's needs affect investment policy, especially in eastern China, where the Jung Jiang River Triangle (Kwangtung etc.) is located. Some energy can be sold to Thailand with the agreement of EGAT.

When any dam is built, the population has to move out of the flooded area. However, the emigration from the Lancang River area (the route of the Mekong River) is nothing new for China because this number is only 1/10 of those who had to move out of the flooded areas when dams were built along the Yangtze River, where were 1.3 million people involved. No problems arose then.



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18. Tao Chao Xan Dam
19. Tao Chao Xan Dam
20. Khoi Ja Tu under construction.



19



20

Building hydro-electric dams on the Lancang River is very beneficial for the Chinese private sector. Previously, electrical energy came under the Ministry of Energy of China, with petroleum and coal. Then, in 1997, government bodies were re-organized. The Ministry changed to a State Enterprise consisting of three bodies: the State Enterprise of Energy, Petroleum of China, Coal of the State.

The year 2002 saw more reorganizing. The State Enterprise of Energy was divided into five private companies, which had to compete in order to take over the river area where the dam would be built. The winner was the Hua Neng Group, which belongs to Mr. Lee Pheng Sue Lee Xiao Pheng. Due to his political and financial status, he could easily raise the money to build the dam. Also, the companies are listed on the Hong Kong stock market, and so money from off-shore groups could easily be raised. Only international political considerations could stop the construction of the dam. Laos, Thailand, Cambodia, and Vietnam are the countries that have to unequivocally come to an agreement to negotiate.



21

Siamo-Jinghong



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23

21. Knoch Ja Tu under construction

22. Jinhong under Construction

23. Jinhong under Construction

Once completed, China's dams affect the river tides and they have consequently changed the ecosystem, the way people earn their living, and their life style, as can be seen at present. This goes without saying. The construction of dams such as Jinghong, started in October 2003, could probably have been stopped. Nuo Zha Du dam, which is about to be built, could also be stopped. If it is completed, it will be very large, producing up to 5,500 MKW of electricity. It will also cause a lot of environmental problems for the downstream countries. To solve the problems caused by dams, experts can be employed. For example, they can estimate the quantity of water kept in the dam and how much water should be released without causing damage. In addition, they might keep water in the water route from Jinghong Port to Guanlei Checkpoint, China. If they want to build the dam, it will need to be very large in order to retain water left from the rainy season. Another place used to retain water is at Ton Le Sab in Cambodia. It is surrounded by gates, which are also useful to prevent flooding in Cambodia.



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24-26 Jinghong under construction

3. Water Transportation

Water transportation along the Mekong River is the most important route for trade in Southern China and for the group of the countries located along the Mekong River; it accounts for about 95% of all transportation. Transportation regulations and international tax rates of different countries must be clearly and reliably specified. Each country has its own commercial ports with 14 ports in all: Yunnan (Simao, Chiangrung or Jinghong, Menghan and Guanlei), Laos (Ban Sai, Chiangkok, Muang Mam, Ban Coon, Huayxay, and Louangphrabang), Myanmar (Wang Seng and Wang Pong), and Thailand (Chiang Saen and Chiang Khong in Chiang Rai.) At present, China uses the route along the Mekong River from Simao and Jinghong to Chiang Saen in Chiang Rai as a way to transport goods to Thailand and to the group of the countries along the Mekong River; they also use the same route to take goods back to China. The length of the journey depends on the levels of the Mekong River.

27. Simao Port
28. Jinghong Port
29. The Mekong River
at Jinghong



27



28



29

Nowadays, there are approximately 100 ships in service, mostly owned by Chinese and registered in China. There are a few Thai ships and some Thai merchants have registered in China because it is convenient for shipping through Myanmar and Laos. The route usually starts from Kunming. First, goods are taken on board at Guanlei Port (the last Chinese port along the Mekong River). Then, after they pass the port in Laos and pay a fee, they will be able to get to Chiang Saen Port. Mostly, for goods transported from China, merchants will unload 70% of goods at Chiang Saen Port to be sold at the Mae Sai Checkpoint and another 30% of goods will be unloaded at Wang Pong Port in Myanmar to be sold at Thachilek or taken to be sold illegally at the Mae Sai Checkpoint. Very few merchants unload goods at Chiang Khong Port since it is 70 kms from Chiang Saen and there are a lot of rapids, shoal and reefs.



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From Chinese Border to Thai Border



31



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32. Customs post at Gwanlei, China

In May and December, the Mekong River will be between 2-7 meters deep (sometimes deeper than 7 meters), so a large ship can be used to carry 120-150 tons of goods. However, from January to April, there will be less water (a depth of between 1.5 - 2 meters) and so a smaller ship will be used that can carry only 40-60 tons of goods. The total distance from Chiang Khong to Simao is 540 kms, divided into 3 sections: Chiang Khong Port to Chiang Saen Port (70 kms), Chiangsaen Port to Jinghong Port (about 380 kms), and Jinghong to Simao (about 90 kms).

33. Ships from Guanlei on the China bank and Myanmar

34. Dangerous rocks at Guanlei-Chiang Saen

35. Wrecked ship on its way to Jinghong, Golden Triangle



33



35



36



37

- 36. Golden Triangle
- 37. Youth Friendship Ship, Lancang
River-The Mekong River
- 38. Ships at Chiang Saen Port



38

4. North-South Road

In the future, the transportation of goods by land will play a more vital role if the construction of the road from Thachilek to Kengtong (Myanmar) and Jinghong (China) is completed. This road covers 164 kms from Mae Sai district, Chiang Rai, to Kengtung, Myanmar; it takes about 3 hours to travel this road which leads to the Chinese border. Additionally, it will be an important trading route if the Myanmar situation is safe.

Pictures 16 and 17 show the area of the Mekong River that another North-South road will traverse. The route starts from Kunming and runs down to the south to Simao; then it divides, going to west to Jinghong and going straight on to Mengla on the Chinese border. After that, it goes across to the Laos border at Boten or Ban Pak Khong and goes on to Louangnamtha, Viangphouka, Ban Ta Fa, Huayxay. Then, it goes across the Mekong River at the Thai border at Chiang Khong and finally joins to the Thai highway to Malaysia and Singapore. China expects to complete this road in 2006, and some parts have already been started in Laos. It is expected to be completed in 2007. When this road is finished, the transportation role of the Mekong River

Thachilek



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39. Thachilek, Myanmar
40. Thachilek Temple

will dramatically change, as will the lifestyles of the local communities.

The road that passes through Pakbeng is a North-South road that passes through Laos on its way to Thailand. It joins Mongla, Mohang, Boten, Nateui, Muang Xai, Pakbeng and Muang Nguen in Laos. At Pakbeng, there will be a bridge over the Kong in the future, which will make commuting along this road more convenient. After crossing the Me Kong River, one will arrive in Muang Nguen, where the Lao border meets the Thai border at Huai Kon in Nan province. Then, it will join the Thai highway that leads to Malaysia and Singapore.



41. Inside Thachilek, Myanmar

41



42: Padaung, Thachiek, Myanmar

42

Minorities

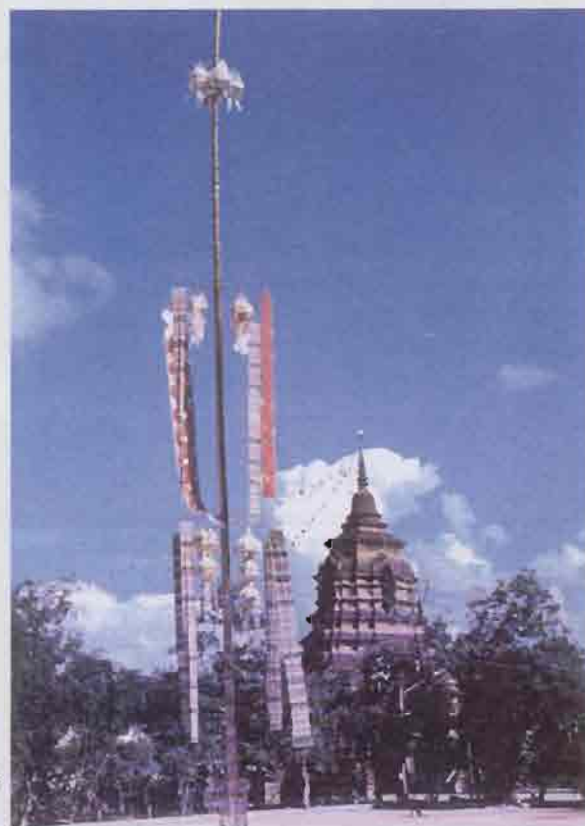
The population in the lower The Me Kong River consists of a group of minorities, or 1/8 of the whole population, numbering more than 30 million people. This group of minorities consists of the Cham, Yi, Pai, Ha Nii, Zhuang, Tai, Bhu Tai, Ka Muh, Lue, Lua, Kah, Pakayoh (Karieng), La Hoo (Mu Sur), I-kor, Yao and others. Several of the minorities can exploit natural resources in the long term but they are affected by world-wide changes and globalization. Attempts to develop their infrastructure in the fields of communications, hydro-electric power construction and the Free Trade Area Market have modified their lifestyle. Picture 29 shows the Padaung, who were not originally in Tahchilek but were brought into the tourist orbit by the curiosity of visitors.

Chiang Saen

43. Pagoda in Chiang Saen

44. Photo vantage point

43



44

Chiang Khong-Huayxay



45



46

- 45. Port at Ban Huayxay
- 46. Bridge over North-South road planned for Construction in this area
- 47. The calm in this area will disappear if the construction of North-South road is completed.



47



48

The Mekong Giant Catfish (Pla Buk)

Catching the Mekong giant catfish (Pla Buk) is a popular activity along the stretch of the Mekong River running from Chiang Khong to Huayxay. It is one of the biggest fresh water fish. It takes 12 years to reach maturity, becoming about 3 meters long and 300 kgs in weight. The season lasts from the middle of April to May when the Mekong River is only 3-4 meters deep; the egg-laying season begins then at Ar Hai Lake in Dali. During the peak season, villagers used to catch 20 or 30 fish, but now it is rarely found. However, in 1983, the Department of Fisheries of Thailand began to farm this fish, which helped deal with the problem of short supply. So far, catching "Pla Buk" in a natural habitat is still possible, so its extinction should be preventable. On the other hand, China is constructing a hydro-electric dam in Jinghong that will cause the Mekong River to dam and so adversely affect the egg-laying season at Ar Hai Lake.

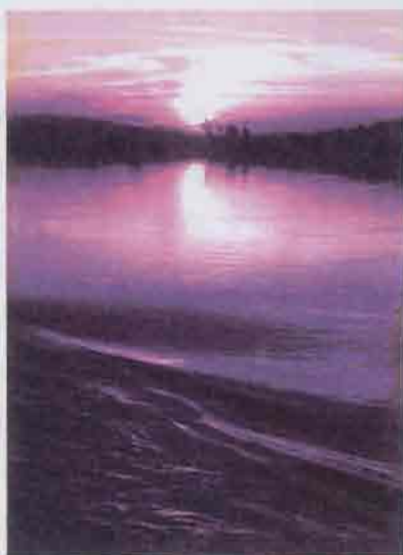


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48. Cat fish (Pla Buk) Zone

49. Ban Huayxay, Laos

Pak Beng



51



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50. Parts of Pakbeng that the proposed North-South Road will pass through

51. Twilight at Pakbeng, Laos

52. Sunset at Pakbeng, Laos



52

5. Blowing up the Cataracts

The Mekong River Development Project for Commercial Shipping is a plan for economic cooperation among the Mekong River region countries which has been launched by China. The purpose is to sail commercial ships from Simao, Yunnan province, in China to Louangprabang over a distance of 331 kms. Under this project, China spent US\$ 5.3 million on blowing up cataracts on the Mekong River. A preliminary study and evaluation of the environmental effects was conducted by China from April to June 2001 with 1 month spent on collecting data. The study revealed 3 phases as follows:

First phase: blowing up 11 reefs and 10 underwater reefs in order to allow passage of freight of at least 100 tons, retaining a cataract in Thailand called "Don Phee Long."

Second phase: blowing up and excavating 51 bars in order to allow passage of freight of at least 300 tons, retaining 9 reefs in Thailand (at Chiang Saen, Chiang Khong, and Wiangkaen.)



50



51



52

50. Cataracts at Pak Beng. The Mekong River in Laos

51. Pak Beng, Laos

52. Scenery at Pak Beng, Laos

Third phase: Modify channels so that they are similar to canals in order to allow passage of freight of at least 500 tons.

In addition, there are still some agreements regarding commercial shipping at Lancang River-the Mekong River. For example, Section 1 of the General Act No.105 states that "excavation of soil, stone and sand, laying fish nets, and moving bamboos or logs around the area of the channel is not permitted because it could be dangerous, directly and indirectly, for shipping."

In connection with the blowing up of cataracts on the Mekong River, the Chinese engineering team ranked the danger levels of the Mekong River rock reefs into 3: A, B, and C. (A = the most dangerous for shipping, B = moderately dangerous for shipping, and C = dangerous for shipping).



53



54



55

53. Beautiful reefs along the Mekong River

54. Pakbeng (both sides), Laos

55. The banks of the Mekong River at Pakbeng, Laos

The first set of explosions started in 2002 (March-April). There were 3 cataracts on the Myanmar-Laos Border: Tang Ao ranked as A and the lower Tang Luang ranked as B; the last cataract, Nam Loi River Mouth, ranked as B, was undertaken later.

The next series of explosions lasted from 15th December 2002 to 15th April 2003. China opened the dam gate for a day and closed it for 3 days in order to adjust water level to allow the cataracts to be destroyed. Under the plan, the following 16 cataracts in the Mekong River, on the borders of Myanmar-China, Myanmar-Laos, were to be blown up:

Level A: Tang Salum

Level B: Khrai or Had Khrai, Nam Loi River Mouth, Khlong Tan, Wong Wit, Lower Mong Pa Liao, Wang Seng, Sam Zhao and Long Zhom

Level C: Huai La, Chuang Nam Tang Lan, Kon Mu Tai, Ton Pa Nok Yang, Huai Na Yo, Tha Ban Bo and Saen Pi

The last series of explosions was scheduled for December 2003 to April 2004. Under the plan, the following 3 cataracts were to be blown up:
Level B: Nam Loi River Mouth

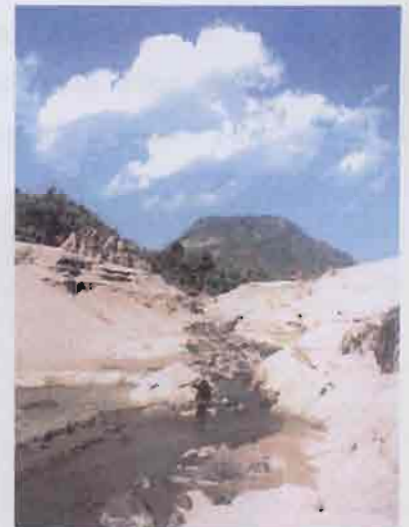


56

56. Fishing at Pakbeng

57. Stream flowing down
through the Mekong
River at Pakbeng

58. Boat downstream at
Pakbeng, Laos



57



58

Level C: Tang Pang, Khon Pi Luang
(Thai-Lao border at Chiang Khong
,Chiang Rai)

The destruction of the cataracts is the first stage, normally called "Phase 1." China has planned 3 phases in connection with the Mekong River in order to allow passage of ships all year, as follows:

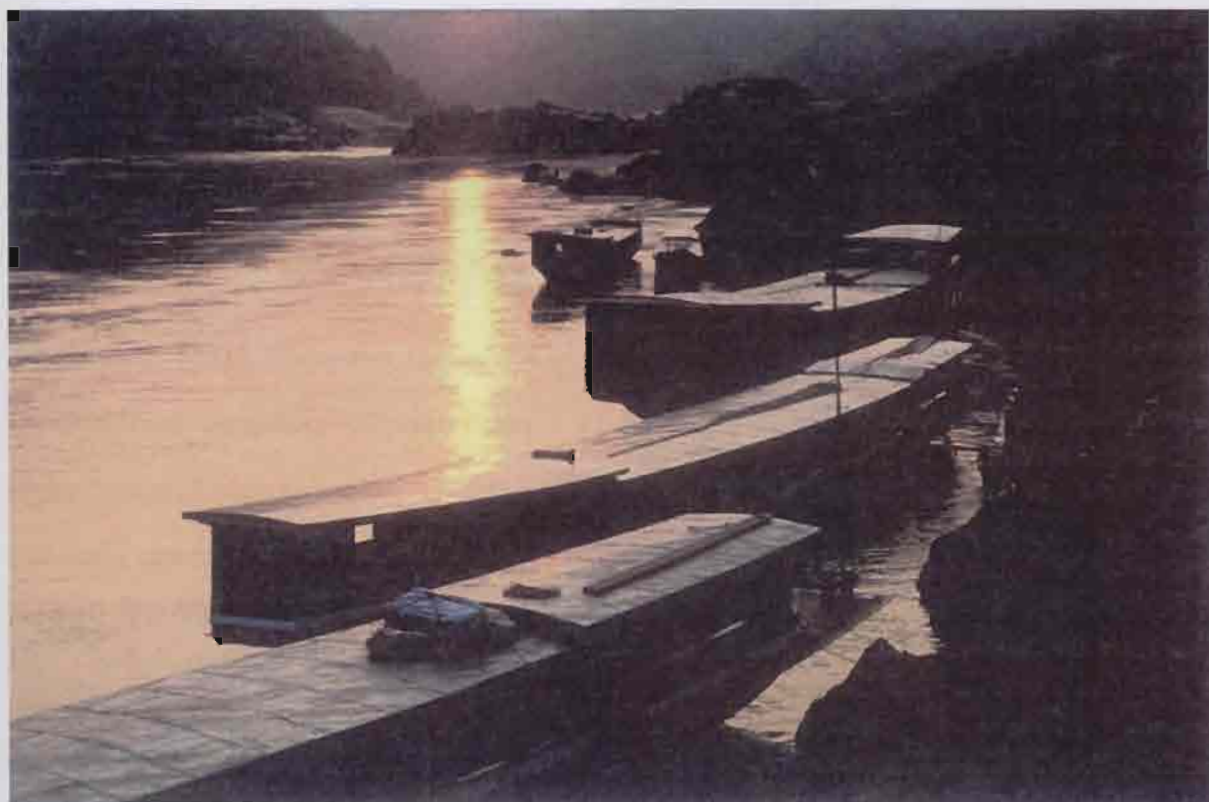
Phase 1: destroy 20 cataracts in order to allow passage of freight-carrying vessels of at least 100 tons all year.

Phase 2: destroy 51 reefs and all

river bars in order to allow passage of freight-carrying vessels of at least 300 tons all year.

Phase 3: develop canals along the Me Kong River in order to allow passage of freight-carrying vessels of at least 500 tons all year.

Nowadays, a freight-carrying vessel of 100-200 tons is able to navigate the Mekong River, but only in the rainy season, not in the summer. One of China's ideas is to destroy all obstructions in order to allow ships to pass all year, not for only one season.



59. Sunset at Pakbeng, Laos

6. Tourism

Tourism along the Mekong River is not very well-developed because of many limitations on travel, such as the tourism policy of the countries located along the Mekong River, which passes Laos and Myanmar. Security is limited in these two countries. Besides, there are strict regulations that make travel difficult, such as a system of visas for tourists that is not reciprocated for travel from China to Vietnam.

From a survey on trading and tourism carried out in December 2003, it was found that a 200-ton freight ship had been modified with cabins for tourists who want to travel along the upper the Mekong River.



At present, travel along the upper the Mekong River, JInghong – Chiang Saen, takes 3 days (2 nights).

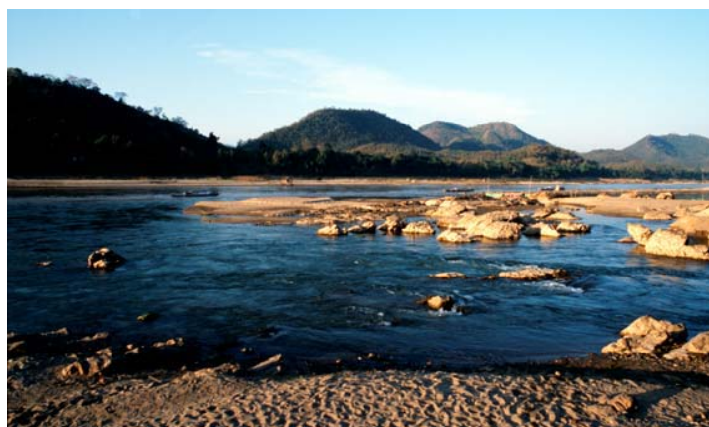
The road starting from Jinhong passing through the Myanmar border and Laos still has much natural beauty: development has not destroyed nature or the environment. The Mekong River communities have still retained their traditional ancestral lifestyles. Customs

Louangprabang



60. The Kan Sob waterway on the Mekong River, Luoangprabang

60



61. Cataracts in the Mekong River, Luoangprabang

61



62. Land use of the bank of the Mekong River, Luoangprabang

62

However, there are some difficulties to be met during a trip along the Mekong River, such as the need to camp on the ship that has to anchor on banks of a neighboring country; this is very risky for travelers. Additionally, time can be a problem: the ship cannot move if there is insufficient water. Another difficulty is hygiene in connection with toilets and cooking (the Mekong River water is used for drinking and cooking.) Presently, there are few tourists travelling between Jin Hong and Chiang Saen because basic facilities are not provided. Tourism development along the upper The Mekong River should focus on stopping in the towns, and providing public utilities, including the development of tourism personnel.



From Chiang Saen to Louanprabang, there are a lot of popular attractions along the Mekong River. The Louanprabang tourism route can be developed by combining a trip on the Mekong River with travel to other places.



63



64

- 63. Everyday life,
- Luoangprabang
- 64. Royal Palace Museum
- 65. Vuchunrath Temple



65

A small boat with 50 seats can travel along the lower the Mekong River, from Chiang Khong, Luoangprabang; this takes 2 days (1 night) or only 1 day by a 4-seater speed boat. Tourists who want to travel from Chiangkhong to Luang Prabang have to take a boat on the Lao side (Huayxay). The journey it normally takes 7 hours and terminates at Pakbeng (a small town) and it costs between 100 and 500 baht. The scenery along the Mekong River from Chiang Khong to Louangprabang is spectacularly beautiful due to unspoilt nature. From Louangprabang, tourists can go through Thailand in order to travel to Phnom Penh and Vietnam. Currently, many tourists use the lower The Mekong River (Seam Reap, Phnom Penh, Vietnam) as their route, most traveling out of an interest in nature, local customs, and ancient civilizations.



From Seam Reap, tourists can board a boat at Ton Le Sap Lake that will take about 7 hours to get from Seam Reap to Phnom Penh.



66. Chiang Thong Temple, Luoangprabang

67. Door panel at Chang Thai Temple, Louangprabang

68. Wall painting in the temple at Chang Thai Village, Luoangprabang

***The Survey of the Mekong River and
Colonization Attempts***

Pictures 69 A and 69 B show the tomb of Henri Mouhot, who discovered Angkor Wat in Cambodia. In fact, other Europeans had come across it before him but it was Henri Mouhot who brought it to the attention of the world. He died at Louangprabang in Laos. At the present, his tomb is being renovated; at the same location there is a monument to Dudart de Lagree. Dudart de Lagree was the leader of the Mekong River survey team that found the route to China. He was motivated by an interest in commerce and rivalry with Great Britain, but he was unable to reach China because he too died in Louangprabang. In the tomb area there is also a monument to Francis Garnier, who was a member of Dudart de Lagree survey team. After Dudart de Lagree's death, the survey team managed to reach China. While Garnier was in Yunnan, he discovered an easier way to reach China - by the Red River. So he persuaded the French to invade Hanoi but he died in Hanoi at the hands of the Vietnamese. As a result, Hanoi, North Vietnam and South Vietnam became part of the French empire.



69



69A



69B

69. Francis Ganier monument, Luoangprabang

69A. Dudart de Lagree's monument, Luoangprabang

69B. Henri Mouhot's tomb, Louangprabang

From Phnom Penh, tourists can cruise along The Mekong River to Kratie, which is situated to the north of Phnom Penh. However, people can also travel to Kratie by land, since it is more convenient and faster. This has led to the cancellation of boat services from Phnom Penh to Kampong Cham.



Tourists can travel by land from Phnom Penh to Kratie and rent a car to visit the Fresh Water Dolphin Conservative Center, where they can rent a boat to see groups of large dolphins. Finally, they can take a cruise along the Mekong River from Kratie to Kampong Cham for about 4 hours and then travel by land from Kampong Cham to Phnom Penh in about 2 hours.



- 70. Buddhist in Pak Ou cave, Luoangprabang
- 71. Prathat Luang, Vientiane
- 72. The Emerald House, Vientiane



70

Vientiane



71



72

Nakhon Phanom-Tah Khak

From Phnom Penh, tourists can cruise for about 4 hours along the Mekong River to Vietnam to arrive at Chau Doc, which is at the border. On arriving at Chau Doc, tourists have to go through immigration. There are not many hotels; a room normally costs about US\$ 3-10. From Chau Doc, tourists need to travel by bus because there is no boat service along the Mekong River. There are travel agents who provide a tourist bus leaving Chau Doc for Ho Chi Minh City.

During the trip, the driver will sometimes stop to allow tourists to take a small boat to see the life of the community and floating markets on both sides of the Mekong River on the way to Can Tho City, a beautiful town located by the Mekong River. Not many people live there, but it is a tourist destination very popular with Europeans.



73. Pra That Pranom, Nakhon Phanom

73

Prasat Pranom

Pra That Pranom was established at Wat Pra That Pranom Voraviharn near the Mekong River. Pra That is located at Phu Kam Pra (also known as Doi Kam Pra or Kapana Banpot or Kapana Kiri in Pali, near the Konnathi River in the city of Sricote Buraboran.

Prasat Phanom has been renovated seven times. On two occasions, there was no record of the year of renovation. However, the third renovation took place in 1614, the fifth in 1806, and the sixth in 1901: in this year it was completely renovated. The surrounding areas of the temple Pra That were renovated and the golden parasol was elevated. The earlier golden parasol has been retained. In 1954, Buddhists from both sides of the Mekong River, Thailand and Laos, came to pay their respects to Pra That over a period of one month.

On the way from Can Tho to Vinh Long tourists can take a small boat to see the sunset and continue cruising along the Mekong Delta to arrive at Vinh Long. They can also rent a boat to go from Vinh Long to My Tho (about 6 hours) and they will see the entire area surrounding the Mekong River. From My Tho city, tourists can take the bus to Ho Chi Minh City (3 hours).



In general, travel along the lower The Mekong River is more convenient than along the upper due to the fact that Laos, Cambodia, and Vietnam have initiated tourism along the Mekong River; most tourists from Europe, America and other places can experience the different lifestyles, culture, customs and history of the countries located along the Mekong River.



74

74. Bank of the Mekong River,
Nakhon Phanom



75

75. Sun rise at Tah Khak, Laos.
Views From Nakhon Phanom

76. Wat Nong Saeng,
Nakhon Phanom



76

Mukdaharn-Savannakhet



77



79. Thurb, Mukdahan

79

78. Sun rises at Savannakhet
from Mukdahan

77. The Mekong river at Mukdahan



78

7. The Mekong River at present

The Mekong River originates from the area of the Tibet plateau, Fuji Mountain Range, in the U-Shu Autonomous Zone in Tibet, Qinghai in China where the Zha-Koo and Ar-Koo River meet and become the “Lancang River” (Turbulent River); it runs through Yunnan and leaves China at Jinghong. The Lue people in the Sishuangbanna region call this river “Lancang River”; it follows the border between China and Myanmar, Myanmar and Laos, and Thailand and Laos. Along the border between Thailand and Laos, it is divided into two parts. The upper part borders the region of Chiang Rai in Thailand and the region of Bokeo in Laos, running through Laos at Huayxay; from Bokeo, it leaves Laos again at Sanakham, the walls of Vientiane.



The Pra That Son Khon Incident

In 1940, there was a disagreement between Thailand and the Indo-Chinese French. The French fired cannons and bombarded the provinces on the border near the Mekong River: Nong Khai, Nakhon Phanom and Mukdahan. Because of this, a conservative Thai group expelled the French and their missionaries from Thailand. Along the border of Mekong River, regulations to control the situation were announced. Some Thai teachers and nuns were alleged to have broken the regulations. Seven people were shot: Sister Pilla Tiipayasook, Sister Lu Ar Si Kambang Srikampong, Argata Putta Vonvai, Ms. Ce Ci Lia Buddi Vongvai, Ms. BiBi Arna Kampai Vongvai, Maria Porn Vongvai, and the teacher Srikampong Ornpitak.

The villagers agreed that these seven people gave their lives in defence of their religious beliefs. They did not change their beliefs. As a result, these seven people were canonised as Saints by the Vatican. At present, Wat Song Khon is located near the Mekong River; it has a large hall and is very beautiful architecturally: it received an award from the architectural association of Thailand.

83. Wat Pra That Song Khon

The lower part also flows along the border between Thailand and Laos, passing the following 6 provinces of Thailand: Loei, Nong Khai, Nakhon Phanom, Mukdahan, Amnatchareon, and Ubon Ratchathani. In Laos, it passes Vientiane, Bolikamsai, Kham-Mouan, Savannakhet, Saravan, and Champasak. Another section runs through Pak Sae at Champasak and leaves Laos at Kong to go on to Cambodia at Stung Treng. In Phnom Penh, the Mekong and Basak Rivers (the terminal stretch of the Ton Le Sap River) join each other. The Mekong River leaves Cambodia at Phnom Penh to enter Vietnam and separates into many smaller sections at the area called “ The Triangle Highland of the Mekong River Mouth” before running into the South China Sea. The upper The Mekong River mostly derives its water from melted snow, but the lower part derives it from the mountain ranges running through the branches of the river in Thailand. In the north of Thailand, it consists of the Kok and the Ing; in the north east, it comprises the Moon and the Songkham. in Laos, it consists of the Yon, Ngao, Nguem, Tern, and Se Kong. In Cambodia, there is Ton Le Sap or Cambodian Lake, which receives its supply in part from the Soi Dao Mountain Range east of Chantaburi. Vietnam has the river Sae-San.



84



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84-85 Palm painting at Phu Pah
Turb, Mukdahan

Physical Features and Environment

The Mekong River is located at longitude 94 degrees 40 minutes 52 seconds east and latitude 33 degrees 45 minutes 48 seconds north. In geographical terms, its source is at Ji Fu Valley in the U-Shu Autonomous Zone in Tibet, at an altitude of 5,200 meters. The entire length is about 4,909 kms. For about 2,198 kms it follows the border between China and Myanmar, for about 31 kms the border between Myanmar and Laos and for about 234 kms the border between Thailand and Laos. It flows for approximately 937 kms in Thailand (in the north, 85 kms in Chiang Rai, in the northeast 852 kms from Loei to Ubon Ratchathani), 789 kms is in Laos, 490 kms in Cambodia, and 230 kms in Vietnam. The Mekong River is the 10th longest river in the world. In addition, it is the 24th largest in area at 795,000 square kms. There are between 450 and 1,300 species of fish (according to researchers' estimates) including both the biggest and smallest. It is ranked as the 3rd after the Amazon and Congo for its biological variety.

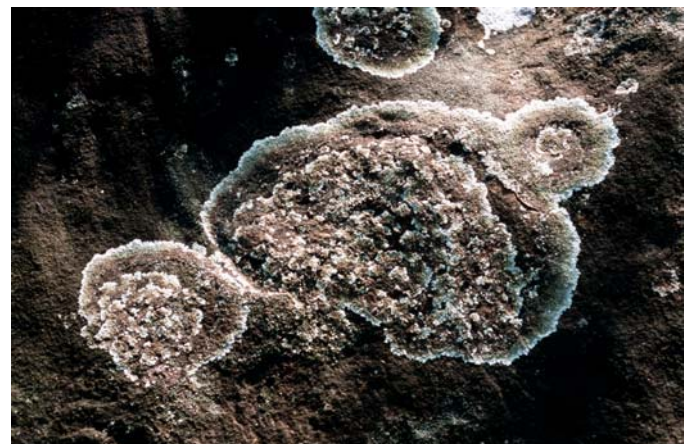
The Mekong River originates from melted ice in Tibet at an altitude of 5,000 meters and runs rapidly through China and Myanmar to the area of Golden Triangle (border area of Thailand-Laos-Myanmar), which is



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86-88 Thurb, Mukdahan

Ubon-Ratchathani



89. Ancient painting at Pha Tam, Ubon Ratchathani

89

Paintings

Wall paintings in the cave depict pets, fishing, animal hunting and stoneware created with the use of powerful metal tools. The distinguishing feature is the use of red for painting and glazing. It appears on vessels used in an agricultural society that lived in the Isaan about 2,000-3,000 years ago.

During the period 1800-1500, this agricultural society spread to the highlands. So the villagers needed to use the land for their livelihood. They used the lower land by the Moon River, She, Say Bai, Lam Xe Bok and other rivers. They selected villages on agricultural land above the level of the river at its highest or in the season of floods. They selected the area that Ubon Ratchthai people called “Pone” or Bhu Din”.

In the lower part of the river there is a socially important area, which developed into a town and absorbed elements of Indian culture, religion and arts along with features that come from the provinces by the ocean.

only 500 meters in altitude. A distance of 2,500 kms and a descent of 4,500 meters in the upper The Mekong River cause the river to flow fast and powerfully. It runs through many complicated and narrow gorges with 100-meter cliffs. This area is unique for the variety of its nature and is also the source of three important rivers: the Salawin, Mekong, and Yangtze. For the last 10 million years, these three rivers have been forced to run the same route at Li Jiang (a deep valley.) This area is a center of biological variety of world significance, containing a large range of flowers and plants and assumed to have unique species of fish.

When China declared its the “Great Leap Forward” policy during the period 1958-1962, the Chinese people destroyed a lot of forests to obtain wood to manufacture steel: many mountains in China were affected, resulting in flooding, soil collapse, and blocked rivers. Although there was an attempt to solve the problem by planting large-scale forests on the mountains, Asian biologists believe that the quantity of fish species in the Mekong River has sharply decreased because of this problem.



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90-91. Ancient painting at Pha Tam, Ubon Ratchathani

92. Sunset over the Mekong River, seen from Pha Tam, Ubon Ratchathani

Champasak



93

Prasat Wat Phu

Prasat Wat Phu is located in Champasak district, Lao. Cham Pa Sak was the capital of the Chan La kingdom and part of the ancient Fynan kingdom. Prasat Wat Phu was built before Khmer kingdom existed. In those ancient times, burnt human offerings were made at this place.



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- 93. Pra Sat Wat Phu, Champasak district
- 94. Front of Pra Sat Wat Phu, Champasak district
- 95. Inside Pra Sat Wat Phu, Champasak district



96



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96-97 The Kon waterfall, Champasak district

Fresh Water Dolphin (*Osceola Brevirostris*)

The fresh water dolphin (*Osceola Brevirostris*) can be seen in the Mekong River at the Kon waterfall, at Lee Phee in Laos, Ton Le Sap in Kratie, Cambodia, and at Kampi, which is about 15 kilometers from the town. It can also be seen along The Mekong River waterways such as Se Kong, Se Pian, and Se Kan. This dolphin attains a length of 2.5 meters. At present, there are only 300 fish in the lower The Mekong River in Laos: at Kampi in Cambodia there are only 60 fish left. The reason for its scarcity is twofold: it gets trapped in fishing nets and other fish are caught through the use of grenades.

Siem Raj



98



98-99 Angkor Wat

99

However, proper quantity and quality of alluvial deposits is still a major factor in the growth of aquatic animals and a factor for the 55 million people living in the lower the Mekong River, or about 1/3 of the whole population in Thailand, Laos, Cambodia and Vietnam.

At the Guanlei Checkpoint, which is the end of the border with China , the Kong flows at a height of only 500 meters. To reach the South China Sea, the Mekong River runs for a further 2,300 kms. There are more than a hundred large and small branches, which join together along the route of the entire Lower the Mekong River. These branches are an important factor in making the Mekong River capable of releasing 475 hundred million cubic meters a year on average, 8th most voluminous in the world. Water from the Upper The Mekong River comes mostly from melted snow and covers only 26 % of the Mekong River area; it can be released into only 20 % of the entire river area. The other 80% is from the branches of rivers running through The Lower the Mekong River. All these branches are from the monsoon area, so they variously provide plenty of water.

In the rainy season, water in the Mekong River will run over hillsides down to the valleys as far as the overflow canals.



100



101



102

100. Images of Apsaraat Angkor Wat

101-102 Stone carving on the walls of Angkor Wat

The power of the water will wash away soil surfaces to gather in the river branches. The water there will thus contain a lot of physical matter and minerals. Wherever this accumulates on the banks, especially in the lowland near the coasts before reaching the sea, farmers will obtain fertilizer; plants and animals will use this material as their “food.”

In the summer, the water level will drop by between 8 to 10 meters. This will change the river dramatically. This seasonal change is the most important factor for those living in the Lower Mekong River, since it provides them both food and constitutes the ecosystem. From Chiang Saen to Vientiane, the Mekong River runs over many cataracts and islets, a long route: most of the areas passed are steep valleys with lots of rocks or reefs. In the drier season, the tides will be forced by gorges as far as the river. In April, goods must be carried by land, as ships will be dragged to the banks. Because of the huge rocks and bars at the river mouth, many parts of the river are divided into small narrow routes, which will overflow the river mouth when large quantities of snow in Tibet melt and run down in spring. However, when it leaves Vientiane, the Mekong River will run through the wide lowland, becoming a huge river again able to support shipping. When it



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103. Bayon, Nakhon Thom

104. Stone carving at Bayon, Nakhon Thom

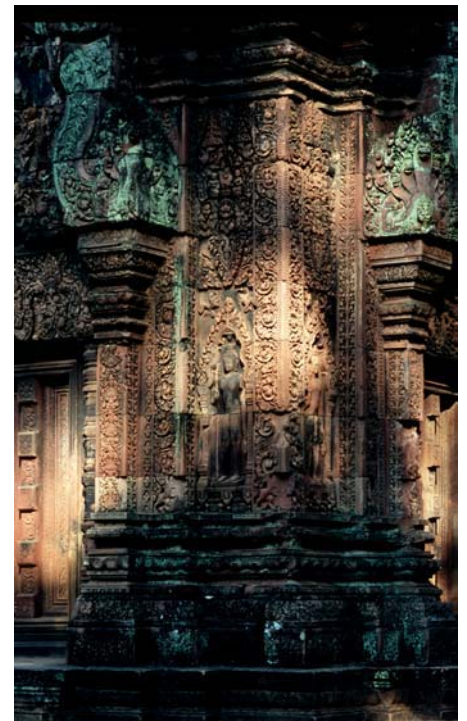
105. Prasat Nak Phan

passes through the plains of the northeast as far as Nakhon Phanom to arrive at Khemarat, there will be long sections of cataracts until it goes beyond Pak Sae. At this time, the Mekong River will widen to almost 14 kms to run over 4,000 small islands, an area known as “See Phan Don”(Four Thousand Islands). The river runs past Kong Island at the Laos-Cambodia border, where the biggest island in the Mekong River is, before descending to the Kon Waterfall, normally called “Kon Pha Pheng.” Kon is not one huge waterfall like Niagara or Hell Chasm (Haeu Narok) but consists of both small and big waterfalls connected from bank to bank with a length of 11 kms; some parts, 60 feet high, rise to Wang Nam Luek, while others descend to Kon waterfall in steps, 2-3 feet per step. The water runs through the turbulent Phratabang cataract, which is full of whirlpools, and past long, straight islands in the region of Stung Treng until it reaches Kratie and runs through the wide lowland of the Mekong River in Cambodia and Vietnam. กลางเป็น

Both large and small river branches in Thailand and Laos running into the Mekong River provide all the water in the river, over 70% of its entire route. These are the Au River (3%), Nguem River (5.4%), Turn River (6.3%),



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106. Stone Carving, Ban Tai Sri Castle

107. Ban Tai Sri Castle

Songkam River (2.1%), Sae Bang Fai (3.7%) She-Moon River (20.5%). In the monsoon, where the Mekong River runs through Phnom Penh, the enormous amount of water will cause a special phenomenon to occur. Cambodia will come to resemble a huge “bowl”, where large amounts of water from the surrounding mountains will gather; the overflow water in the centre will become like a large lake. In the dry season, water from the lake will run into the Mekong River, but in the rainy season, when the Mekong River runs through Phnom Penh, a huge quantity of water bursts the banks of the river, dividing into two: the first route runs along the main The Mekong River to the South China Sea in Vietnam while the other runs to the northwest to the Cambodian Lake. This can expand the 3,000 km² lake in the dry season to 12,000 km² and brings soil deposits, a good quality fertilizer for central Cambodia. When the water level decreases, rice will be cultivated along the different water levels. The lake can also provide up to 400,000 tons of fish a year; this includes over 140 different species. This Cambodia could be seen as the “stomach” of the Mekong River in that the lake is a special source that can exchange products with the main the Mekong River, according to the river tides.



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108. Elephant field, Nakhon Thom

109. Ta Phroma Castle

110. Under water stone carving in the water at Phnom Kulane

When the Mekong River runs out of the lake at Phnom Penh, near the Cambodia-Vietnam border, it will assume a delta-shape as it runs into the sea. The estuary of the river Kong covers approximately 40,000 km² in Vietnam, and separates into many branches; each is at a great distance. The Vietnamese call it “Kao Long” or “Nine Dragons”. It covers 300 kms of the coast like a lake; these areas of

Vietnam are subject to flooding and water shortage. It is known as the granary of Vietnam, taking in most of the population along the entire the Mekong River. However, it is not only deposits that make the Mekong River communities fertile; seasonal variations also contribute to the various wet areas and downstream geography.

Ton Le Sap

Fisheries (Page 46)

The Mekong River is populated by most species of fish, over 1,000 in all. It is thus the source of one of the biggest fresh water fisheries of the world. Up to 2.6 million tons a year of fish are caught, with a value of more than US\$ 17,000,000,000. The population of about 65 million who live along the Mekong River must directly or indirectly depend on and earn their living from fish, consuming, trading, and catching them according to the cycle of the seasons. Rain falling on the entire length of the Mekong River adds to the quantity of water. The excess water will overflow onto the lowland. During the dry season, a lot of fish species will migrate to deep reservoirs and river branches in order to have lay eggs. During the rainy season, there will be sufficient water in the Mekong River and its branches: newborn fish can swim into the flooded area in order to find food and mature.



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111. A corner of Ton Le Sap

112. Tonne Le Sap

113. Fishing at Tonne Le Sap

8. The Roles of the Mekong River in the Future

At present, the Mekong River, especially at Jinghong in Yunnan and Chiang Saen in Chiang Rai, Thailand, plays a number of important roles for the people living along it. In general, there are six important roles.

1. It is a source for the local people to earn their living in fishery, agriculture, and even livestock. These occupations are the original means of earning a living and exemplify the traditional lifestyles of the ancient The Me Kong River communities.

2. It is a route for transporting goods, which mostly come from China and Thailand. When China and Thailand signed the contract called “Free Trading Areas” (FTA), the Mekong River communities also demanded a greater quantity of goods: the trend is likely to continue. If there is no change in transportation, for example, if the Kunming-Bangkok Road is opened, transportation of goods along the Mekong River will obviously decrease.

114. Kam Pong Cham

115. Water traffic in Ton Le Sap at the end of the
Mekong River In Phnom Penh, Kam Pong Cham

116. Fishing village at ton Le Sap, Kam Pong Cham

Kampongchanam



114



115



116

Phnom Penh

3. Because of its natural beauty, the river offers many opportunities for sightseeing, during the trip from Jinghong, a center of Tai culture, and from Chiang Saen, an ancient city; the famous Golden Triangle is also located on it. Therefore, tourists can visit these two places during their trip along the Mekong River. In addition, they can enjoy the beautiful natural scenery of China, Myanmar, Laos and Thailand. Thus, the river at this point in time is certainly worth visiting.

4. It is a source of great biological diversity. Although no survey on biological diversity focusing on the stretch of the Mekong River from Jinghong to Chiang Saen has been carried out, it is reasonable enough to assume that the biological diversity is due to the fact that there are approximately over 1,000 species of fish in the Mekong River.

5. It is a source that contributes to maintaining the environmental balance in Cambodia at Ton Le Sap and a source of fresh water, as opposed to salt water, at the Mekong River Triangle in Vietnam. Modifications to the river's flow at its source in China or in the countries situated at its end, such as in Thailand and in Laos, might affect



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117. Royal Palace

118. "Killing Field" at Jeng Ek

119. Phnom Penh

the water supply in Cambodia and Vietnam.

6. It is a source of hydro-electric energy. Presently, China has constructed many dams in Yunnan along the Mekong River, as previously mentioned. These dams produce electric current to be used in Yunnan. At Guan Zhou or the Pearl River Delta Area and Thailand, construction of dams may affect the water flow in the Mekong River and the environment. Moreover, it might change the lifestyles of the Mekong River communities considerably. Not only China but also Thailand, Myanmar, Laos, Cambodia and Vietnam will be affected.

The six important roles of the Mekong River described above might in fact change in the next five years for the following three reasons:

1. There has been an attempt to blow up cataracts, especially from Jinghong to Louangprabang in Laos. At the beginning of the Mekong River, China blew up cataracts, raising the height of the river from level 6, which would allow passage of freight ships of 150 tons, to level 5, which would allow passage of freight ships of 300 tons. The other cataracts to be considered for destruction are those between Chiang Saen and Louangprabang.



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Kam Pong Cham



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120. The Mekong River at Phanom Penh
121-123. Local lifestyle at Kam pong Cham

Many people living along the river do not agree with the destruction of the cataracts because it might change their lifestyles. However, if it makes navigation between Jinghong and Louangprabang more convenient, more goods will probably be transported. Additionally, it will permit greater use of boats of 300 tons or more ship for tourism.

2. The construction of a hydro-electric dam at the beginning of the Mekong River in China affects river flow in many ways. Also, shipping on the Mekong River has been affected and the river's role in the transportation of goods might change the traditional lifestyles of the Mekong River communities.

3. The construction of a road from Kunming to Bangkok through Louang Nam Ta in Laos and via Jinghong in Chiang Rai, which will be completed by the year 2007, will cause many changes to the river's role in the transportation of goods; there would be no need for the destruction of cataracts.

In the near future, a railway might be built from Denchai in Phrae to Chiang Rai and Chiang Khong in order to join up with the Kunming-Louang Nam Ta-Bangkok route. Thailand has already studied the feasibility of this project, which can be undertaken if the budget is approved.

Kratie



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124. Kratie Port

125. Fishing by the Mekong River, Kratie

126. Sunset at Kratie

Chau Doc



128



127



129

127. The Mekong River at Chau Doc

128. Dried fish at Chau Doc

129. Xham village at Chau Doc

The Xham Minority

The “Xham” are a minority who speak an Austro-Asian and Malay-Polynesian language. The culture of Xham basically originates from the prehistorical “Za Hin” culture in the land of Annam and Indian merchants of the first century AD. Their culture survived more than one thousand years. From the beginning till the end of the Xham realm, there were 78 kings and 14 dynasties. Up to the 15th century AD, the king of Xham owed loyalty to the Di Viet dynasty of Viet nationality, which would replace the Xham. The Xham are Hindu. Various literary works on Indian religions exist, which were translated into the Xham language and became local chronicles. The Hindu gods such as Phrom, Siva, Visanu are respected by the Xham people. Siva is the most highly respected: many buildings dedicated to Siva were built.

In the near future, a railway might be built from Denchai in Phrae to Chiang Rai and Chiang Khong in order to join up with the Kunming-Louang Nam Ta-Bangkok route. Thailand has already studied the feasibility of this project, which can be undertaken if the budget is approved. China, at present, is studying the feasibility of the construction of a railway from Kunming to Sue Mao and La City to Laos in order to join the track to be built by Thailand to Chiang Khong.

In China, there is a railway from Kunming to Yee See, but not from Yee See to Sue Mao and La City in Laos. This railway is very significant for China since it provides a cheap route for the transportation of goods that link Yunnan and other cities in the west of China with the ocean at Singapore; products from China can be exported to the world market by crossing India and the Pacific Ocean.

Thailand plans to build a railway at Nam Luek Port at Thai Muang in Phang Nga, and if there is a railway connection from Suratthani to Thai Muang, it will be much more convenient for China and Thailand to export their goods to the Middle East, Europe, and Africa. It also makes the railway from Kunming-

Can Tho



130



131

130. Field at Can Tho

131. Local Life style by the
Mekong River, Can Tho

132. Can Tho



132

Louang Nam Ta-Chiang Rai more important.

Even if there is agreement to build this railway, it may take at least 15 years, according to experts. If the railway from Kunming to Chiangkhong is completed as well as the Kunming-Luang Nam Ta-Bangkok road, the role of the river Kong in the transportation of goods will be much reduced, and the destruction of cataracts will no longer be necessary.

However, the river's role in producing electricity still remains in the construction of the hydro-electric dam in Yunnan. This role could be further increased if more dams are constructed. Nevertheless, the countries situated downstream such as Thailand, Laos, Cambodia and Vietnam are very much affected by the construction of dams.

Myanmar is also affected but much less than these 4 countries. This issue must be given serious consideration in order for the right solution to be found.

Otherwise, it could cause trouble for the Mekong communities, who would face a disastrous situation.

In conclusion, the role of the Me Kong River in terms of goods transportation in

Can Tho



133. The Mekong River waterway flowing into the estuary, My Tho

133



134. The Mekong River estuary, Can Tho

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the near future will be diminished after the land transportation routes between Kunming-Louang Nam Ta-Chiang Khong-Bangkok are completed in 2007 (estimate).

The economic role of The Mekong River will be important only in tourism and the destruction of cataracts will be no longer necessary. The construction of dams at the source of the Me Kong River in Yunnan has started to affect the communities living at the mouth of the river. The case for rejecting construction becomes stronger and could lead to the

idea of giving up construction altogether.

If that happens, the six countries situated along the Mekong River - China, Myanmar, Laos, Thailand, Cambodia and Vietnam - have to come to an agreement about how to manage the water in the river. In the long term, perhaps, there will be a railway link joining Kunming and Singapore. When that happens, the need for transportation via The Mekong River may decrease very much; on the other hand, trade and tourism will expand enormously.