

## **Economic Cooperation under the Framework of Mekong Development Project**

**Mr. Samran Chooduangngern\***

### **Abstract**

On the basis of his long-year working experience with the Secretariat of the Committee for Coordination of Investigations of the Lower Mekong Basin (generally known as the Mekong Committee), the author presents in this relatively concise paper aspects of the Mekong Development Project (MDP) and outlines the relationship between two factors: the implementation of MDP and its impacts on economic cooperation among or between the riparian countries, namely, Cambodia, the Lao PDR, Thailand and Viet Nam. In addition to the technical information provided, the author elaborates on the "opportunities" that the Committee, as an inter-governmental organization, could offer to international donor communities to render their assistance (both in cash and in kind) leading to economic cooperation and other exchanges among the countries. In this connection, roles of Japan in helping promote such development in the region are also noted.

The spirit of cooperation among the riparian countries and peace in the region are seen to have been the key factors of successful undertakings of the Committee to date. Several cases in point reflect the above statement, apart from the fact that they could be information of relevant interest to the scholars who are working on development issues in these riparian countries of the lower Mekong basin. In addition, the author, from his personal point of view, gives several remarks on future trends of the MDP for the benefit of the participants attending the present Conference at which this paper was presented. Lastly, he makes his recommendations on future assistance required in such important areas as pre-investment studies and to human resources development being implemented by the Committee.

All constitute the highlights of this paper which may be picked up for reference and/or review by all concerned. In respect to Japan, her future role in helping to promote further economic cooperation among the Indochinese States and under the framework of the MDP is seen to be very strong and significant.

---

\* Adviser, Policy and Planning Division, Mekong Secretariat. The views expressed in this paper are solely of his own and do not necessarily reflect those of the Mekong Committee or its Secretariat.

## 1. Introduction

This paper was prepared specifically for the International Conference on Thailand and Japan Economic Cooperation with Indochinese States which is being organized by the Institute of East Asia Studies, Thammasat University, at Asia Hotel, Bangkok, Thailand, from 27 to 28 May 1993.

The term Mekong Development Project (MDP) referred to in this paper means to cover all the projects and/or activities of the Committee for Coordination of Investigations of the Lower Mekong Basin (known as the Mekong Committee) which has been established since 1957, to develop the water and related resources of the basin. The Committee has four founding member countries: Cambodia, Laos, Thailand and Vietnam. Economic cooperation among these countries could be observed in many ways through the implementation of a large number of basin- or regional wide projects/activities carried out during the last 37 years of its operation by the Mekong Secretariat which is its working arm. In this connection, both pre-investment and investment projects have been implemented in all the riparian states with funds made available by a large number of cooperating agencies and donor countries, including Japan.

The principal objectives of this paper are three-fold:

- i) to present basic facts about the MDP and working mechanism of the Mekong Committee;
- ii) to highlight the roles of Japan and to a lesser extent, Thailand, in promoting economic cooperation and development in the Indochinese States under the framework of MDP; and
- iii) to recommend areas of future assistance which may be considered by the countries for the same purposes.

## 2. The Mekong Committee and MDP

### Establishment

Until the early years of the 1950s, water resources of the lower Mekong basin, i.e., the Mekong river and its tributaries, still had been left largely untouched. Three main obstacles, namely, lack of basic data, absence of an appropriate institutional framework and shortage of funds, had impeded development of resources. With a view to utilize the immense potential of the resources, the Mekong Committee (or in short, the Committee) was established by the four riparian governments of Cambodia, Laos, Thailand and the Republic of Vietnam in 1957. The establishment was, in fact, in response to a recommendation adopted by the then ECAFE (now re-named the Economic and Social Commission for Asia and Pacific or ESCAP) of the United Nations.

Its main goal, as laid down in its Statute, is to *promote, coordinate, supervise and control planning and investigation of water resources development projects in the lower Mekong basin*. This, in fact, is the mandate of the Committee.

By nature, the Mekong Committee is an inter-government organization with plenipotentiary representatives from the participating governments (see the organization chart in Annex 1). Within the framework of its mandate, the Committee performs its functions to achieve a common purpose of integrated basin development to generate social and economic benefits for the people therein through regional cooperation and through its working/administrative arm, the Mekong Secretariat which is located in Bangkok. At present, there are a little over 100 staff from some 15 different nationalities working at this Secretariat whose major functions are meant to include programme planning, management of resources (for implementation of projects) and co-ordination. It works in close collaboration with the various national agencies concerned in the Committee's member countries through their respective National Mekong Committees.

The Mekong Development Project (i.e., projects and activities already approved by the Committee) are implemented with funds and other necessary resources obtained mainly from various UN and other international agencies and the donor community. It is a responsibility of the Executive Agent, head of the Secretariat, to do the fund-raising. The work of the Committee is based on a continuous and close co-operation between these parties.

It should be noted at this junction that the functioning of the Committee was interrupted in 1975 (although the work of the Secretariat continued) due to the warfare and revolution in the Indochinese States. No meetings of the full Committee could be held for years after 1975 because of non-participation on the part of Kampuchea (Cambodia at present), and latterly because of the unresolved political problems in the region. With the strong will to see that implementation of the MDP continues to materialize the established development goal of the Committee, the remaining three member countries, namely, the Lao People's Democratic Republic (Lao PDR, formerly Laos), Thailand and the Socialist Republic of Vietnam (hereinafter referred to as Vietnam, formerly the Republic of Vietnam), signed in 1978 their joint Declaration announcing the establishment of the Interim Committee for Coordination of Investigations of the Lower Mekong Basin (generally known as the Interim Mekong Committee). The Declaration enables the Secretariat of the Interim Committee to perform its functions with more or less the same development objectives but with a high degree of compromise and flexibility among the member countries. It should be noted further that although the Interim Committee is intended to function only until the fourth member

(Cambodia) resumed participation in the full Committee, due to reasons, status of the Interim Committee remains unchanged until today and, the Secretariat continues its functions uninterrupted.

### Resources and Programme areas

The lower Mekong basin (as can be seen from the location map in Annex 2), covers an area of more than 600,000 km<sup>2</sup>, comprises almost the whole of Cambodia and Lao PDR, one third of Thailand (its entire north-eastern region and part of its northern region) and one-fifth of Vietnam (its Central Highlands and delta region). Of the total length of some 4,200 kms, the stretch of the Mekong river in the lower basin is about 2,400 kms. The amount of water that each year flows down through the basin and into the ocean is vast, i.e., 475,000 million m<sup>3</sup>. If this water was used to generate power, this resource of the basin could supply some 505,000 Gwh of electricity per year to all the countries in South-east Asia, and possibly beyond, through an interconnected grid. Further, there is a possibility of using the water to irrigate some 6,000,000 ha of cultivable lands for rice and other crops. While the potential of water resources of the basin is so immense, it has not yet been utilized very much to date and as everyone knows, the river still runs through one of the poorest regions of the world.

Figures in Annex 3 illustrate the relatively poor state of sub-regions in the basin when comparing their respective productivities to those of the national economies. The same is true of the 50 million people of its population. As can be seen from the same Annex, average annual per capita income in most of the basin's areas is still in the neighborhood of US\$ 180-570. During the last 37 years of the Committee's existence, although many projects and activities have been carried out and completed, less than one per cent of the energy potential of the basin has been put into use. Similarly, less than five per cent of the cultivated area in the basin has been put under irrigation. Much still has to be done by the Committee.

### Work Programme of the Committee

Over time and as explained earlier, the Committee has come to perceive its tasks as the comprehensive development of both the water and related resources of the basin for hydroelectric power, irrigation, flood control, drainage, navigation improvement, watershed management, water supply and related development. It likewise pays attention to the environmental, social and economic aspects of the basin. These form the overall scope of the current Work Programme of the Committee or in other words, the scope of the MDP. Details of projects and activities duly approved by the Committee will be presented in the Work Programme which becomes one of its focal planning documents for developing the natural resources of the basin. While the Work



Programme serves as a shopping list providing important information about the projects/activities including the indication of types and volume of assistance required to donors, it gives also an annually updated overview of the coordinated implementation of MDP based upon a strategy adopted for sustainable and integrated development of the resources.

In Annex 4, a full list of the projects/activities as appeared in the current Work Programme for 1993 of the Committee is given. In addition to the aspects mentioned above, the list reflects development priorities of the riparian countries which are supposed to be in conformity with their national development plans. It may be observed that the programme includes projects and activities at various stages of implementation, i.e., from basic data collection and studies of pre-investment category to those of investment for construction.

The current Work Programme has a portfolio of nearly 120 projects/activities with the total fund requirement of over US\$ 150 million. It should be pointed out that number of basin-or regional wide projects (both on-going and newly proposed ones) is larger than that of the national ones, contrasting with the picture of the last decade but reflecting well the shifting emphasis of the Committee in carrying out its functions at the present, i.e., aiming at promoting more and more economic cooperation and other exchanges among the member countries. In the next section, discussions will focuss on the donors of MDP who play a crucial role in promoting regional cooperation and economic development in the countries.

### 3. The Donors

As mentioned earlier, projects and activities in the MDP are normally implemented with general external support from donors. A unique feature of the Committee's resources, which are largely composed of voluntary contributions, is that there are in cash and in kind (i.e., commodities and services). Since its establishment in 1957, the Committee has received already over half a billion US\$ in contributions. Over 60% of the amount constituted investment for construction and the rest was allocated for pre-investment investigations, studies and planning. To date, donors of the Committee include more than 25 countries, 13 UN agencies, five major financial institutions including ADB and IBRD and three foundations. Leading donors include the Netherlands, United States of America, Australia, Germany and Japan. Korea is among the new donors that has started recently to provide its assistance to MDP.

It is important to mention at this stage about the financial policy of the Committee which in general has been to underwrite pre-investment work by governments and to finance construction by donors. Other characteristics are, as mentioned, the voluntary aid given for pre-investment investigation work and

resources provided by the riparian countries themselves in matching contributions to the external assistance.

The flow of assistance from donors fluctuates from time to time depending on such factors as peace in the region, project performance of the Committee, national economies of the donors, etc. An example is to be given on the situations between 1975 and 1978 when the three riparian countries (Cambodia, Laos and Vietnam) failed to appoint their members to the Committee, so that no sessions could be held in these years. One immediate consequence was that UNDP's Institutional Support to the Committee declined sharply, e.g., compared to US\$ 5.6 million pledged in 1973, the pledges dropped to US\$ 60,000 in 1975 and to nil in 1976. As situations improved, some US\$ 240,000 was pledged in 1977 and US\$ 950,000 in 1978. The 1973 levels were regained in 1979 when US\$ 5.7 million was pledged by this long-standing and supporting agency of the United Nations, the UNDP.

A similar situation is being observed again in the last two years. Annex 5 provides an instant summary of funding status of the projects/activities in the current Work Programme for 1993 of the Committee. It was noted that as of mid-1992, of the total external funds required of US\$ 154.7 million, the Mekong Committee could secure only US\$ 41.2 million (or, 26.6%) for the implementation of its projects/activities. The figure reflected to a certain degree the difficult situation faced by the Committee in that year when its Session could not be organized as scheduled and also as there was a requirement to discuss a new modality of future cooperation among the member countries. However, despite the fact that such the discussion (on the future cooperation) was still going on and has not been concluded yet, situation improved gradually with the assistance and strong leadership of UNDP. At the time of this reporting, the figure of funds secured has already increased to the level of 40% point which reflected very well the donors' understanding on the improved environment of political climate in the region and their firm intention to continue providing their assistance to the MDP.

Special mention is to be made of the roles of Japan and Thailand in this respect. Japan has been actively involved in the Committee's work since its establishment in 1957. She has become one of the major donors of the Committee providing constant assistance to its development projects and activities. In terms of cash contribution, she even was the second largest, next to the United States of America, until the occurrence of political changes in the region in 1975. Subsequently, and for more than a decade, Japan's assistance was limited to provision of two experts on a non-reimbursable basis and an additional sum of cash contribution for institutional support every year. Changes were observed in recent years when the assistance began to include more and more funds for implementing projects/activities in MDP. Her contributions to

the region and in this respect have been significant and always been highly acknowledged.

Regarding Thailand, she is not a donor as such under the Mekong's development context but simply a member country of the Mekong Committee and a recipient country from the donors' point of view. Nevertheless, Thailand is the host country where the Office of the Mekong Secretariat is located. In addition, Thailand's initiatives in promoting the implementation of many development projects in the region have always been substantial (as will also be discussed in the subsequent section).

#### **4. MDP : The Impact and Future Requirement**

Generally speaking, implementation of MDP will generate various types of benefits (either tangible or intangible), depending on the projects' designs. One type of such benefits, regardless whether or not it has been envisaged at the planning stage, includes the impact of the projects or activities in promoting "economic cooperation" between or among the beneficiary countries. This is particularly true when talking about the implementation of projects/activities of a "basin wide" nature, i.e., the projects/activities which involve two countries or more. In the sub-sections below, for the benefit of the discussions to be made at this Conference, some relevant examples of such the impact as has had been experienced by the Mekong projects in a few sectors of interest and within the context of MPD will be explained. Mention will be made also of the related donors and their respective roles in implementing such projects.

##### **Navigation and transport**

For more than three decades of its operation, the Committee has implemented a large number of projects related to river works and transport, especially for the purpose of inland water-borne transportation. The Committee has pressed for navigation improvement programmes (in addition to improvement of navigation routes) in three different areas: establishment of transit ports, construction of new vessels and ferries and development or expansion of cargo-handling facilities on both the Mekong and its major tributaries in the member countries. These programmes, in addition to helping maintain the significant roles of navigation and transport on the river-systems, strongly promote government cooperation and economic development in the countries. This case is very significant particularly for the Lao PDR which is the landlocked country of the Mekong lands, and Vietnam and Cambodia.

Several projects in this development sector which have been or are being implemented with millions of US\$ contributions from such countries as Australia, Germany and the Netherlands, include navigation aids on the Mekong river, construction of river ports in the Lao PDR, improvement of ferries

services in Cambodia and hydrographic surveys covering the whole stretch of the Mekong river in the lower Mekong basin.

The role of the Mekong river in regional and sub-regional transport development has been confirmed by a recent study undertaken by the Mekong Committee. In this connection, the Committee is preparing to undertake two additional important strategic studies: (i) Development of the Upper Mekong Navigation and (ii) Role of the Southern Lao Transport Corridor. While the former aims at ascertaining the important role of the Mekong river in promoting future economic cooperation and exchanges (including trades, tourism, etc.) among countries in the upper as well as the lower Mekong basins, the latter aims particularly at promoting the same but more among the countries in the lower Mekong basin. A lot of assistance is to be required further for the work in this sector (see the information provided in Annex 5).

### Irrigation and Agriculture

Increased agricultural production has been a key priority in all the member countries and the MDP has helped in many ways to raise the required productivity through a number of projects. Further, as projects in these particular two sectors are more nationally oriented, a few cases will be cited to illustrate their success in respect of promoting regional cooperation among the countries concerned. A recent case of the US\$ 10 million Mekong Irrigation Programme (known as MIP) funded by the Netherlands is one. MIP included such components as construction of pump irrigation schemes, establishment of water users' groups, training in water management, establishment of experimentation farms and crop trials, etc., in the Lao PDR and Thailand. During the course of its implementation, it gained cooperation from a large number of people at both the government and grassroots levels and in both countries for the benefits of sharing their experience and learning about new things from one another. Phase I of this project ended in late 1991 and the experience gained is expected to be applied not only in the Lao PDR and Thailand but also in the other two member countries during the implementation of Phase II., which is on-going.

As a matter of fact, agriculture/irrigated agriculture in the lower Mekong basin is still very much at an underdeveloped stage. In addition to the problems of inadequate water supply and flood control, farm technology and management capability are among other aspects that need to be strengthened everywhere. It is unfortunate, however, to observe that in spite of a relatively large programme in these two sectors, assistance obtained from the donor community is rather limited at the present (see Annex 5). On the basis of the fact that agriculture is the backbone of the countries in the basin, it would be desirable that major donors look at the possibility of extending more of their support to these particular sectors.



## Hydropower

As have had explained, due to the great potential of Mekong water resources for generation hydropower in the basin, this development sector has always been given high (if not top) priority in the MDP. Of the many feasible projects identified, Pa Mong scheme is of interest. This scheme not only comprised studies of hydropower and irrigation of areas in the Lao PDR and northeast Thailand but also of its regulating capacity which would enhance the viability of all the Mekong projects downstream. However, as the scheme is so large in scale, involving tremendous investment costs and environmental and social (resettlement) problems, its implementation still can not be decided.

Another important case is the Nam Ngum Hydropower Dam in the Lao PDR which was constructed within the context of MDP in the early 1960s. This project contributes so much not only to the national economy of the Lao PDR but also to economic cooperation between it and Thailand. The project was initially studied by Japan and the United Nations Special Funds although it was later constructed by the funds from some 9 major donor and cooperating countries including Japan and Thailand. When the construction was completed in 1967, its inauguration ceremony was held with the King of Thailand and the King of Laos meeting on a barge in the middle of the Mekong river to dedicate the project which stood out as a symbolic occasion for the Mekong development. The occasion also underscored the potential of the MDP when regional cooperation and political will in support of a project exist.

The exchange of power supply between Lao PDR and Thailand continues until today. In recent years, the Lao PDR has sold her surplus electricity generated by the Dam to Thailand for the average of US\$ 50-60 million a year. The figure represents about one third of her annual export income. At the same time, Thailand also supplies electricity to some regions in the southern part of the Lao PDR, although at a much smaller scale and volume. Thank to this successful case of the Nam Ngum Dam, the present Government of the Lao PDR has made clear provision in its medium- and long-term development plans to develop further hydropower projects in the country and for the purpose of export earning. Among a few successful contractors, a Japanese firm has been awarded recently to carry out studies for possible construction of the Nam Theun 1 Dam (potential of over 1,000 MW). Development of this low cost energy and pollution-free hydropower dam using renewable resources from rivers in the basin and for the benefit of all the member countries in this respect is therefore not a dream. More efforts will have to be made in this development direction, although problems do exist. In this regard, assistance from donors to this particular sector of MDP remains important and will be significant for many more years to come.

### Human Resources Development (HRD)

Lastly, mention may be made of the cross-sectoral HRD programmes within the MDP, involving many projects of training nature. Training in the context of the Committee's work is aimed at enhancing the absorptive capacity of member countries and at facilitating the transfer of modern technology in disciplines related to water resources. Institutional-building and a variety of training programmes are being organized to meet specific needs of the Committee as well as those of the member countries themselves. A Human Resources Development Unit was set up recently in the Secretariat to undertake the various projects/activities required, reflecting fully the emphasis being made by the Committee. In 1992, as many as 66 HRD activities were taking place to strengthen the technical capabilities of riparian personnel. Over 1,500 persons were involved in these activities, 62% of which participated in project-related training. It should be added that although this training was project-specific, participation in more than half of the activities had a basin wide character, i.e., involving participants from more than one country. Other training was that of a broad based technical type which covered about 550 persons, or a little over 30% of the total. However, as HRD is a common need to all the countries and the demand for implementing the related training programmes is so large, there are still many gaps to be filled under the framework of MDP. See, for example, the requirements shown in Annex 5 of this paper.

To conclude this section, it will not be complete without mentioning the roles of Thailand in this respect. Thailand has constantly been a co-operating country in accepting to host various trainings and study programmes for personnel from the other member countries. A recent policy of the Royal Thai Government in providing grant aid to the Lao PDR for supporting HRD in the country is another significant example that should be noted. As for Japan, on the basis of her plentiful resources, her roles and contributions to this particular sector of MDP are to be greatly expected.

### **5. Concluding Remarks**

The development potential of the Mekong Development Project is very high and there are still a lot of development opportunities to be taken up. The relatively poor state of the basin and its people has called for assistance and support from donor countries including Japan to render their help in carrying out the many unfunded development projects and in fulfilling the local as well as regional needs.

Under the framework of the Mekong Development Project, the Mekong Committee, as an inter-governmental organization, provides a great opportunity to those donor countries and cooperating agencies to consider providing their

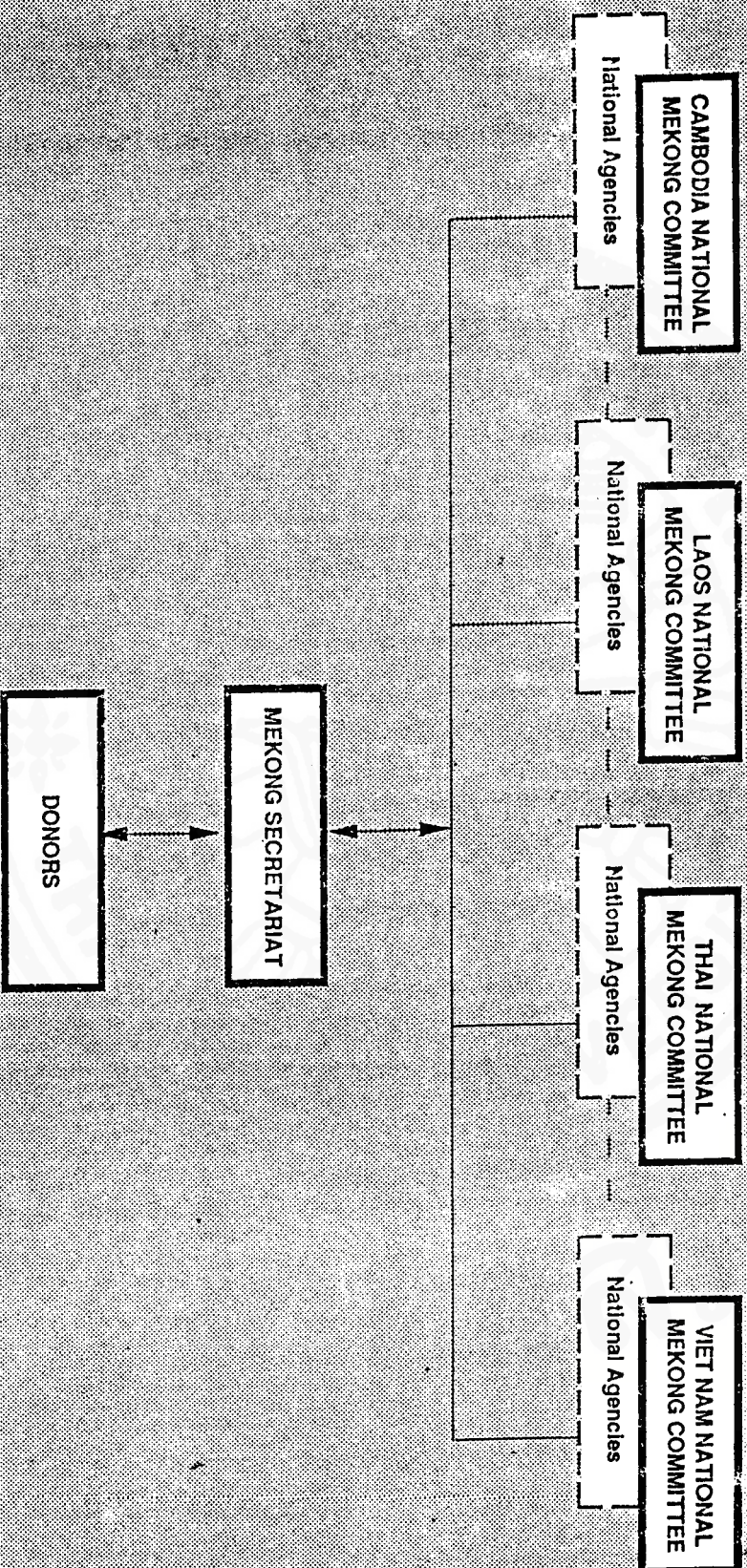
assistance at their will and in line with their respective policies. Experience has shown that the assistance both in cash and in kind provided for the implementation of basin wide projects/activities has contributed significantly to regional cooperation, economic and other exchanges between or among the countries concerned.

However, it is observed that peace in and a cooperative spirit of the member countries are the key factors for successful undertakings of the Committee. Such factors dictate to a large degree volume of assistance from its donors over time.

In terms of areas for which assistance is most needed, it is recommended that an emphasis should be placed on contributions for pre-investment studies aiming at improving knowledge on the basin and strengthening understanding of the people on these common resources as well as their appropriate uses. In addition, the assistance should include those resources required for the implementation of HRD programmes of the Mekong Committee.



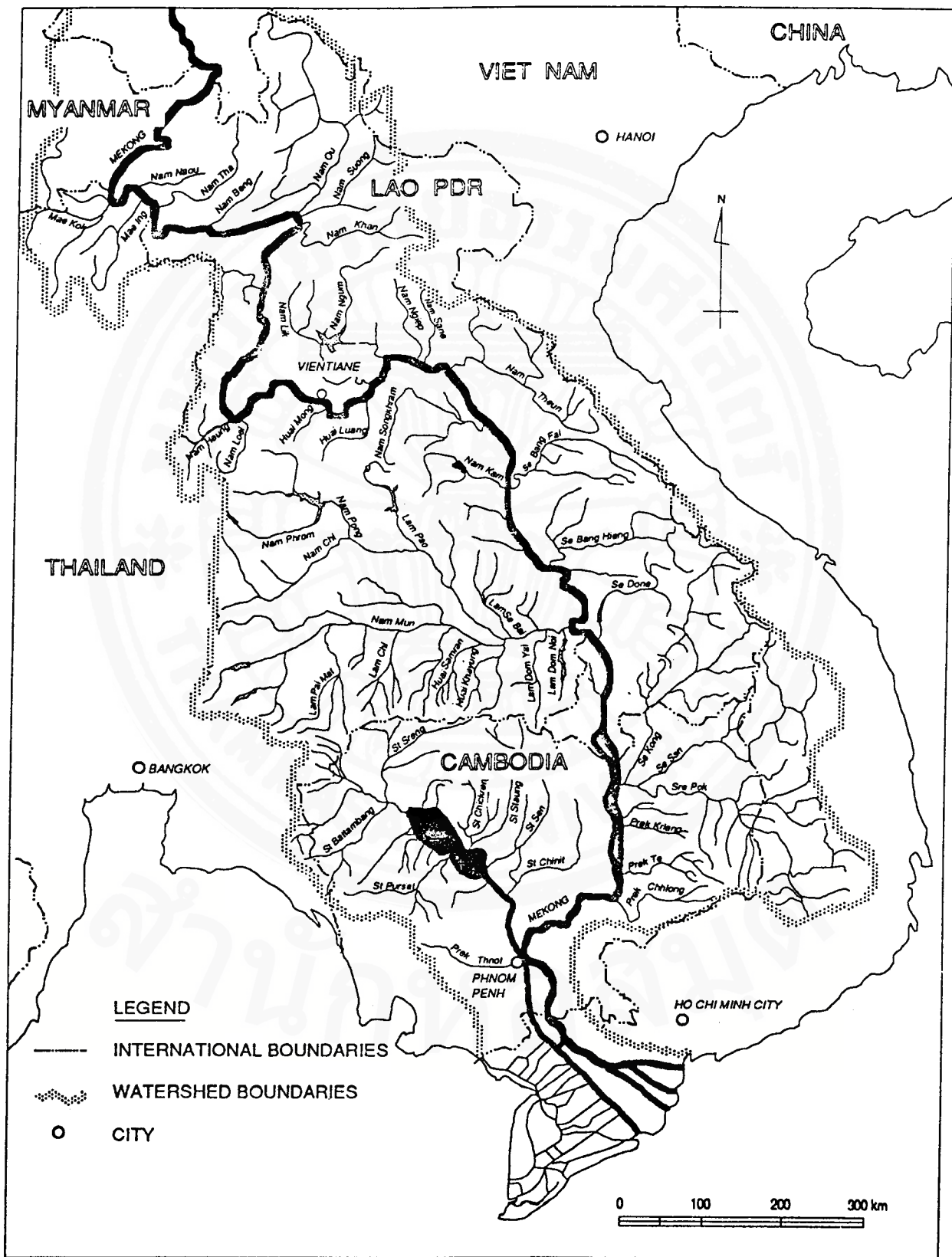
**Appendix 1**  
**Mekong Committee**  
**Organization Chart**



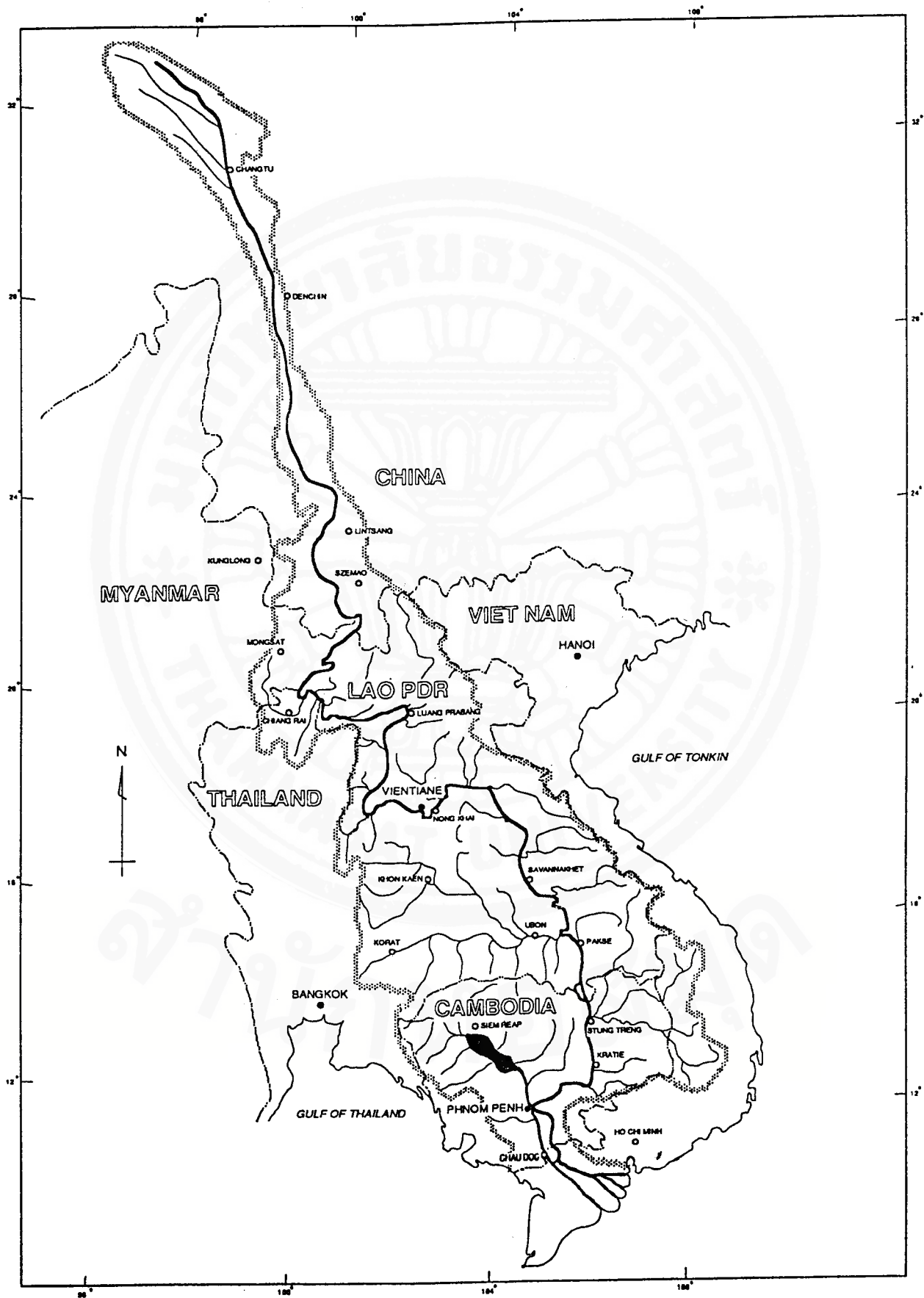


## Appendix 2

### Location of the Development Project



# THE MEKONG RIVER BASIN



**Appendix 3**  
**Basic Data on Population and Per Capita Income,**  
**The Lower Mekong Basin (1990)**

	Population (million)		Per capita GNP (US\$)		GNP Of Country million US\$	GNP Of Basin million US\$	Shared GNP of Basin %
	Of Country	Of Basin	Of Country	Of Basin			
Cambodia	8.5	7.8	190	200	1615.0	1564.0	96.8
Lao PDR	4.2	3.9	170	180	714.0	704.6	98.7
Thailand	56.0	22.2	1420	568	79520.0	12624.0	15.9
Viet Nam	68.0	15.3	200	220	13600.0	3367.5	24.8
Total	136.7	49.2			95449.0	18260.1	
Average			698	371			

**Sources :**

- 1) National Transport Study for the Lao PDR., SWECO, April 1990
- 2) United Nations Yearbook
- 3) Gross Regional and Provincial Product, NESDB., July 1989
- 4) ADB Report, October 1992
- 5) Mekong's Socio-Economic Database

**Appendix 4**  
**List of the Mekong Development Project**  
**(as appearing in the Work Programme for 1993)**

<u>Project code*</u> <u>and Status**</u>	<u>Project title</u> <u>(character : national/ basin wide)</u>
1.1.06/90	F Preparatory organizational and legal studies (basin wide)
1.1.09/92	UF Strategy study on the development of Upper Mekong Navigation (basin wide)
1.1.12/93	UF Role of women in water resources development in the lower Mekong basin (basin wide)
1.1.13/93	UF Study on the legal framework for water pollution control (basin wide)
1.1.14/93	UF Role of southern Lao transport corridor in Mekong regional cooperation (basin wide)
1.1.15/93	UF Study on long-term development of inland navigation in Cambodia
2.1.02/86	F Groundwater investigation programme (basin wide)
2.1.07/91	UF Measurement and investigation of floods in the Mekong delta (basin wide)
2.1.09/90	UF Flood forecasting and damage reduction study (basin wide)
2.1.10/91	UF Water balance of the lower Mekong basin, Phase IV (basin wide)
2.1.11/90	UF Mekong morphology and sediment transport (basin wide)
2.1.12/91	F Salinity forecasting in the Mekong delta Stage III (Viet Nam)
2.1.13/92	UF Improvement of the hydro-meteorological network (basin wide)
2.1.14/92	UF Rehabilitation and development of the hydro-meteorological network in Cambodia
2.1.15/93	UF Assessment of the impact of deforestation on runoff (basin wide)
2.2.04/92	UF Improvement of the Mekong Documentation Centre (basin wide)

---

\* .../90 indicates the year when the project/activity was formulated (i.e., in 1990)

\*\* F, PF and UF stand for funded, partially funded and unfunded projects, respectively. It may be noted that unfunded projects indicated in this list cover as well a few projects whose funding were being secured but not yet confirmed at the date this Work Programme was prepared.



2.3.03/89	F	Mekong geographic information system (basin wide)
2.3.05/92	UF	Mekong geographic information system (GIS) : Cambodian component
2.3.06/92	PF	Aerial photography for resources mapping (Cambodia)
2.4.11/86	F	Management of acid sulfate soils (Viet Nam)
2.4.12/88	F	Inventory and management of the wetlands in the lower Mekong basin (basin wide)
2.4.13/92	UF	Inventory and management of the Cambodian wetlands
2.4.14/88	PF	Management of problem soils : Part I (Viet Nam) and Part II. (Cambodia, Laos and Thailand)
2.4.15/88	F	Water quality monitoring network in the lower Mekong basin, Phase II. (basin wide)
2.4.17/90	UF	Effects of rise in sea level in the Mekong delta (Viet Nam)
2.4.18/91	F	Integration of environmental components in projects (basin wide)
2.4.19/92	UF	Basin wide waterborne diseases management project
2.4.20/92	F	Control of soil erosion, sedimentation and flash flood (basin wide)
2.4.21/93	F	Feasibility study for a regional sustainable development network (SDN) in the lower Mekong basin (basin wide)
3.1.10/89	PF	Pilot micro-hydropower projects with standardized equipment (basin wide)
3.1.12/90	UF	Feasibility study on the Pleikrong hydropower project (basin wide)
3.1.19/88	PF	Water resources development plan for north-eastern Thailand
3.1.20/88	F	Master plan for the integrated development of the Mekong delta (Viet Nam)
3.1.21/90	UF	Water resources development plan for Laos
3.1.22/90	F	Integrated development of the lower Mekong basin (basin wide)
3.1.23/91	UF	Feasibility study on the Nam Mae Kham multipurpose project (Thailand)
3.1.25/92	UF	Huai Pa Thao multipurpose project, Phase II. : Operation and maintenance plan, irrigation and environment (Thailand)
3.1.26/89	PF	Low Pa Mong multipurpose project (basin wide)
3.1.27/91	UF	Feasibility study on the Nam Maang No. 3 multipurpose project (Laos)
3.1.28/91	PF	Prefeasibility study on major hydropower projects, Phase I (basin wide)

3.1.29/92	UF	Feasibility study on electrification of isolated Lao border areas (basin wide)
3.1.30/92	UF	Support services for strengthening the Vientiane Plain dike (Laos)
3.1.31/92	UF	Review and assessment of water resources for hydropower and identification of priority projects (Cambodia)
3.1.33/92	UF	Feasibility study on the Stung Battambang multipurpose project (Cambodia)
3.1.34/92	UF	Master plan of the Upper Srepok basin (Viet Nam)
3.1.35/92	PF	Rehabilitation of the Kirirom 1 hydropower project (Cambodia)
3.1.36/92	UF	Revision of Mekong integrated transmission (basin wide)
3.1.37/93	UF	Study on micro-hydropower for rural electrification (basin wide)
3.1.38/93	UF	Run-of-the-river hydropower possibilities on the Mekong mainstream (basin wide)
3.1.39/93	UF	Development plan for Tonle Sap and Chakdomuk (basin wide)
3.1.40/93	UF	Detailed design of the Yali Falls hydropower project (basin wide)
3.1.41/93	UF	Environmental study on Prek Thnot reservoir (Cambodia)
3.1.42/93	UF	Prefeasibility study on the Kamchay hydropower project (Cambodia)
3.1.43/93	UF	Prefeasibility study on hydropower project linked to the Nam Ngum-Luang Prabang transmission line (Laos)
3.1.44/93	UF	Detailed design and construction of the Ry Ninh hydropower project No. 2 (Viet Nam)
3.2.22/91	F	Sustainable irrigated agriculture (MIP 2) (basin wide)
3.2.24/92	F	Improved land and water use in northern Thailand
3.2.25/89	UF	Establishment of an agricultural training centre at Mukdahan (basin wide)
3.2.26/93	UF	Sustainable irrigated agriculture in Huong My (Viet Nam)
3.2.27/93	UF	Crop diversification in the Tam Phuong and Long Phu areas (Viet Nam)
3.3.01/87	PF	Se Champhone basin flood mitigation and irrigation (Laos)
3.3.07/91	UF	Prefeasibility study on the Huai Bang Sai multipurpose project (Thailand)
3.3.17/90	UF	Nam Ngok and Nam Koua small-scale irrigation micro-hydropower development (Laos)

3.3.19/90	UF	Ya-Soup multipurpose project (Viet Nam)
3.3.24/87	PF	Nam Houm irrigation system (Laos)
3.3.26/89	UF	Small-scale irrigation/micro-hydropower development (Laos)
3.3.29/91	UF	Feasibility study on Houay Phaling basin development (basin wide)
3.3.30/91	UF	Upper Huai Mong irrigation development (Thailand)
3.3.32/92	UF	Improvement of the land settlement scheme in Lam Dom Noi (Thailand)
3.3.33/92	UF	Improved operation and maintenance of Mekong irrigation pumps (Laos)
3.3.36/92	UF	Feasibility study on the lower Nam Pung multipurpose project (Thailand)
3.3.37/92	F	Irrigation rehabilitation study in Cambodia
3.3.38/92	UF	Repair and appraisal of the Stung Chinit project (Cambodia)
3.3.39/92	UF	Feasibility study to update the Stung Mongkol Borey irrigation scheme, Phase I (Cambodia)
3.3.41/93	UF	Improvement of flood drainage at the Tuk Thla-Kompong Tuol headworks (Cambodia)
3.3.42/93	UF	Rolang Chrey irrigated agricultural development project (Cambodia)
3.4.06/89	F	Forestry-based development in the Long Xuyen quadrangle (Viet Nam)
3.4.07/90	F	Assessment and monitoring of the Mekong basin forest cover (basin wide)
3.3.08/88	F	Mekong watershed assessment and management (basin wide)
3.4.10/92	UF	Watershed rehabilitation in the lower Mekong basin (basin wide)
3.4.11/93	UF	Creation of national parks along the Mekong river (basin wide)
3.5.26/88	UF	Fisheries in Mekong reservoirs (basin wide)
3.5.27/88	UF	Chaiyaphum brackish water aquaculture centre for salt-affected lands in the Korat plateau (basin wide)
3.5.28/89	UF	Fish culture in ponds and lakes of the Tay Nguyen region (Viet Nam)
3.5.29/89	F	Fishermen's communities in the Nam Ngum basin (Laos)
3.5.30/91	UF	Community fisheries management in rural reservoirs (Thailand)
3.5.31/92	UF	Assessment and management of freshwater, capture fisheries in Cambodia ; Phase I
3.5.32/92	UF	Small-scale aquaculture development in Laos

3.5.33/93	UF	Management of regional fisheries resources (basin wide)
3.5.34/93	UF	Investigation of commercially important fish species in the lower Mekong basin (basin wide)
3.5.35/93	UF	Assessment of impacts of water management on fishery resources (basin wide)
3.6.16/86	UF	Siltation and channel maintenance at the Mekong entrances (Viet Nam)
3.6.17/82	UF	Rehabilitation of the Lak Si shipyard, Vientiane (Laos)
3.6.18/86	UF	Vientiane Navigation Technical College (Laos)
3.6.19/89	PF	Construction of concrete ramps at Pak Sane, Pak Lay and Sana Kham (Laos)
3.6.20/89	UF	Installation of aids to navigation (basin wide)
3.6.21/91	UF	Detailed design for the southern Lao-Thai Mekong bridge (basin wide)
3.6.25/92	PF	Mekong river bank protection programme (basin wide)
3.6.26/92	UF	Strengthening of inland navigation training for the Mekong delta (basin wide)
3.6.29/92	UF	Preliminary study on the Chrui Changvar port (Cambodia)
3.6.30/92	UF	Upgrading of ferry facilities in Cambodia
3.6.31/87	PF	Updating of the hydrographic atlas ; ground control hydrographic survey and mapping (basin wide)
3.6.33/93	UF	Feasibility study on the improvement of the access channel of the Bassac river (basin wide)
3.6.34/93	UF	Updated feasibility study on the My Thuan bridge (basin wide)
3.6.35/93	UF	Protection works to the Monivong bridge (Cambodia)
3.6.36/93	UF	Immediate improvement of the waterborne transport in Laos
3.7.24/90	F	Environmental training fund (basin wide)
3.7.25/90	UF	Regional training programme for irrigated agriculture (basin wide)
3.7.26/90	PF	Water resources training programme (basin wide)
3.7.27/90	PF	Water resources training programme : Cambodian component
3.7.28/91	PF	Human resources development programme for riparians (basin wide)
3.7.31/93	UF	Strategic human resources development planning (basin wide)
3.7.32/93	UF	Training programme for water pollution control (basin wide)
3.8.07/91	F	Australia/Mekong Committee Consultancy Services Fund (basin wide)



3.8.08/91	F	Swedish Consultancy Fund for Studies, Investigations and Training (basin wide)
3.8.09/93	UF	Support for programme activities of the Mekong Committee (basin wide)



**Appendix 5**  
**Status of Project Funding, 1992**

Project status by sectors	Number by categories		Project value, US\$ (external funds only)	
	Pre-invest	Investment	-A-	-B-
	-A-	-B-		
<b>1. Unfunded Projects :</b>				
<b>1.1 Number of projects:-</b>				
- Central operation activities	12	5	8457000	3513000
- Environment	3		2815000	
- Water resources and hydropower	18	4	11350000	30217000
- Agriculture	1	2	650000	4160000
- Irrigation	10	7	5990000	12787000
- Watershed/forestry	2		798000	
- Fisheries	5	3	2232000	2833000
- River works and transport	7	8	7042000	16128000
- HRD	6	-	4539800	-
<b>1.2 Sub-total 1.</b>	<b>58</b>	<b>29</b>	<b>43873800</b>	<b>69638000</b>
<b>2. Funded/On-Going Projects :</b>				
<b>2.1 Number of projects:-</b>				
- Central operation activities	6	2	7357000	2220000
- Environment	8	-	5375000	-
- Water resources and hydropower	9	1	3096000	250000
- Agriculture	1	1	326000	6667000
- Irrigation	1	2	61000	2903000
- Watershed/forestry	3		2606000	
- Fisheries		2		1189000
- River works and transport	1	2	4300000	1179000
- HRD	4	-	3714000	-
<b>2.2 Sub-total 2.</b>	<b>29</b>	<b>10</b>	<b>26835000</b>	<b>14408000</b>
<b>3. Grand total (1.+2.)</b>	<b>87</b>	<b>39</b>	<b>70708800</b>	<b>84046000</b>