AGREEMENT

ON THE COOPERATION FOR THE SUSTAINABLE DEV!MENT

OF THE MEKONG RIVER BASIN

The Governments of The Kingdom of Cambodia, The Lao Per Democratic Republic, The Kingdom of Thailand, and The Socialist Republic et Nam, being equally desirous of continuing to cooperate in a constructive and illy beneficial manner for sustainable development, utilization, conservation and gement of the Mekong River Basin water and related resources, have resolved onclude this Agreement setting forth the framework for cooperation acceptable to rties hereto to accomplish these ends, and for that purpose have appointed zir respective plenipotentiaries:

The Kingdom of Cambodia:

H.E. Mr. Ing Kieth Deputy Prime Minister and Minister of Public Works and Transport

The Lao People's Democratic Republic:

H.E. Mr. Somsavat Lengsavad Minister of Foreign Affairs

The Kingdom of Thailand:

H.E. Dr. Krasae Chanawongse Minister of Foreign Affairs

The Socialist Republic of Viet Nam:

H.E. Mr. Nguyen Manh Cam Minister of Foreign Affairs

Who, having communicated to each other their respective full are and having found them in good and due form, have agreed to the following:

CHAPTER I. PREAMBLE

RECALLING the establishment of the Committee for the Coordination of Investigations of the Lower Mekong Basin on 17 September 1957 by the Governments of these countries by Statute endorsed by the United Nations,

NOTING the unique spirit of cooperation and mutual assistance that inspired the work of the Committee for the Coordination of Investigations of the Lower Mekong Basin and the many accomplishments that have been achieved through its efforts,

ACKNOWLEDGING the great political, economic and social changes that have taken place in these countries of the region during this period of time which necessitate these efforts to re-assess, re-define and establish the future framework for cooperation,

RECOGNIZING that the Mekong River Basin and the related natural resources and environment are natural assets of immense value to all the riparian countries for the economic and social well-being and living standards of their peoples,

REAFFIRMING the determination to continue to cooperate and promote in a constructive and mutually beneficial manner in the sustainable development, utilization, conservation and management of the Mekong River Basin water and related resources for navigational and non-navigational purposes, for social and economic development and the well-being of all riparian States, consistent with the needs to protect, preserve, enhance and manage the environmental and aquatic conditions and maintenance of the ecological balance exceptional to this river basin,

AFFIRMING to promote or assist in the promotion of interdependent sub-regional growth and cooperation among the community of Mekong nations, taking into account the regional benefits that could be derived and/or detriments that could be avoided or mitigated from activities within the Mekong River Basin undertaken by this framework of cooperation,

REALIZING the necessity to provide an adequate, efficient and functional joint organizational structure to implement this Agreement and the projects, programs and activities taken thereunder in cooperation and coordination with each member and the international community, and to address and resolve issues and problems that may arise from the use and development of the Mekong River Basin water and related resources in an amicable, timely and good neighbourly manner,

PROCLAIMING further the following specific objectives, principles, institutional framework and ancillary provisions in conformity with the objectives and principles of the Charter of the United Nations and international law:

CHAPTER II. DEFINITIONS OF TERMS

For the purposes of this Agreement, it shall be understood that the following meanings to the underlined terms shall apply except where otherwise inconsistent with the context:

Agreement under Article 5: A decision of the Joint Committee resulting from prior consultation and evaluation on any proposed use for inter-basin diversions during the wet season from the mainstream as well as for intra-basin use or inter-basin diversions of these waters during the dry season. The objective of this agreement is to achieve an optimum use and prevention of waste of the waters through a dynamic and practical consensus in conformity with the Rules for Water Utilization and Inter-Basin Diversions set forth in Article 26.

Acceptable minimum monthly natural flow: The acceptable minimum monthly natural flow during each month of the dry season.

Acceptable natural reverse flow: The wet season flow level in the Mekong River at Kratie that allows the reverse flow of the Tonle Sap to an agreed upon optimum level of the Great Lake.

Basin Development Plan: The general planning tool and process that the Joint Committee would use as a blueprint to identify, categorize and prioritize the projects and programs to seek assistance for and to implement the plan at the basin level.

Environment: The conditions of water and land resources, air, flora, and fauna that exists in a particular region.

Notification: Timely providing information by a riparian to the Joint Committee on its proposed use of water according to the format, content and procedures set forth in the Rules for Water Utilization and Inter-Basin Diversions under Article 26.

<u>Prior consultation</u>: Timely <u>notification</u> plus additional data and information to the Joint Committee as provided in the Rules for Water Utilization and Inter-Basin Diversion under Article 26, that would allow the other member riparians to discuss and evaluate the impact of the <u>proposed use</u> upon their uses of water and any other affects, which is the basis for arriving at an agreement. <u>Prior consultation</u> is neither a right to veto the use nor unilateral right to use water by any riparian without taking into account other riparians' rights.

<u>Proposed use</u>: Any proposal for a definite use of the waters of the Mekong River system by any riparian, excluding domestic and minor uses of water not having a significant impact on mainstream flows.

CHAPTER III. OBJECTIVES AND PRINCIPLES OF COOPERATION

The parties agree:

Article 1. Areas of Cooperation

To cooperate in all fields of sustainable development, utilization, management and conservation of the water and related resources of the Mekong River Basin including, but not limited to irrigation, hydro-power, navigation, flood control, fisheries, timber floating, recreation and tourism, in a manner to optimize the multiple-use and mutual benefits of all riparians and to minimize the harmful effects that might result from natural occurrences and man-made activities.

Article 2. Projects, Programs and Planning

To promote, support, cooperate and coordinate in the development of the full potential of sustainable benefits to all riparian States and the prevention of wasteful use of Mekong River Basin waters, with emphasis and preference on joint and/or basin-wide development projects and basin programs through the formulation of a basin development plan, that would be used to identify, categorize and prioritize the projects and programs to seek assistance for and to implement at the basin level.

Article 3. Protection of the Environment and Ecological Balance

To protect the environment, natural resources, aquatic life and conditions, and ecological balance of the Mekong River Basin from pollution or other harmful effects resulting from any development plans and uses of water and related resources in the Basin.

Article 4. Sovereign Equality and Territorial Integrity

To cooperate on the basis of sovereign equality and territorial integrity in the utilization and protection of the water resources of the Mekong River Basin.

Article 5. Reasonable and Equitable Utilization

To utilize the waters of the Mekong River system in a reasonable and equitable manner in their respective territories, pursuant to all relevant factors and circumstances, the Rules for Water Utilization and Inter-basin Diversion provided for under Article 26 and the provisions of A and B below:

A. On tributaries of the Mekong River, including Tonle Sap, intra-basin uses and inter-basin diversions shall be subject to notification to the Joint Committee.

B. On the mainstream of the Mekong River:

1. During the wet season:

- a) Intra-basin use shall be subject to notification to the Joint Committee.
- b) Inter-basin diversion shall be subject to prior consultation which aims at arriving at an agreement by the Joint Committee.

2. During the dry season:

- a) Intra-basin use shall be subject to prior consultation which aims at arriving at an agreement by the Joint Committee.
- b) Any inter-basin diversion project shall be agreed upon by the Joint Committee through a specific agreement for each project prior to any proposed diversion. However, should there be a surplus quantity of water available in excess of the proposed uses of all parties in any dry season, verified and unanimously confirmed as such by the Joint Committee, an inter-basin diversion of the surplus could be made subject to prior consultation.

Article 6. Maintenance of Flows on the Mainstream

To cooperate in the maintenance of the flows on the mainstream from diversions, storage releases, or other actions of a permanent nature; except in the cases of historically severe droughts and/or floods:

- A. Of not less than the acceptable minimum monthly natural flow during each month of the dry season;
- B. To enable the acceptable natural reverse flow of the Tonle Sap to take place during the wet season; and,
- C. To prevent average daily peak flows greater than what naturally occur on the average during the flood season.

The Joint Committee shall adopt guidelines for the locations and levels of the flows, and monitor and take action necessary for their maintenance as provided in Article 26.

Article 7. Prevention and Cessation of Harmful Effects

To make every effort to avoid, minimize and mitigate harmful effects that might occur to the environment, especially the water quantity and quality, the aquatic (eco-system) conditions, and ecological balance of the river system, from the development and use of the Mekong River Basin water resources or discharge of wastes and return flows. Where one or more States is notified with proper and valid evidence that it is causing substantial damage to one or more riparians from the use of and/or discharge to water of the Mekong River, that State or States shall cease immediately the alleged cause of harm until such cause of harm is determined in accordance with Article 8.

Article 8. State Responsibility for Damages

Where harmful effects cause substantial damage to one or more riparians from the use of and/or discharge to waters of the Mekong River by any riparian State, the party(ies) concerned shall determine all relative factors, the cause, extent of damage and responsibility for damages caused by that State in conformity with the principles of international law relating to state responsibility, and to address and resolve all issues, differences and disputes in an amicable and timely manner by peaceful means as provided in Articles 34 and 35 of this Agreement, and in conformity with the Charter of the United Nations.

Article 9. Freedom of Navigation

On the basis of equality of right, freedom of navigation shall be accorded throughout the mainstream of the Mekong River without regard to the territorial boundaries, for transportation and communication to promote regional cooperation and to satisfactorily implement projects under this Agreement. The Mekong River shall be kept free from obstructions, measures, conduct and actions that might directly or indirectly impair navigability, interfere with this right or permanently make it more difficult. Navigational uses are not assured any priority over other uses, but will be incorporated into any mainstream project. Riparians may issue regulations for the portions of the Mekong River within their territories, particularly in sanitary, customs and immigration matters, police and general security.

Article 10. Emergency Situations

Whenever a Party becomes aware of any special water quantity or quality problems constituting an emergency that requires an immediate response, it shall notify and consult directly with the party(ies) concerned and the Joint Committee without delay in order to take appropriate remedial action.

CHAPTER IV. INSTITUTIONAL FRAMEWORK

A. MEKONG RIVER COMMISSION

Article 11. Status

The institutional framework for cooperation in the Mekong River Basin under this Agreement shall be called the Mekong River Commission and shall, for the purpose of the exercise of its functions, enjoy the status of an international body, including entering into agreements and obligations with the donor or international community.

Article 12. Structure of Mekong River Commission

The Commission shall consist of three permanent bodies:

- Council
- Joint Committee, and
- Secretariat

Article 13. Assumption of Assets, Obligations and Rights

The Commission shall assume all the assets, rights and obligations of the Committee for the Coordination of Investigations of the Lower Mekong Basin (Mekong Committee) Interim Mekong Committee) and Mekong Secretariat.

Article 14. Budget of the Mekong River Commission

The budget of the Commission shall be drawn up by the Joint Committee and approved by the Council and shall consist of contributions from member countries on an equal basis unless otherwise decided by the Council, from the international community (donor countries), and from other sources.

B. COUNCIL

Article 15. Composition of Council

The Council shall be composed of one member from each participating riparian State at the Ministerial and Cabinet level, (no less than Vice-Minister level) who would be empowered to make policy decisions on behalf of his/her government.

Article 16. Chairmanship of Council

The Chairmanship of the Council shall be for a term of one year and rotate according to the alphabetical listing of the participating countries.

Article 17. Sessions of Council

The Council shall convene at least one regular session every year and may convene special sessions whenever it considers it necessary or upon the request of a member State. It may invite observers to its sessions as it deems appropriate.

Article 18. Functions of Council

The functions of the Council are:

- A. To make policies and decisions and provide other necessary guidance concerning the promotion, support, cooperation and coordination in joint activities and projects in a constructive and mutually beneficial manner for the sustainable development, utilization, conservation and management of the Mekong River Basin waters and related resources, and protection of the environment and aquatic conditions in the Basin as provided for under this Agreement;
- B. To decide any other policy-making matters and make decisions necessary to successfully implement this Agreement, including but not limited to approval of the Rules of Procedures of the Joint Committee under Article 25, Rules of Water Utilization and Inter-Basin Diversions proposed by the Joint Committee under Article 26, and the basin development plan and major component projects/programs; to establish guidelines for financial and technical assistance of development projects and programs; and if considered necessary, to invite the donors to coordinate their support through a Donor Consultative Group; and,
- C. To entertain, address and resolve issues, differences and disputes referred to it by any Council member, the Joint Committee, or any member State on matters arising under this Agreement.

Article 19. Rules of Procedures

The Council shall adopt its own Rules of Procedures, and may seek technical advisory services as it deems necessary.

Article 20. Decisions of Council

Decisions of the Council shall be by unanimous vote except as otherwise provided for in its Rules of Procedures.

C. JOINT COMMITTEE

Article 21. Composition of Joint Committee

The Joint Committee shall be composed of one member from each participating riparian State at no less than Head of Department level.

Article 22. Chairmanship of Joint Committee

The Chairmanship of the Joint Committee will rotate according to the reverse alphabetical listing of the member countries and the Chairperson shall serve a term of one year.

Article 23. Sessions of Joint Committee

The Joint Committee shall convene at least two regular sessions every year and may convene special sessions whenever it considers it necessary or upon the request of a member State. It may invite observers to its sessions as it deems appropriate.

Article 24. Functions of Joint Committee

The functions of the Joint Committee are:

- A. To implement the policies and decisions of the Council and such other tasks as may be assigned by the Council.
- B. To formulate a basin development plan, which would be periodically reviewed and revised as necessary; to submit to the Council for approval the basin development plan and joint development projects/programs to be implemented in connection with it; and to confer with donors, directly or through their consultative group, to obtain the financial and technical support necessary for project/program implementation.
- C. To regularly obtain, update and exchange information and data necessary to implement this Agreement.
- D. To conduct appropriate studies and assessments for the protection of the environment and maintenance of the ecological balance of the Mekong River Basin.
- E. To assign tasks and supervise the activities of the Secretariat as is required to implement this Agreement and the policies, decisions, projects and programs adopted thereunder, including the maintenance of databases and information necessary for the Council and Joint Committee to perform their functions, and approval of the annual work program prepared by the Secretariat.

- F. To address and make every effort to resolve issues and differences that may arise between regular sessions of the Council, referred to it by any Joint Committee member or member state on matters arising under this Agreement, and when necessary to refer the matter to the Council.
- G. To review and approve studies and training for the personnel of the riparian member countries involved in Mekong River Basin activities as appropriate and necessary to strengthen the capability to implement this Agreement.
- H. To make recommendations to the Council for approval on the organizational structure, modifications and restructuring of the Secretariat.

Article 25. Rules of Procedures

The Joint Committee shall propose its own Rules of Procedures to be approved by the Council. It may form ad hoc and/or permanent sub-committees or working groups as considered necessary, and may seek technical advisory services except as may be provided for in the Council's Rules of Procedures or decisions.

Article 26. Rules for Water Utilization and Inter-Basin Diversions

The Joint Committee shall prepare and propose for approval of the Council, inter alia, Rules for Water Utilization and Inter-Basin Diversions pursuant to Articles 5 and 6, including but not limited to: 1) establishing the time frame for the wet and dry seasons; 2) establishing the location of hydrological stations, and determining and maintaining the flow level requirements at each station; 3) setting out criteria for determining surplus quantities of water during the dry season on the mainstream; 4) improving upon the mechanism to monitor inter-basin diversions from the mainstream.

Article 27. Decisions of the Joint Committee

Decisions of the Joint Committee shall be by unanimous vote except as otherwise provided for in its Rules of Procedures.

D. SECRETARIAT

Article 28. Purpose of Secretariat

The Secretariat shall render technical and administrative services to the Council and Joint Committee, and be under the supervision of the Joint Committee.

Article 29. Location of Secretariat

The location and structure of the permanent office of the Secretariat shall be decided by the Council, and if necessary, a headquarters agreement shall be negotiated and entered into with the host government.

Article 30. Functions of the Secretariat

The functions and duties of the Secretariat will be to:

- A. Carry out the decisions and tasks assigned by the Council and Joint Committee under the direction of and directly responsible to the Joint Committee;
- B. Provide technical services and financial administration and advise as requested by the Council and Joint Committee;
- C. Formulate the annual work program, and prepare all other plans, project and program documents, studies and assessments as may be required;
- D. Assist the Joint Committee in the implementation and management of projects and programs as requested;
- E. Maintain databases of information as directed;
- F. Make preparations for sessions of the Council and Joint Committee; and,
- G. Carry out all other assignments as may be requested.

Article 31. Chief Executive Officer

The Secretariat shall be under the direction of a Chief Executive Officer (CEO), who shall be appointed by the Council from a short-list of qualified candidates selected by the Joint Committee. The Terms of Reference of the CEO shall be prepared by the Joint Committee and approved by the Council.

Article 32. Assistant Chief Executive Officer

There will be one Assistant to the CEO, nominated by the CEO and approved by the Chairman of the Joint Committee. Such Assistant will be of the same nationality as the Chairman of the Joint Committee and shall serve for a co-terminus one-year term.

Article 33. Riparian Staff

Riparian technical staff of the Secretariat are to be recruited on a basis of technical competence, and the number of posts shall be assigned on an equal basis among the members. Riparian technical staff shall be assigned to the Secretariat for no more than two three-year terms, except as otherwise decided by the Joint Committee.

CHAPTER V. ADDRESSING DIFFERENCES AND DISPUTES

Article 34. Resolution by Mekong River Commission

Whenever any difference or dispute may arise between two or more parties to this Agreement regarding any matters covered by this Agreement and/or actions taken by the implementing organization through its various bodies, particularly as to the interpretations of the Agreement and the legal rights of the parties, the Commission shall first make every effort to resolve the issue as provided in Articles 18.C and 24.F.

Article 35. Resolution by Governments

In the event the Commission is unable to resolve the difference or dispute within a timely manner, the issue shall be referred to the Governments to take cognizance of the matter for resolution by negotiation through diplomatic channels within a timely manner, and may communicate their decision to the Council for further proceedings as may be necessary to carry out such decision. Should the Governments find it necessary or beneficial to facilitate the resolution of the matter, they may, by mutual agreement, request the assistance of mediation through an entity or party mutually agreed upon, and thereafter to proceed according to the principles of international law.

CHAPTER VI. FINAL PROVISIONS

Article 36. Entry Into Force and Prior Agreements

This Agreement shall:

- A. Enter into force among all parties, with no retroactive effect upon activities and projects previously existing, on the date of signature by the appointed plenipotentiaries.
- B. Replace the Statute of the Committee for Coordination of Investigations of the Lower Mekong Basin of 1957 as amended, the Joint Declaration of Principles for Utilization of the Waters of the Lower Mekong Basin of 1975, the Declaration Concerning the Interim Committee for Coordination of Investigations of the Lower Mekong Basin of 1978, and all Rules of Procedures adopted under such agreements. This Agreement shall not replace or take precedence over any other treaties, acts or agreements entered into by and among any of the parties hereto, except that where a conflict in terms, areas of jurisdiction of subject matter or operation of any entities created under existing agreements occurs with any provisions of this Agreement, the issues shall be submitted to the respective governments to address and resolve.

Article 37. Amendments, Modification, Supersession and Termination

This Agreement may be amended, modified, superceded or terminated by the mutual agreement of all parties hereto at the time of such action.

Article 38. Scope of Agreement

This Agreement shall consist of the Preamble and all provisions thereafter and amendments thereto, the Annexes, and all other agreements entered into by the Parties under this Agreement. Parties may enter into bi- or multi-lateral special agreements or arrangements for implementation and management of any programs and projects to be undertaken within the framework of this Agreement, which agreements shall not be in conflict with this Agreement and shall not confer any rights or obligations upon the parties not signatories thereto, except as otherwise conferred under this Agreement.

Article 39. Additional Parties to Agreement

Any other riparian State, accepting the rights and obligations under this Agreement, may become a party with the consent of the parties.

Article 40. Suspension and Withdrawal

Any party to this Agreement may withdraw or suspend their participation under present Agreement by giving written notice to the Chairman of the Council of the Mekong River Commission, who shall acknowledge receipt thereof and immediately communicate it to the Council representatives of all remaining parties. Such notice of withdrawal or suspension shall take effect one year after the date of acknowledgment or receipt unless such notice is withdrawn beforehand or the parties mutually agree otherwise. Unless mutually agreed upon to the contrary by all remaining parties to this Agreement, such notice shall not be prejudicial to nor relieve the noticing party of any commitments entered into concerning programs, projects, studies or other recognized rights and interests of any riparians, or under international law.

Article 41. United Nations and International Community Involvement

The member countries to this Agreement acknowledge the important contribution in the assistance and guidance of the United Nations, donors and the international community and wish to continue the relationship under this Agreement.

Article 42. Registration of Agreement

This Agreement shall be registered and deposited, in English and French, with the Secretary General of the United Nations.

IN WITNESS WHEREOF, the undersigned, duly authorized by their respective governments have signed this Agreement.

DONE on 5 April 1995 at Chiang Rai, Thailand, in English and French, both texts being equally authentic. In the case of any inconsistency, the text in the English language, in which language the Agreement was drawn up, shall prevail.

For The Kingdom of Cambodia:

Ing Kieth

Deputy Prime Minister and Minister of Public Works and Transport

For The Lao People's Democratic Republic:

Somsavat Lengsavad

Minister of Foreign Affairs

For The Kingdom of Thailand:

Krasae Chanawongse

Minister of Foreign Affairs

For The Socialist Republic of Viet Nam:

Nguyen Manh Cam

Minister of Foreign Affairs

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PROTOCOL

TO THE AGREEMENT ON THE COOPERATION

FOR THE SUSTAINABLE DEVELOPMENT

OF THE MEKONG RIVER BASIN

FOR THE ESTABLISHMENT AND COMMENCEMENT

OF THE MEKONG RIVER COMMISSION

The Governments of the Kingdom of Cambodia, Lao People's Democratic Republic, Kingdom of Thailand, and Socialist Republic of Viet Nam, have signed on this day the AGREEMENT ON THE COOPERATION FOR THE SUSTAINABLE DEVELOPMENT OF THE MEKONG RIVER BASIN.

Said AGREEMENT provides for in Chapter IV the establishment of the Mekong River Commission as the institutional framework through which the AGREEMENT will be implemented.

BY THIS PROTOCOL, the signatory parties to the AGREEMENT do hereby declare the establishment and commencement of the MEKONG REVER COMMISSION, consisting of three permanent bodies, the COUNCIL, JOIN! COMMITTEE and SECRETARIAT, effective on this date with the full authority and responsibility set forth under the AGREEMENT.

IN WITNESS WHEREOF, the undersigned, duly authorized by their respective governments have signed this Protocol.

DONE on 5 April 1995 at Chiang Rai, Thailand.

For the Kingdom of Cambodia:

Ing Kieth

Deputy Prime Minister and

Minister of Public Works and Transport

For the Lao People's

Democratic Republic

Somsaunt Lengsavad

Minister of Foreign Affairs

For the Kingdom of Thailand:

Crasac Chanawongse

Minister of Foreign Affairs

For the Socialist Republic of

Viet Nam:

Nguye: Manh Cam

Minister of Foreign Affairs

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MEKONG RIVER COMMISSION **COUNCIL** (Members at Ministerial Level) JOINT COMMITTEE (Members at Department Level) **SECRETARIAT** (Technical/Administrative Arm) OFFICE OF THE CHIEF EXECUTIVE OFFICER Programme Coordination Public Information Unit Unit FINANCE AND POLICY AND **TECHNICAL** RESOURCES ADMINISTRATION **PLANNING SUPPORT** DEVELOPMENT DIVISION DIVISION DIVISION DIVISION Policy and Water Resources Finance Hydrology Planning and Hydropower Unit Unit Unit Unit Agriculture, Personnel Remote Sensing Irrigation, Services and Mapping Forestry and Unit Unit Fisheries Unit Computer Databases River Works Services and Modelling and Transport Unit Unit Unit Procurement Human Resources Unit Environment Development Unit Unit General Services Unit 出典:ANNUAL REPORT 1995

付-3 メコンプロジェクトの実績(1957-1993)

メコン川 メコン川 実現したプロジェクト

1957年メコン委員会が発足して以来、今迄にいわゆるメコンプロジェクトとして実現した主な施設は次のとおりである。

(1)ダム

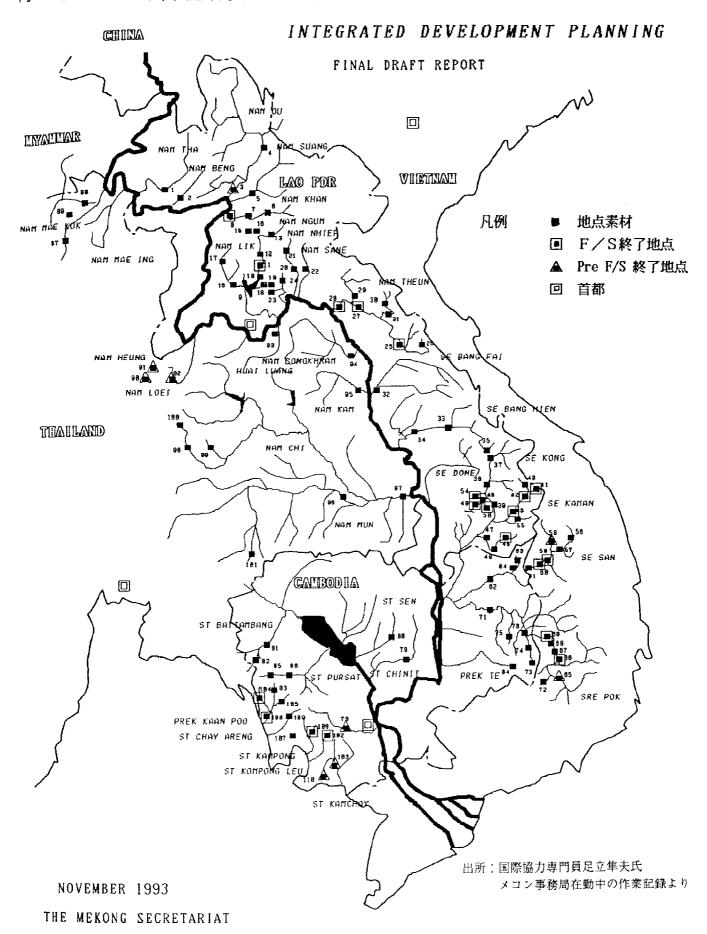
No.	プロジェクト名		国及	び地域	į	目的	設備能力 (Mw)	総事業費 (10³US\$)	完工年
1	Nam Pung	東	北	タ	1	発電	6.3	5.4	1965
2	Nam Pong	東	北	タ	1	発電	25	28	1966
	(Ubolratna)								
3	Lam Phra Plerng	東	北	タ	1	灌漑		9	1967
4	Lam Pao	東	北	タ	1	灌漑		32	1968
5	Lam Takong	東	北	タ	1	灌漑		11.4	1970
6	Lower Se Done	ラ	7	t	ス	発電	2.55	3	1970
	(Selabam)	(チ	ヤムハ	゚゚゚゚サッ	ク)				
7	Nam Dong	ラ	7	t	ス	発電	1.25	1.6	1971
		(ル	アンフ	プラパ	ン)				
8	Nam Ngum	ラ	7	t	ス	発電	150	93	1971
		(ヴ	ィエン	ノチャ	ン)				
9	Lam Dom Noi	東	北	タ	1	発電	24	17	1971
	(Sirindhorn)					灌漑			
10	Nam Phrom	東	北	タ	1	発電	40	19	1972
	(Chulabhorn)								
11	Nam Oon	東	北	タ	1	灌漑		21	1973
12	Prek Thnot	カ	ンボ	デ ィ	ア	発電		27	1975
								(推定)	以降建
									設中止
13	Huai Luang	東	北	タ	1	灌漑			1979
14	Nam Houm	ラ	7	t	ス	灌漑		2.8	1981
		(ヴ	ィエン	ノチャ	ン)				
15	Nam Souang	ラ	7	t	ス	灌漑			1983
		(ヴ	ィエン	ノチャ	ン)				
16	Huai Pa Thao	東	北	タ	1	発電	4.3		1993
						灌漑			

(2)ダム以外の主要施設

No.	プロジェクト名	国及び地域 目的 総事業費 (10 ⁶ US\$)	完工年
1	Nong Khai industrial and boat building centre	東 北 タ イ 舟運改善 1.7	1970- 1979
2	Ferry boats Thanaleng/ Nong Khai	ラ オ ス / 東 北 タ イ 舟運改善 2.2	1981- 1985
3	Nam Ngum fishery	ラオス(ヴィエンチャン) 淡水漁業 1.3	1982
4	Nong Teng fish breeding station	ラオス(ヴィエンチャン) 淡水漁業 8.5	1983
5	Improvement of cargo	ラ オ ス 舟運改善 0.4	1985
6	Lam Pao fish farm	東 北 タ イ 淡水漁業 2.8	1985
7	Keng Kabao transit port	ラオス (サバナケット) 舟運改善 3.3	1986
8	Huai Mong	東 北 タ イ 灌 漑 23	1986
9	Mekong pump irrigation	ラオス(ヴィエンチャン) 灌 漑 1.3	1986
10	Mun/Chi pump irrigation	東 北 タ イ 灌 漑 12.5	1986
11	Huong My	ヴィェトナム (デルタ) 灌 漑 4.3	1987
12	Vung Tau prawn hatchery	ヴィェトナム(ブンタオ) 灌 漑 1.7	1987
13	Tam Phuong	ヴィェトナム(デルタ) 灌 漑 14.4	1988
14	Tha Deua/Pak Khone	ラ オ ス 舟運改善 2.3	1988
15	Rehabilitation of Thana- leng port	ラオス (ヴィエンチャン) 舟運改善 2.8	1988
16	Pak Cheng agriculture development	ラオス(ヴィエンチャン) 灌 漑 1.4	1988

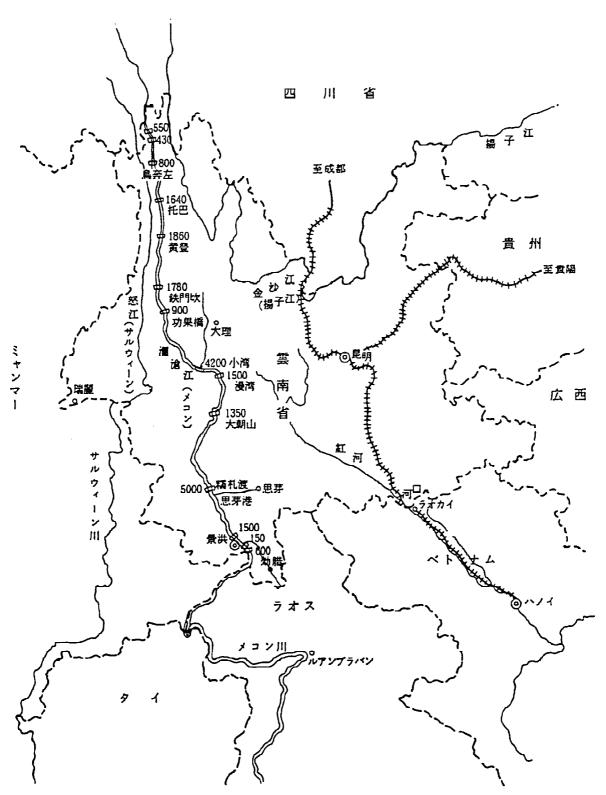
出典:メコン川の開発 (JICA国総研、1990)

付一4 メコン川下流域水力地点位置図



付一5 ランチャン川発電所計画位置図

瀾滄江発電所計画図



〈四数字:発電所計画地と予定最大出力(MW)〉

出典:OECF資料

付 - 6 中国領域15のダム計画(ランチャン川)

							(Data	from 1993	, Hydropo	ower deve	lopment,	China)					
項目	単位	Liuteng- Jiang	Tiabi	Wunang- Iong	Tuoba	Huang- deng		Congguo- qiao	Xiaowan		Dachao- shan	Sijiagang	Nuozhadu	Jinghong	Gualanha	Nunahuk- u u	合計
1. Hydrology																	
Catchment. area	km2	83,000	84,000	85,500	88,000	92,000	93,400	97,200	113,300	114,500	121,000	123,000	144,700	149,100	151,800	160,000	
Mean annual inflow	m3	650	675	714	791	880	916	985	1,210	1,230	1,342	1,380	1,771	1,850	1,984	1,985	
2. Reservoir																	
High water level	m	2,174	2,054	1,964	1,820	1,640	1,472	1,319	1,242	994	892	807	736	600	-	-	
Low water level	m	2,156	2,040	1,942	1,757	1,606	1,441	1,311	1,166	978	883	800	709	594			
Gross storage	M. m3	500	320	980	5,150	2,290	2,150	510	15,650	1,110	940	550	7,300	970	-	-	38,420
Net storage	M. m3	170	90	340	3,400	1,110	960	120	11,500	410	240	140	3,300	220	-	-	22,000
3. Dam																	
Type of dams		-	-	-	-	-	-	-	DCA	-	G	G	-	-	-	-	
Crest length	m								285		118	260					
Height	m																
4. Power plant																	
Rated head	m																
Firm power	MW	162	131	270	626	798	765	418	2,111	785	631	510	1,280	640	106	336	9,569
Installed capacity	MW	550	430	800	1,640	1,860	1,780	900	4,000	1,500	1,300	1,100	2,600	1,350	220	700	20,730
Average annual		32.90	25.90	47.90	82.90	93.50	89.10	47.70	204.60	77.60	68.70	57.30	139.50	70.90	11.70	38.10	1088.30
Energy																	
Plant factor	%	68.30	68.80	68.40	57.70	57.40	57.10	60.50	58.40	68.10	60.30	59.50	61.20	60.00	60.70	62.10	59.90
5. Lowflow increase	m3/s	11	6	22	219	71	62	8	555	26	15	9	212	14			1,230.00
6. Resettlement																	
Poplulation	人							4,000	25,380	3,042	4,390	2,200	5,270	1,405			45,687.00

出典:日本GIF研究財団・国連大学 共著「メコン川流域地域のインフラ整備に関する国際シンポジウム」(1994年12月)資料

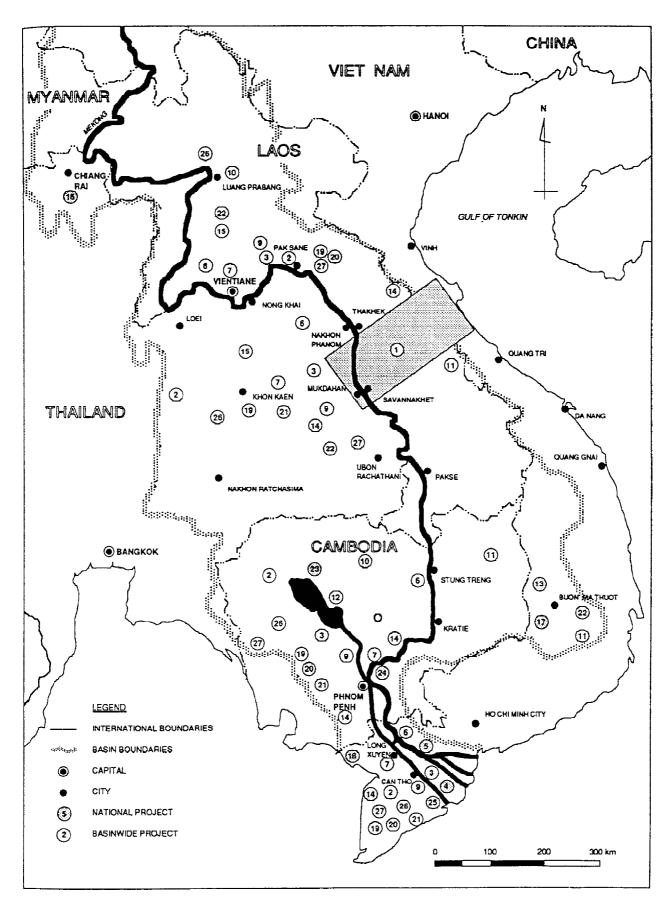
付一7 (a) 資金手当て済メコンプロジェクトリスト (1996年度)

TABLE 2 - FUNDED PROJECTS WORK PROGRAMME 1996

				Funds required (US\$)			Status of funds	(U6\$)	Tyl	
	Proj.code	Former code	Name of project	Proj. cost	Nat. Input	Ext. funds	Secured	Source	National	Basinwide
no.	1.1.14/93		Study on Laos-Thailand and Viet Nam East West transport corridor	1,030,000	30,000	1,000,000	1,000,000	ADB (France)		
1	1.1.21/93		Strategic human resources dev. planning	55,000	5,000	50,000	50,000	UNDP	ļ	
	2.1.02/86		Groundwater investigation programme	630,000	105,000	525,000	525,000	Sweden		
	2.1.12/91		Salinity forecasting in the Mekong Delta: Stage III (Viet Nam)	633,000	173,000	460,000	460,000	Australia	,	
-	2.4.11/86		Management of acid sulphate soils (Viet Nam)	1,285,000	700,000	585,000	585,000	Sweden	,	
<u> </u>	2.4.12/88		Inventory and management of the wetlands in the LMB	835,000	200,000	635,000	635,000	Sweden	ļ <u>-</u>	
7	2.4.15/88		Water quality monitoring network in the LMB: Phase II	3,077,000	300,000	2,777,000	2,777,000	Sweden, UNEP	ļ	
R	2.4.18/91		Integration of environmental components in projects	1,605,000	30,000	1,575,000	1,575,000	Sweden	ļ	
	2.4.20/87		Control of soil erosion, sedimentation and flash flood hazards	875,000	200,000	675,000	675,000	Sweden	ļ	
	3.1.36/92		Revision of Mekong integrated transmission system study	727,000	40,000	687,000	687,000	Japan		
	3.1.37/93		Study on microhydropower for rural electrification	140,000	20,000	120,000	120,000	Japan	ļ	
	3.1.39/93		Development plan for Tonle Sap	1,204,000	50,000	1,154,000	1,154,000	France, UNDP		
	3.1.54/92		Action plan for water resources development in the Upper Sre Pok Basin (Phase III)	1,750,000	40,000	1,710,000	1,710,000	Denmark	ļ. <u>,</u> ,	
	3.2.29/95		Integrated land and water use for sustainable agri.dev.in the Lower Mekon basin	220,000	0	220,000	220,000	Denmark	ļ	
-	3.2.31/91	3.3.43/91	Sustainable irrigated agriculture	10,967,000	4,300,000	6,667,000	6,667,000	Netherlands		
16		3.3.44/92	Improved land and water use in northern Thailand	411,000	35,000	376,000	376,000	Denmark	,	
17		3.3.47/94	Feasibility study on the Ya-Soup multipurpose project	920,000	120,000	800,000	800,000	Korea, Rep. of	,	
18	3.3.48/89	3.4.06/89	Forestry-based dev. in the Long Xuyen quadrangle, Mekong Delta	1,335,000	100,000	1,235,000	1,235,000	Australia	, ,	
19		3.4.07/92	Assessment and monitoring of the Mekong basin forest cover	2,200,000	110,000	2,090,000	2,090,000	Germany		
20		3.4.08/93	Watershed classification in the lower Mekong basin	935,600	100,000	835,600	835,600	Switzerland		
	3.3.51/92	3.4.10/92	Sustainable management of resources in the Lower Mekong Basin	1,790,000	40,000	1,750,000	1,750,000	Germany		
1	3.4.13/88	3.5.26/88	Management of reservoir fisheries in the Mekong basin: Phase I	3,841,000	350,000	3,491,000	3,491,000	Denmark		
	3.4.14/92	3.5.31/92	Management of the freshwater capture fisheries in Cambodia: Phase I	2,469,000	200,000	2,269,000	2,269,000	Denmark	х х	
		3.6.30/92	Upgrading of ferry facilities in Cambodia	20,500,000	1,900,000	18,600,000	18,600,000	Denmark	×	
	3.5.45/93	3.6.33/93	Feasibility study on improvement of entrance channel to Bassac River	1,835,000	63,000	1,772,000	1,772,000	Belgium		
	3.6.41/90		Environment training fund	335,000	15,000	320,000	320,000	Sweden		
	4.1.01/93	3.8.09/93	Support for the Mekong programme	5,315,000	2,500,000	2,815,000	2,815,000	UNDP		
27			TOTAL	66,919,600	11,726,000	55,193,600	55,193,600		8	19

付ー7 (b) 資金手当て済メコンプロジェクト位置図

LOCATIONS OF FULLY FUNDED PROJECTS



付一7 (c) メコンプロジェクト(資金手当て未定)

III. 2 LIST OF PROGRAMMES/PROJECTS AWAITING FUNDING

1. POLICY AND PLANNING

1.1 STRATEGIC STUDIES

1.1.13/93	Study on the legal framework for water pollution control (basinwide)
1.1.18/94	Strengthening of the legal framework of water management in the lower Mekong basin (basinwide)
1.1.19/93 (former 1.1.12/93)	Role of women in water resources development in lower Mekong basin (basinwide)
1.1.20/94	Strategy study on the development of the watershed management/forestry sector in the lower Mekong basin (basinwide)
1.1.22/95	Preparation of the Mekong River basin development plan (basinwide) (partially funded)
1.1.23/95	Preparation of the Mekong River Commission rules for water utilization and inter-basin diversion (basinwide) (partially funded)

2. ENVIRONMENT AND MONITORING

2.1 HYDROLOGY

2.1.09/94	Flood forecasting and damage reduction study in the Mekong basin (basinwide) (partially funded)
2.1.10/91	Water balance of the lower Mekong basin: Phase IV (basinwide)
2.1.11/90	Mekong morphology and sediment transport (basinwide)
2.1.13/92	Improvement of the hydrometeorological network (basinwide) (partially funded)

2.2 DATABASES AND MODELLING

2.2.04/92	Improvement of the Mekong Documentation Centre (partially funded)
2.2.05/94	Integrated database for natural resources management (basinwide)

2.3 REMOTE SENSING AND MAPPING

2.3.03/89	Mekong Geographic Information System (basinwide) (partially funded)
2.3.06/94	Aerial photography for resources mapping (Cambodia) (partially funded)
2.3.07/95	Land resources inventory for agricultural development (basinwide)

2.4 ENVIRONMENT

2.4.01/95	Environment Programme (basinwide)
2.4.13/92	Inventory and management of the Cambodian wetlands
2.4.19/92	Basinwide waterborne diseases management project (basinwide)
2.4.23/94	Study on water quality and pollution control (basinwide)
2.4.24/94	Support to the preparation of a diagnostic study for the Mekong River basin (basinwide) (partially funded)

3. RESOURCES DEVELOPMENT AND MANAGEMENT

3.1 WATER RESOURCES AND HYDROPOWER

3.1.01/95	Hydropower programme for the lower Mekong basin
3.1.10/89	Pilot microhydropower projects with standardized equipment (basinwide) (partially funded)
3.1.35/92	Rehabilitation of the Kirirom 1 hydropower project (Cambodia)
3.1.45/94	Prefeasibility study on the Nam Tha hydropower project (basinwide)
3.1.46/94	Action plan for water resources development and management in the Nam Beng basin (Laos)
3.1.47/94	Study on environmentally sound water management in the Plain of Reeds, Mekong Delta (Viet Nam)
3.1.48/94	Feasibility study on the Tad Salen small-scale hydropower project (Laos)

	3.1.49/94	Development plan of the lower Se Bang Fai basin (Laos)
	3.1.50/94	Development plan of the Stung Battambang and Stung Mongkol Borey river basins (Cambodia)
	3.1.51/94	Flood control planning for development of the Mekong Delta (basinwide)
	3.1.53/95	Reappraisal of the Sambor project (Cambodia)
	3.1.55/95	Prefeasibility study on Ban Koum run-of-the-river hydropower (basinwide)
	3.1.56/93	Review of the feasibility study and supplementary studies on the environment and resettlement of the Pleikrong hydropower project (basinwide)
	3.1.58/95	Integrated development planning of the Nam Theun basin (basinwide)
	3.1.59/95	Integrated development planning of the Nam Ngum basin (basinwide)
	3.1.60/95	Prefeasibility study on Don Sahong run-of-the-river hydropower project (basinwide)
	3.1.61/95	Diversion plan from the Mekong River to Sirikit reservoir (basinwide)
	3.1.62/95	Prek Thnot multipurpose project (Cambodia)
3.2	IRRIGATIO	N AND AGRICULTURE
	3.2.30/94 (former 3.3.37/94)	Irrigation rehabilitation study and capacity-building in Cambodia (partially funded)
	3.2.32/95	Sustainable irrigated agriculture project, Phase II
	3.2.35/95	Agricultural development formulation in the Se Champhone basin (Laos)
	3.2.36/95	Study on causes and process of salinization of the Korat Plateau (basinwide)
	3.2.37/95	Management of salt-affected soils for agricultural development in the lower Mekong basin (basinwide)
3.3	WATERSHI	ED MANAGEMENT AND FORESTRY
	3.3.14/94	Feasibility study of the forestry-based coastal protection for the eastern coast of the Mekong delta (basinwide)

	3.3.15/94	Melaleuca forest management in the U Minh area (Viet Nam)
	3.3.16/94	Mangrove forest management in the Ca Mau peninsula (Viet Nam)
	3.3.52/93 (former 3.4.11/93)	Creation of national parks along the Mekong River (basinwide)
3.4	FISHERIES	
	3.4.01/95	MRC programme for fisheries management and development cooperation (basinwide) (partially funded)
	3.4.15/91 (former 3.5.35/91)	Assessment of impacts of water management on fishery resources (basinwide)
	3.4.16/94 (former 3.5.36/94)	Rural extension for aquaculture development in the Mekong Delta: Phase I (basinwide)
	3.4.17/95	Support to Fisheries Management and Development Cooperation (basinwide)
	3.4.18/95	Migration and spawning of Mekong fish species (basinwide)
	3.4.19/95	Strengthening of inland fisheries information systems in the Mekong basin (basinwide)
3.5	RIVER WO	RKS AND TRANSPORT
	3.5.37/89 (former 3.6.19/89)	Construction of river ports at Ban Vang (partially funded)
	3.5.38/89 (former 3.6.20/89A)	Installation of aids to navigation (basinwide) A. Mekong Delta component
	3.5.39/89 (former 3.6.20/89B)	B. Upper Mekong stretches
	3.5.40/92 (former 3.6.25/92)	Mekong River bank protection programme (basinwide): Nam San River mouth, Thakhek, Cultural Park, Sithan Neua and Wat Sop (Laos)

3.5.41/92 (former 3.6.26/92)	Strengthening of navigation training for the Mekong Delta (basinwide)
3.5.43/87 (former 3.6.31/87)	Updating of the hydrographic atlas: ground control, hydrographic survey and topographic mapping (partially funded)
3.5.47/93 (former 3.6.38/93)	Study on long-term development of inland navigation in Cambodia

3.6 HUMAN RESOURCES DEVELOPMENT

3.6.01/95	Human Resources Development Programme for the Mekong River Commission (basinwide)
3.6.42/90 (former 3.7.26/90)	Water resources training programme (basinwide) (partially funded)
3.6.43/91 (former 3.7.28/91)	Human resources development programme for riparians (basinwide) (partially funded)
3.6.44/93 (former 3.7.32/93)	Training programme for water pollution control (basinwide)
3.6.45/94 (former 3.7.33/94)	Training on legal aspects of international cooperation for water resources development (basinwide) (partially funded)

4. PROGRAMME SUPPORT

4.1 Donors' programme support

4.2 Donors' consultancy fund

4.2.01/91	Australia/Mekong Consultancy Services Fund (basinwide) (partially funded)
4.2.02/91	Swedish Consultancy Fund for studies, investigations and training (partially funded)
4.2.03/94	United Kingdom Consultancy Services Fund (basinwide) (partially funded)
4.2.04/94	Danish Consultancy Services Fund (basinwide) (partially funded)
4.2.05/90	French contributions (basinwide) (partially funded)

付一7 (d) ドナー別資金拠出一覧(1996年度)

Donors of Mekong Projects/Activities in Work Programme 1996

(as of September 1995)

Donor countries/agencies	Amount ^{1/} (1000 US\$)
ADB $(2)^{2/}$ Australia (6)	1,600
Australia (6) Belgium (2)	5,175
Denmark (8)	2,391
European Union (1)	27,352 438
Finland (2)	5,472
France (2)	941
Germany (2)	3,840
$\widehat{\mathbf{Japan}}$ $\widehat{\mathbf{(6)}}$	2,432
Republic of Korea (1)	800
Netherlands (1)	6,667
New Zealand (1)	28
Sweden (10)	8,227
Switzerland (3)	1,280
United Kingdom (1)	37
$UNDP \qquad \qquad (6)$	5,458
UNEP (3)	843
Total	72,982

If Giving a total amount of external funds provided by individual donors to projects and/or activities included in the present Work Programme, referring also to the information provided in Annex 2.

Indicating number of projects and/or activities to which the respective donors provide the financial assistance. It should be noted that some of these projects/activities are being co-funded by more than one donor (see Annex 2).

付一7 (e) メコンプロジェクト実施一覧

STATUS OF PROJECT IMPLEMENTATION 1996

The time frame, available funds and funding source for ongoing projects and projects expected to be started in the near future are illustrated by the chart below:

		1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
1. Policy and Planning											1
East-West Transport Co (ADB/France	prridor \$1,000,000)							9	Warrier.		
Strategic HRD planning (UNDP	\$ \$50,000)						•				
Preparation of the Mekong River basin development plan											
(Sweden \$250,000) Preparation of the MRC Rules for water utilization and inter-basin diversion (Japan \$200,000)											
2. Environment and Monitoring											
Groundwater investigat (Sweden	s525,000)		'	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			• • • • • • • • • • • • • • • • • • •	7. T 1		100	
Flood forecasting								_			
(Denmark	\$245,000)										
Salinity forecasting in the delta, Stage III (Viet Nam)											
(Australia	\$460,000)										
Improvement of the hydrometeorological network (incl. Cambodia) (Core activity)								k- 4			C 3
(Japan	\$608,000)										
Improvement of Doc. Centre (UNDP \$34,200)											
Geographic Information System			-								
(ADB (Switzerland	\$600,000) \$345,000)										
(UNEP/GRID	\$463,000)										
Aerial photography for resources mapping (Cambodia)							-				
(Belgium	\$619,000)										
(EU	\$438,000)										
(Finland	\$432,000)										
(UNDP	\$250,000)										

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Management of acid sulfate soils (Viet Nam) (Sweden \$585,000) Management of wetlands in the lower Mekong basin (Sweden \$635,000) Diagnostic study (UNEP \$203,000) Water quality monitoring network in the lower Mekong basin, Phase II (Sweden \$2,600,000) (UNEP \$177,000) Integration of environmental components \$1,575,000) (Sweden Control of soil erosion, sedimentation and flash flood hazards (Sweden \$675,000) 3. Resources Development Pilot microhydropower projects \$608,000) (Japan Integrated transmission system (Japan \$687,000) Rural electrification (Japan \$120,000) Development plan for Tonle Sap (Basinwide) (France \$166,000) (UNDP \$988,000) Action plan Sre Pok basin · Phase III (Viet Nam) (Denmark \$1,710,000) Irrigation rehabilitation Cambodia, Phase II (UNDP \$2,299,270) Sustainable Irrigated Agriculture (Netherlands \$6,667,000)

Improved land and water use (Thailand)

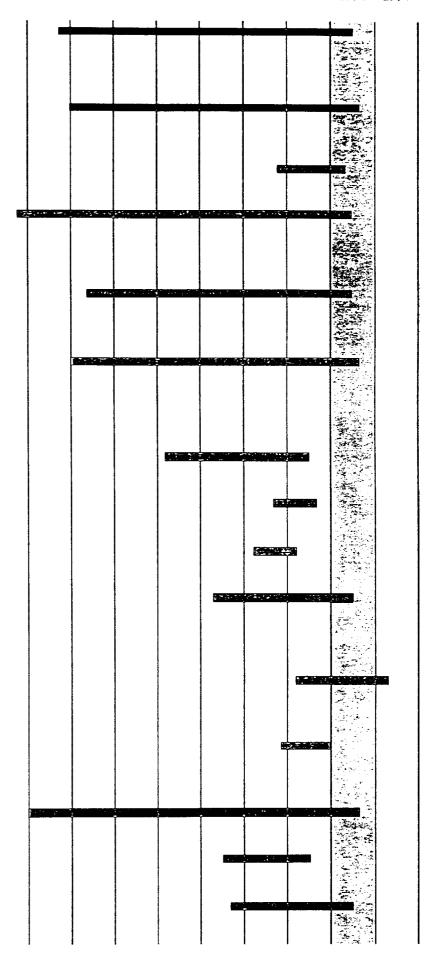
Ya-Soup, Phase II (Viet Nam)

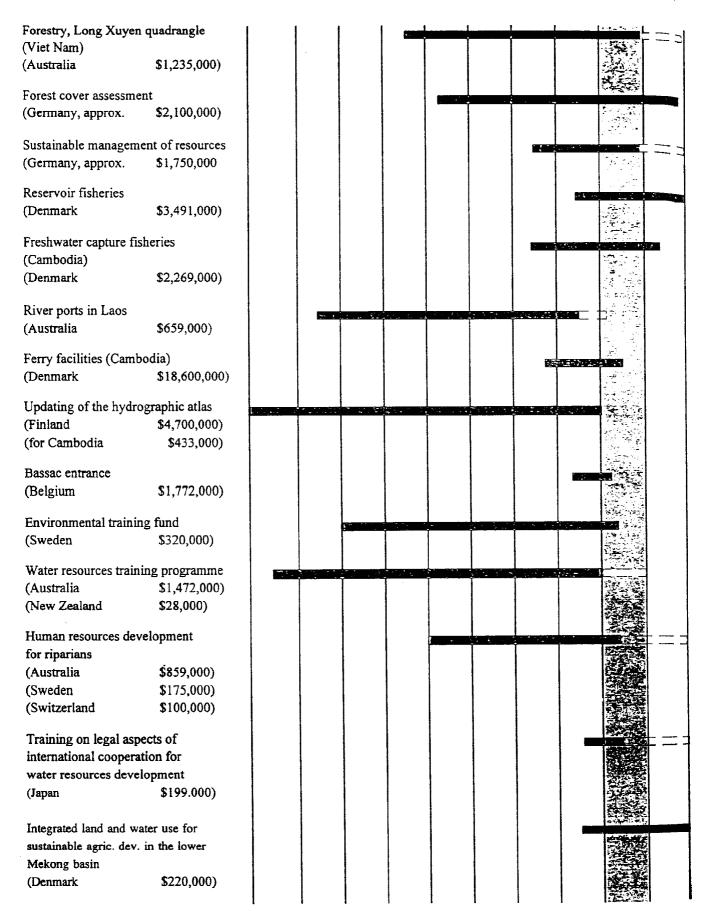
\$376,000)

\$800,000)

(Denmark

(Rep. of Korea





WP96A.XLS

4. Programme Support

Support for Mekong programme (UNDP

\$2,815,000)

Australian Consultancy Fund

(Australia

\$490,000)

Swedish Consultancy Fund

(Sweden

\$887,000)

UK Consultancy Fund

(United Kingdom

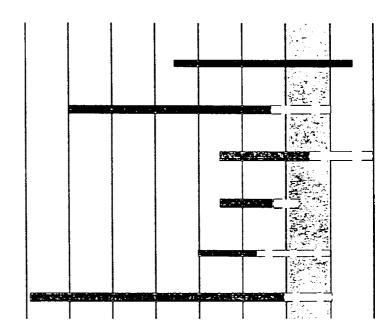
\$37,000)

Danish Consultancy Fund

(Denmark

\$441,000)

French Contributions \$775,000



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