

# Annual Report 1999

Mekong River Commission



#### Visions and Mission

Mekong River Basin Vision: An economically prosperous, socially just and environmentally sound Mekong River Basin

MRC Vision: A world class, financially secure, international river basin organization serving the Mekong countries to achieve the basin vision

THAILAND

MRC Mission: To promote and coordinate sustainable management and development of water and related resources for the countries' mutual benefit and the people's well-being by implementing strategic programmes and activities and providing scientific information and policy advice.

Bangkok

Cover photo: Christoph Piecha

Photo: Christoph Piecha



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## MEKONG RIVER COMMISSION

#### Background

The Mekong River Commission (MRC) was established on 5 April 1995 with the signing of the Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin. The MRC member countries are Cambodia, Lao PDR, Thailand and Viet Nam. The two upper states of the Mekong River Basin, the People's Republic of China and the Union of Myanmar, are dialogue partners to the MRC.

The MRC history goes back to 1957, with the establishment of the Committee for Coordination of Investigations of the Lower Mekong Basin - the Mekong Committee.

#### Structure

The MRC consists of three permanent bodies: The Council, the Joint Committee (JC) and the Secretariat,

The Council, comprising one member at ministerial and cabinet level from each MRC member country, convenes annually. The Joint Committee, comprising also one member from each member country at no less than head of department level, convenes at least twice per year. The Secretariat, which provides technical and administrative services to the Joint Committee and the Council, is under the direction of a Chief Executive Officer (CEO) appointed by the Council. The Secretariat is located in Phnom Penh, Cambodia.

The Assistant to the CEO is of the same nationality as the JC Chairman and serves a one-year term.

The budget of the Commission consists of contributions from its members and the donor community. Formal consultation with the donor community is proceeded through an annual Donor Consultative Group meeting.

The National Mekong Committees (NMCs) act as focal points for the Commission in each of the member countries. National Mekong Committee Secretariats serve the NMCs. The principal imple-

menters of MRC programmes and projects are the line agencies of the MRC member countries.

#### Areas of Co-operation

The MRC member countries agree to cooperate in all fields of sustainable development, utilisation, management and conservation of the water and related resources of the Mekong River Basin, such as navigation, flood control, fisheries, agriculture, hydropower and environmental protection.

#### **Short-term Priorities of the Secretariat**

The new Chief Executive Officer, upon assuming his post in September, has made the following three issues the immediate priorities of the Secretariat:

- (i) to secure MRC financially
- (ii) to open the Secretariat for transparent external cooperation, including better outreach and closer links to the National Mekong Committees, to the MRC donors and other development partners and to the civil society; and
- (iii) to improve the MRC's response and delivery rates.

Measures have been taken for improvement, such as a total freeze on new recruitment, the immediate establishment of E-mail and Internet connection for professional staff, and the formation of a high level inhouse task force to analyze how to utilize available resources.

At the time of reporting actions are under way to introduce structural changes at the Secretariat. The aim is to have a new organization in operation by mid 2000, to enable MRC to live up to its full potential as a regional/international River Basin Organization.

# MESSAGE FROM THE CHAIRMAN OF THE MEKONG RIVER COMMISSION COUNCIL

On behalf of the Mekong River Commission (MRC), I would like to convey to all the readers and partners of the MRC our warmest regards and best wishes.

1999 was a challenging year for the MRC. During the relocation processes of 1998, when the Secretariat was

moved from Bangkok to Phnom Penh, the MRC technical capacity was affected by the loss of many competent staff, and the confidence of the donors dropped. A number of measures have been implemented under the guidance of the Council to strengthen the MRC and regain the confidence of the donors. Qualified staff have been recruited. MRC member countries have provided additional financial support. The member countries have demonstrated their strong com-

mitment to the Water Utilisation Programme (WUP) and the Basin Development Plan (BDP). Finally, the Work Programme of the MRC has been reformulated in line with the Strategic Plan. As a result of these measures the MRC is back on track, and the confidence of the donors is returning.

At its Sixth Meeting in October 1999, the Council reconfirmed its determination to ensure a technically strong and financially secured Secretariat. In addition to the policy guidelines already provided by the Council, the Joint Committee was urged to initiate without delay the necessary strategies, programmes and activities. The Council also made decisions to facilitate an early implementation of the WUP, the BDP and the MRC Capacity Building Programme. It endorsed the Formulation of the Agriculture and Irrigation Programme, the MRC Environment Programme, the Watershed Management Strategy and the Hydropower Sector Development Strategy.

Despite its strained technical and administrative capacity, the Secretariat has delivered most of its planned projects and activities for 1999. Efforts have increased to achieve a

financially secure MRC, transparency in communication and management, and improved technical competency and delivery rates. The Secretariat is being restructured according to a new organization and financing model endorsed, in principle, by the Joint Committee in December 1999.



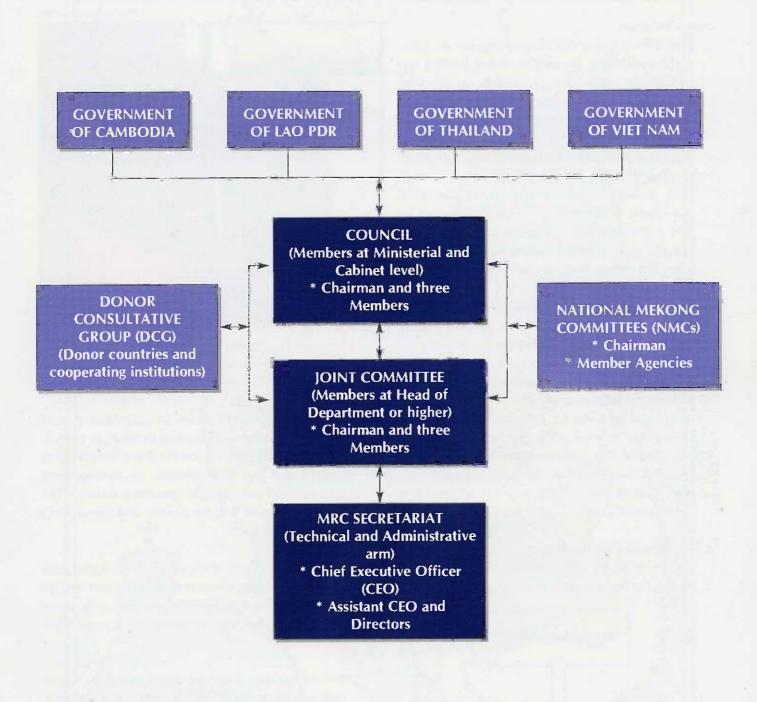
As the MRC Council Member for Cambodia, I am pleased to report that the new MRC Headquarters in Phnom Penh was inaugurated by the Prime Minister H.E. Samdech Hun Sen on 4 May 1999. The office is a donation from the Government of Cambodia as a token of appreciation of Cambodia being the host country of the MRC. It is an honour for me to be able to say that Cambodia has seen very positive developments during the past

year. MRC has helped to create a favourable environment for regional co-operation, especially among the Mekong riparian countries. The international donor community and co-operating agencies have responded to the positive developments through renewed confidence and a corresponding increase in assistance extended to our organization during the same period. Taking this same opportunity, I wish to express my profound gratitude to all of them.

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Chairman of the MRC Council for \$999/2000

# ORGANOGRAM OF THE MEKONG RIVER COMMISSION



### STRENGTHENING CAPACITY OF THE MRC

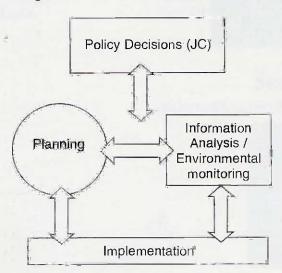
**New Challenges** 

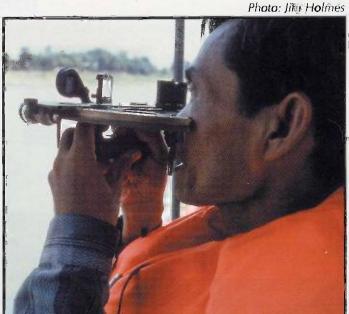
The MRC is facing significant changes in the external environment. In the past, donor funding was reasonably regular and predictable, as the MRC was a convenient institution through which development funds could be channeled, especially to those member countries in transition. Donors are now channeling such funds directly to the countries concerned, rather than through the MRC. The structure and management systems of the MRC Secretariat, which have been primarily suited for the implementation of individual projects rather than for what is needed for broader river basin planning and management, are no longer appropriate.

To meet the challenges and demands of a new era, the MRC Secretariat operational activities need to be reoriented from a predominantly sectoral project approach to a multi-sectoral and basin-wide programme approach. MRC needs to strengthen its data collection and data analysis capabilities in order to become a full-fledged knowledge center. It needs to strengthen its basin-wide planning capabilities. It needs to be able to prepare solid basin development plans, to provide good advice to its member countries, and to ensure high quality, integrated operational activities of basinwide significance.

#### A New Structure for the MRC

During 1999, the MRC started the process of restructuring the Secretariat in order to enable it to reach





these goals. The new structure follows the core funcer tions of the MRC as a basin-wide knowledge and planning body, as shown in the diagram.

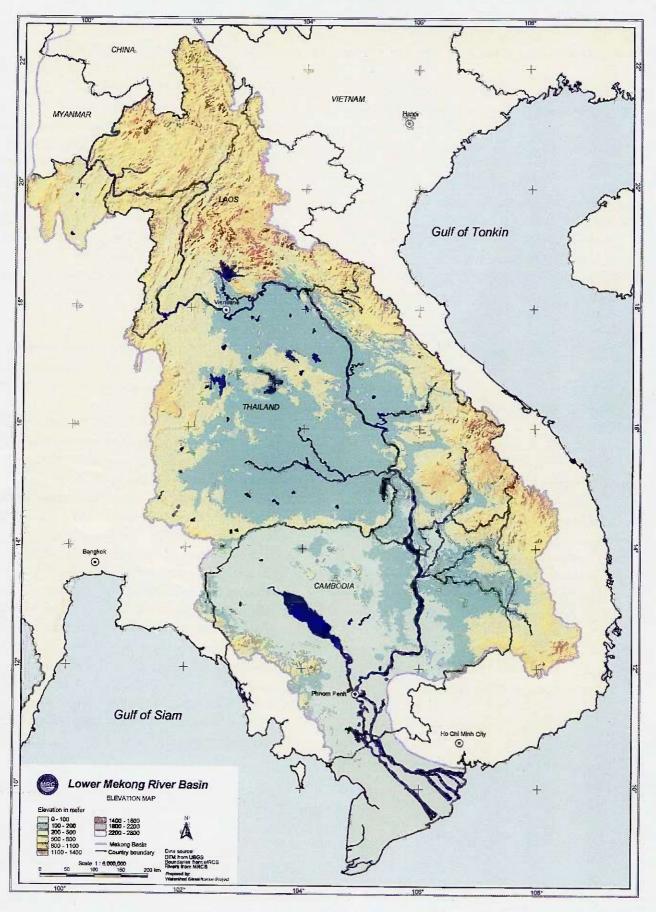
The new MRC will have an upgraded natural resources development planning division, an upgraded technical support division (for data collection, data analysis and data dissemination), an environmental division, and an integrated operations division. The new organisation will be flexible and based on a teamwork approach.

In order to have greater impact, the MRC is also planning to increase its efforts at establishing partnerships with other institutions in the region, such as the Asian Institute of Technology, the Asian Development Bank and others.

The reorganization will be accompanied by significant human resource development and modernization of the information technology systems of the organisation.

With these improvements, the MRCs role as a regional organisation for the promotion of sustainable development in the lower Mekong River Basin is expected to become significantly strengthened.

# MAP OF THE MEKONG RIVER BASIN



# COUNCIL AND JOINT COMMITTEE'S MAJOR DECISIONS

## 30-31 March: Ninth Joint Committee Meeting, Phnom Penh

- Endorsement of UNDP Programme Support;
   Acceptance of creating a new unit of the Water
- Utilisation Programme Management Team;
   Approval of seven proposals for sustainable fundraising;
- Endorsement of final version of Draft Operational
- Agreement for submission to the respective governments for final approval;
- Endorsement of the Secretariat's Report on Public Participation in MRC Activities;
- Approval of establishment of a Task Force at the MRC Secretariat to review 1993 MOU between the People's Republic of China and the Interim Mekong Committee and submit review outcomes for the JC's endorsement;
- · Endorsement of the draft Annual Report 1998;
- Endorsement of the draft report to be presented to the ESCAP 55th Session; and, Proposal on holding the fourth Dialogue Meeting in July back-to-back with the 10th JC Meeting.

#### 21-22 July: Tenth Joint Committee Meeting, Phnom Penh

- Endorsement of the draft Work Programme 2000;
- Endorsement of the revised Project Proposal for the Basin Development Plan;
- Approval of the proposed Project Implementation.
  Plan for the Water Utilisation Programme for submission to the World Bank, and endorsement of the plan of financing of the core function of the MRC Secretariat;
- Agreement for submission of the draft Programme Support Document to UNDP Headquarters;
- Endorsement of the Operating Expense Budget for 2000;
- In all four countries the Ministries concerned endorsed/approved the draft Operational Agreement and procedures have been taken to obtain the final approval from the respective governments; and
- Approval of provisional agenda and tentative programme of the Fourth Dialogue Meeting.

#### 18 October: Sixth Council Meeting, Phnom Penh

- Firm intention from the Council to continue to implement the MRC Strategic Plan;
- Emphasizing the need for MRC to have a teclifically strong and financially secured Secretariat to accomplish its mission, and urging the JC in initiating necessary actions for these purposes;
- Took note of the new pledging from donors, especially the MRC Capacity Building Programme just signed with UNDP;
- Approval of four important fund-raising activities?
- Urging the Secretariat to make greater effort to improve annual donor pledging and to conclude ongoing arrangements for the three top priority projects;
- Approval of Work Programme 2000;
- Taking note with appreciation in-kind contributions offered by the Head of Thai Delegation;
- Approval of MRC Operational Expenses Budget for 2000;
- Taking note with appreciation of the proposal made by the Head of Thai Delegation on possibility of having a new formula for determining the annual contribution in the future;
- Signing of the revised Council Resolution of the Water Utilisation Programme with a new timeframe of six years;
- Approval of the provisional Agenda for the Donor Consultative Group Meeting;
- Advising the Secretariat, besides continuation of planned activities, to identify other concrete projects/activities such as navigation to promote trade and commerce between the riparian countries;
- Allowing the JC to continue to grant extension of services for experienced and qualified staff; and
- Assuring the new CEO of the Council's support to his effort to ensure the overall technical capacity and efficiency of the Secretariat.



### SUPPORT FROM THE DONORS

The donor commitment by agreements signed with the MRC during 1999 amounts to about USD 11.28 million, a noticeable improvement in comparison with that of last year (i.e., approx. USD 2 million). The increased commitments indicate to a certain degree that with the successful relocation, clear vision and mission, and capacity strengthening, etc., our organisation is gradually regaining the confidence of its donor community. Signed Agreements by countries are illustrated below.

Belgium: (In-kind) Institutional Support confirmed in October 1999 for one expert for a year (April 1999 to March 2000) and two man-months of a socioeconomist up to BEF 6.1 million (approx. USD 160,000).

Denmark: (19 Management of Freshwater Capture Fisheries of Cambodia, Bridging Extension Phase I (November 1998-July 1999) with the Agreement signed in June 1999 for a grant of USD 418,500; and Management of Freshwater Capture Fisheries of Cambodia, Phase II (August 1999-July 2005) with the Agreement signed in July 1999 for a grant of USD 4.18 million.

Photo: Jim Holmes

Finland: (1) Internet Installation and Communication System (January 1999-December 2003) with the Agreement signed in March 1999 for a grant of USD 240,000; (2) Harmonisation of the Navigation Aids System along the Mekong River (March 1999-May 2000) with the Agreement signed in March 1999 for a grant of USD 72,000; and (3) Institutional Support signed in December 1999 for one expert up to 1,200,000 FIM (approx. USD 203,000).

Germany: Sustainable Management of Resources in the

Lower Mekong River Basin Project, Phase II (March 1998-August 2001). The Agreement was signed in December 1999 (USD 111,672 received as Secretariat support cost).

Japan: (1) Land Resources Inventory for Agricultural Development Project with a contribution of USD 401,000 in October 1999 for FY 1999; (2) Inundation Mapping in the Lower Mekong Basin with a contribution of USD 100,000 for 1999-2000; and (3) Contribution for fiscal year 1999 of USD 599,000 for: (i) Comprehensive Study on the Chaktomuk Area: Environment, Hydraulics and Morphology (USD 280,000); (ii) Training on Legal Aspects of International Cooperation for Water Resources Development (USD 127,000); (iii) Project Formulation and Strengthening (USD 142,000); and (iv) Institutional

Support (USD 50,000)

Switzerland: (1) Core contribution of USD 1.566 million for 1999-2001 with the Agreement signed in March 1999; (2). Programme Contribution of USD 1.3 million for July 1999-December 2001 with the Agreement signed in November 1999.

UNDP: Capacity
Building for
Implementation of the
MRC Strategic Plan for
USD 2.268 million with

the Agreement signed with UNDP in October 1999.

In addition, other programmes and projects which were under arrangements or negotiation with donors are as follows:

Denmark and Sweden have financed through the use of the existing Consultancy Funds the detailed planning phase of the Basin Development Plan (with a total amount of USD 529,200). A full appraisal by the same two donors and SDC was carried out in December 1999. A total of

Photo: Christoph Piecha



USD 7.6 million is expected to be secured for formulating the BDP and the three-year time frame project. Other relates to the second three-year MDBC-MRC Cooperation Programme which is expected to commence next year, with continued financial support from Australia (AusAID). Australia has also been approached for assistance to a new project, namely, the Hydrological On-line Monitoring Network.

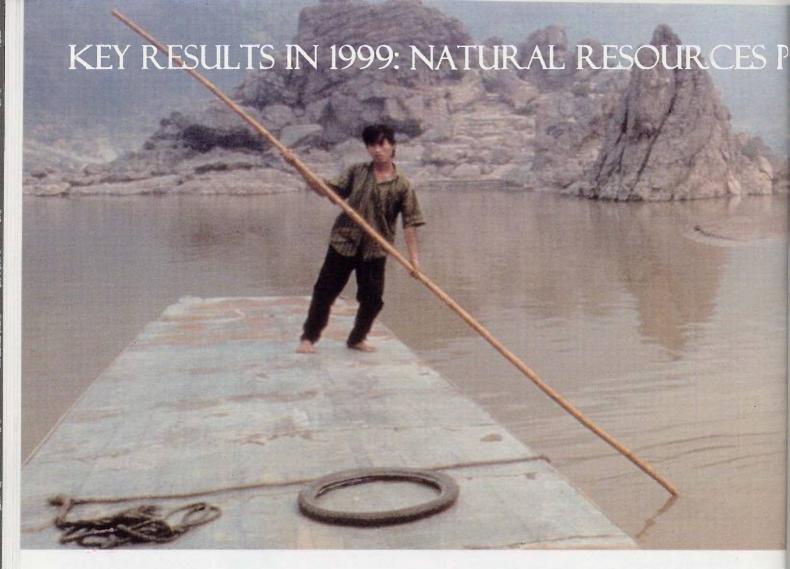
In an effort to restore the confidence of the donors and secure more support from them, and following the directives of the Council and the Joint Committee, the Secretariat continued discussion during the year with a number of donor representatives including those from the Governments of Australia, Belgium, Denmark, Finland, France, Switzerland and the World Bank. It should be noted that the discussion with the Government of Denmark in April was the first high-level annual consultation with participation of the Under-Secretary of the Ministry of Foreign Affairs and the Joint Committee Chairman. The Danish Delegation made it clear that the future scope of Danish assistance to the MRC would depend on the commitment (participation, ownership and resource allocation in terms of funding and staff) of member countries towards the MRC. An informal donor meeting was held at the Secretariat in July to brief the donors on the progress of the MRC key activities. The Fourth Donor Consultative Group Meeting was organized in October-back-to-back with the Council Meeting with 28 representatives from 14 donor countries and cooperating agencies attending. In addition, measures to strengthen ADB-MRC cooperation have also been explored with

preparations for a Partnership Agreement on Cooperation between the ADB and the MRC.

Apart from programme support, several countries still continue to provide technical assistance to the MRC, in terms of expert services at the Secretariat. As of the end of 1999, the following may be noted: (1) Belgium (one seconded expatriate), (2) Denmark (one expatriate at the Secretariat and 16 expatriates stationed at field offices under the programme fund), (3) Finland (one expatriate under the Institutional Support Agreement), (4) Japan (three seconded expatriates), (5) Republic of Korea (one seconded expatriate), (6) Sweden (one expatriate under the Institutional Support Agreement), and (7) Switzerland (two expatriates and five riparians under core support). A few more are expected to be on board shortly.

One last major group of activities relates mainly to fundraising. There were several important activities, some of which are ongoing exercises that are carried out continuously, for improved understanding and support of the donors and cooperating agencies. They include:

- · Improvement of the Work Programme 2000;
- Implementation of programmes/projects as per schedule; ongoing effort;
- JC Chairman's visit to donor countries (together with the Secretariat);
- Proactive public relations (PR). Annual Report and Mekong News remain useful PR materials and will continue to be improved. The Secretariat has finalized the concept of the Home Page and it will be implemented soon.



#### **Key Goals**

- Basin-wide economic development forms the key plank of the MRC vision for the future. The 1995 Agreement calls for preparation of a basin development plan. Basin development plans must be based on rules for water quantity sharing and water quality. Development of water use rules and establishing basin planning processes are thus major goals of the MRC.
- The MRC goal is, further, to identify, co-ordinate and implement those water and related activities which are truly basin-wide in nature, or which contribute substantially to regional knowledge and understanding.

Objectives and progress on the Water Utilisation Programme and the formulation of the Mekong River Basin Development Plan is described separately. Also described separately are projects carried out in river works and transport, and the fisheries programme.

#### Main Achievements in 1999

 Financing has been secured and implementation started of an important strategy study for develop-

- ment of the watershed management / forestry sector in the region.
- Better understanding of the resource management systems of the regional countries has been achieved through the completion of phase I of the Sustainable Management of Resources project.
- An ADB hydropower study for the Sekong Sesan Nam Theun River Basins, for which the MRC acted as Secretariat, has been successfully completed. 6 projects have been recommended for further investigation.
- A study of the potential for micro-hydropower schemes in Cambodia and Laos was completed during 1999. The study identified several potential projects.
- The groundwork was laid for the development of a comprehensive MRC Agriculture and Irrigation programme.
- An important flood control planning project, aiming at developing regional strategies and action plans on flood control measures, was started. The project will be finalized during 2000.

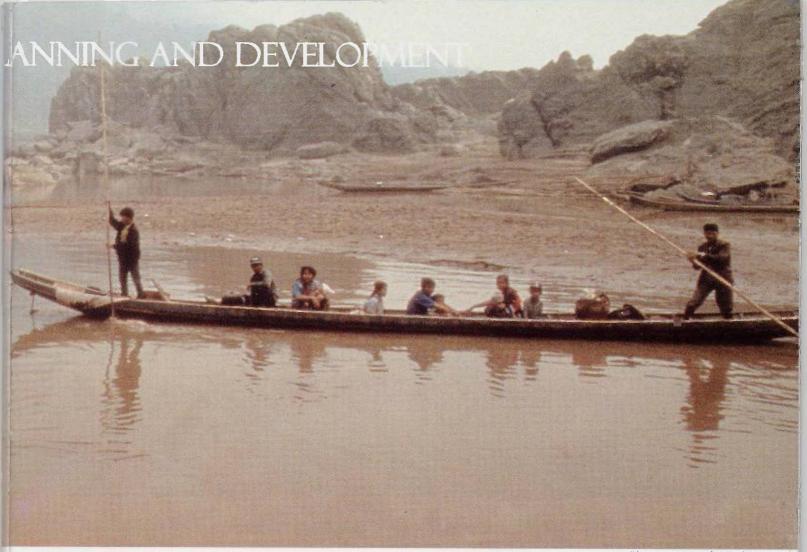


Photo: Christoph Piecha

#### Overview of Activites in 1999

A Strategy Study on the Development of the Watershed Management/Forestry Sector was started in August 1999. Its purpose is to prepare a strategy and action plan to guide the MRC Secretariat and National Mekong Committees in expanding and strengthening their activities in forestry and watershed management.

A project for the Sustainable Management of Resources in the Lower Mekong Basin (Phase I), was completed in early 1999, providing a better understanding of the regional and partner country situations. Phase II will promote measures for the sustainable management and protection of resources in the Lower Mekong Basin for the long-term use and safeguarding of natural resources in the catchment areas.

The MRC Secretariat acted as Co-ordinating Agency for the two-year Asian Development Bank Sekong - Sesan - Nam Theun River Basins Hydropower Study. The study was completed in July 1999. The study considered 37 proposed hydropower schemes in the three basins and recommended six suitable projects

for further investigation.

A study on Microhydropower for Rural Electrification was started in 1994 and completed in October 1999. The study assessed the needs and possibilities for rural electrification by developing microhydropower projects in Cambodia and Lao PDR, and identified several potential projects.

Preparatory activities for the development of an Agriculture and Irrigation Programme, based on the Council's approval of general agriculture and irrigation guidelines in November 1998, was carried out during 1999.

An Inception Meeting for the Flood Control Project was held in July 1999, to seek comments and advice on requirement for additional data and model update, approach, methodology and work plan. Preparation of an immediate action plan, a long term action plan for priority areas, and formulation of long-term flood control measures and strategy are to be carried out during year 2000.



#### **Key Goals**

- To integrate environmental management and social considerations into all MRC development activities.
- To increase the capacity of the MRC Secretariat, the National Mekong Committees and the associated country line agencies in environmental management of water and related resources, and infinorporating social issues in MRC activities.
- To assess and manage identified environmental problems relevant to the Başin's water and related resources.

#### Main Achievements in 1999

- As part of a larger effort to improve water resources and environmental management, a study of the present water resources and environmental situation in the basin has been completed. This will be used to prepare development scenarios and develop plans and processes for water resources and environment management in the region.
- The water quality network in the Lower Mekong Basin, established in 1985, has been further strengthened, and now consists of 103 monitoring stations in the basin.
- Progress has been made towards the development

- of regional, ecologically sound wetland management plans. Studies and surveys have been carried out on key wetland areas in the region, providing greater understanding of critical development issues.
- The capacity of national agencies to integrate environmental issues in development planning has been improved. (See separate article on the Environment Training Programme.)

#### Overview of Activities in 1999

The environmental monitoring and information component primarily focus on establishing baseline information on key parameters reflecting the environmental state of the aquatic ecosystems (river lake, wetland and shallow ground water) of the Lower Mekong Basin.

A pilot study of water resources and environment management is under implementation. The study is based on the basin of the River Kok in northern Thailand. The analysis of the present water resources and environmental situation in the basin has been completed and the formulation of plans and processes for water resources and environment management will be made based on future development scenarios.

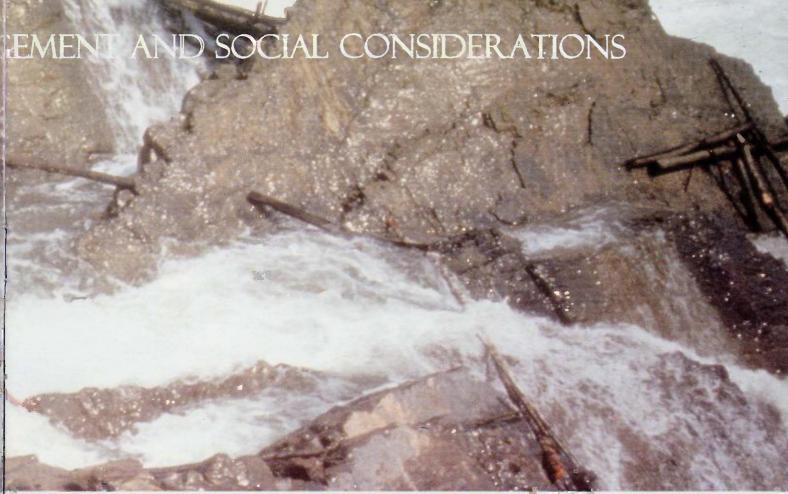


Photo:Rolf Lambert

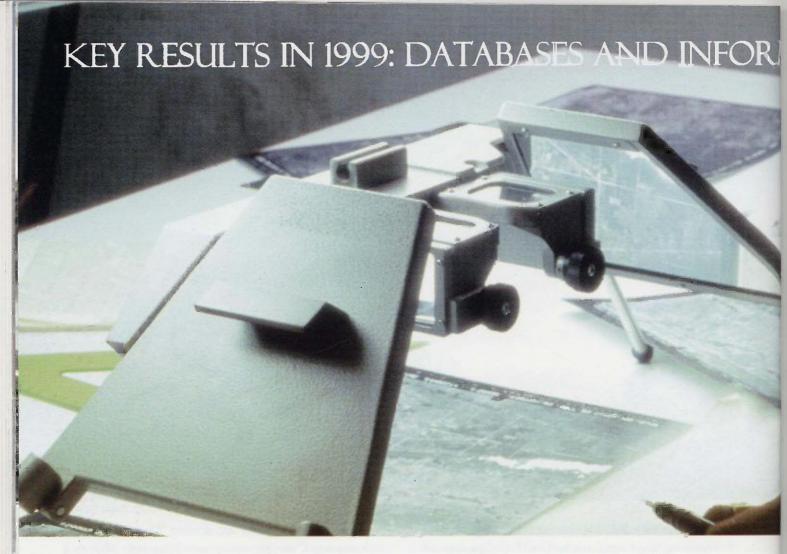
The Water Quality Monitoring Network in the Lower Mekong Basin was launched in 1985. The network is focused on monitoring the water quality in order to determine the background conditions in the Mekong water system, and to monitor the water quality changes in River. The network also tries to establish a system for early recognition of water quality problems arising from current and future development activities. To date 103 stations have been established, with 18 stations along the main river, 35 along the tributaries, 44 in the Mekong delta, and 5 in the wetlands as corridor of the Mekong river.

The Inventory and Management of Wetlands project started in 1990 under the stated development objective "to formulate ecologically-sound management plans that will permit the productive use of basin wetlands on a sustainable basis while conserving their natural ecological and socio-economic functions". During 1999, project activities were kept at a low level due to the initiation of restructuring of the MRC Environment Programme. The completed activities include pilot area surveys for Vietnam and Thailand, a water quality survey for Laos, and improvement of Vietnam wetlands database.

A wetland site study of Boeung Thom system in Kompong Cham province, one of the most important wetland in provinces, containing very productive fishing lots was carried out. Rapid survey produced detailed descriptions of wetlands and combined with a study of the user of the system. A Water Quality Monitoring Programme of Boeung Thom, Kompong Cham, was started in December 1999.

Soil erosion and sedimentation activities were initiated in 1990 with the ultimate objective to prevent environmental degradation through erosion and siltation by timely identification of critical and potentially critical areas. In the context of the renewed objective of the MRC Environment Programme to serve the WUP and BDP, it is proposed that soil erosion and sedimentation studies are integrated in the WUP and related MRC Programmes where appropriate.

The MRC Environment Programme aims at strengthening the capacities of the MRC Secretariat, NMCs and related agencies in incorporating environmental considerations in policies, project/programme planning and implementation. A more detailed information of the Environment Training Programme is presented in a separate article.



#### **Key Goals**

- Promote free exchange of natural resources and socio-economic data and information among MRC member country agencies and external information sources.
- Increase the technical and communications capacity of MRC, NMCs and associated line agencies in databases and information systems management.
- Develop, maintain and make accessible relevant, up-to-date, reliable natural resources and socioeconomic databases and information systems, based on integrated monitoring systems.

#### Main Achievements in 1999

- Good progress has been made in the development of basinwide spatial databases on soil types, inundation and irrigation.
- New remote sensing technology has been used to map inundation in the Lower Mekong Basin. The data will improve the land resources inventory and agricultural development of the region.
- Progress has been made in building an integrated database at a basinwide level to provide the tools for proper monitoring of the environment and management of the water and related resources

- within the Lower Mekong Basin. This is an important step towards the development of water utilisation rules and basin development plans.
- The hydro-meteorological network for the Lower Mekong Basin has been further strengthened through capacity building measures and improved data exchange.
- Discharge measurement and sediment sampling of the Great Lake basin in Cambodia are now becoming regular activities. Intensive measurements provides reliable discharge data for the Vietnam delta.
- A new information network for flood forecasting has been established among the riparian countries.
- The Lower Mekong Hydrologic Yearbook, covering more than one hundred hydrologic data, was printed and distributed.

#### Overview of Activites in 1999

The Land Resources Inventory for Agricultural Development Project aims to develop basinwide spatial databases at the scale 1:250,000 on soil types, inundation and a separate database on irrigation. Guidelines on the development of these data layers

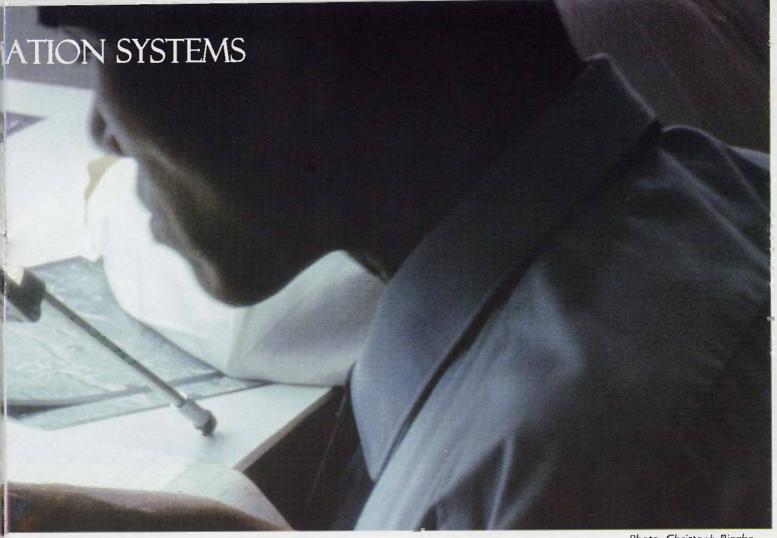


Photo: Christoph Piecha

have been developed for use by line agencies in their respective parts of the Mekong Basin. The Secretariat will continue its efforts to build an updated and integrated database at a basinwide level to provide the necessary tools for proper monitoring of the environment and management of the water and related resources within the Lower Mekong Basin.

The overall objective of the Hydrology Programme is to achieve a reliable and sustainable hydro-meteorological information system of the Lower Mekong Basin which will provide basic scientific information necessary for common understanding of the basin water resources among stakeholders. Improvement of the hydro-meteorological network of the region remains an important core activity of the MRC. Key hydro-meteorological stations in the Lower Mekong Basin were strengthened during 1999.

Discharge measurement and sediment sampling of the Great Lake basin in Cambodia are now becoming regular activities. Intensive Measurement at Tan Chau and Chau Doc in Vietnam provides reliable dry season discharge data at the entrance points of the Vietnam delta. Flood Forecasting of the Mekong Mainstream has continuously been carried out during the flood season in cooperation with national agencies. Since MRC was relocated to Cambodia in September 1998, a new information network has been established among the riparian countries. Through the new network, using radios and internet in combination, the MRC Secretariat successfully collected daily hydrometeorological data at more than thirty stations in the basin.

Under the Exchange Programme between MRC and the Murray Darling Basin commission in Australia, an Initial Scoping Workshop "A Hydrologic Model for the Mekong River System" was organized in June.

The Government of New Zealand has continued to provide support for the printing of the Lower Mekong Hydrologic Yearbook. It covers more than one hundred hydrologic data and almost two hundred rainfall data collected in the basin.



KEY GOALS

- To develop the MRC into a highly effective, professional, international river basin organization.
- To shape the MRC and develop the right skills and competencies to support the MRC strategic plan.
- To mobilize financial and other resources necessary to implement the activities, programmes and projects under the strategic plan.

**MAIN ACHIEVEMENTS IN 1999** 

- The capacity of the National Mekong Committees and line agencies to effectively plan and execute organization development and human resources programmes has been strengthened through various training activities. This will help enable agencies to implement the MRC strategic plan.
- A second phase of a project for legal training and capacity strengthening of the National Mekong Committees has started. Strengths and weaknesses of the NMCs have been identified, and plans have been developed to improve weaknesses and increase regional co-operation.
- Gender training teams have been established and trained in the four riparian countries. A number of activities aiming at institutionalizing gender perspectives in development planning for the Mekong delta have been carried out.
- A comprehensive MRC Capacity Building Programme, integrating all capacity building /

human resources development efforts of the MRC has commenced with the support of UNDP.

#### **OVERVIEW OF ACTIVITIES IN 1999**

Implementation of the MRC's Human Resources Strategy, formulated in 1996, has progressed well. Human resources development will cater to the present and future requirements of all components of the Mekong River Commission.

The Capacity Building of HRD Core Groups and Strengthening HRD Network Project, supported by the Government of Switzerland, primarily aims to establish and strengthen the strategic HRD institutional framework. The major achievements of this HRD project included formulation of three-year HRD Action Plans, which responded to the needs and priority of each member country; and development of 4 National HRD Plan Formulation Guidelines in English and respective riparian languages.

The Legal Training and Capacity Building for Effective Mekong Cooperation Project, funded by the Government of Japan, has also been successfully extended for another two years. This second phase of the project aims to strengthen the capacities of National Mekong Committees necessary to plan, implement, and evaluate water development and related programmes and to foster cooperation among



Photo: Jim Holmes

member riparian countries based on the principles of mutual and sustainable development.

The project "Study on the roles of women in water resources development in the lower Mekong basin", funded by the Government of New Zealand, has progressed impressively in 1999. Major accomplishments included: Training and establishment of Gender Training Teams in four riparian countries; formulation of Gender Guidelines and Checklists for MRC development activities; development of National Gender Mainstreaming Training Packages and the organization of capacity building workshops for 113 MRC Project personnel basin-wide.

Led by the UNDP-supported Capacity Building Programme for Implementation of MRC Strategic Plan, from 2000 onward, all capacity building/HRD projects and various process will be integrated into one system within the MRC context so as to facilitate the synergistic and timely implementation of the MRC Strategic Plan.

#### INTERNATIONAL COOPERATION

As the major inter-governmental organization in the region, the MRC always accords high importance to international cooperation. Resources from the international donor community and cooperating agencies still constitute the largest share in its overall operation.

tional and programme budget. In view of this, the MRC introduced in 1999 a new set of strategy and measures for communicating with its stakeholders and especially, its donors and cooperating agencies. Transparency and adequate information flow have become major policies in this respect. Meetings of the Donor Consultative Group were and still are the most important forum that the MRC organized several times, formally and informally. The Annual Consultation Meeting was a new approach that was adopted for separate meetings with individual donors for specific programmes and assistance. With some specific partners such as the Asian Development Bank, the Asian Institute of Technology, etc., in addition to frequent dialogue and communications, the MRC is in the process of concluding a partnership arrangement with them. Additionally, the MRC is considering a new "twinning concept", aiming at establishing partnerships with other international river basin organizations in the world. For the last three years, the MRC has enjoyed an established relationship with the Murray Darling Basin Commission in Australia from which it greatly benefited from such a cooperation, in terms of information exchange and learning from one another about development experiences.

## THE WATER UTILISATION PROGRAMME

Reaching for Regional Agreement on use of the Mekong River

The Water Utilisation Program (WUP), financed through the World Bank / Global Environmental Facility (GEF), is a program of major importance for

the MRC member countries. Carrying out the program will be one of the great challenges for MRC in the years ahead. Planning for the program was finalized during 1999, and implementation started in early 2000. The program will be implemented over the next 6 years.

A major goal of the WUP is to assist the

riparian countries in establishing minimum flows in the Mekong River and in agreeing on water allocation - the Water Utilisation Rules. As part of the program, the WUP will seek to develop detailed information exchange procedures and assist in negotiations and consultation.

The GEF Board approved the Project in January 2000, and the World Bank Board approved the WUP Start-up Project on 4 February 2000. The Grant will be effective from March 2000. The total cost of the WUP is US\$ 16.3 million, with the GEF support amounting to US\$ 11.0 million.

As an umbrella program, the WUP covers planning, data collection, development of a basin modeling and knowledge base, establishment of monitoring systems and river basin management.

Implementation of the WUP will require strong regional and national institutional capacity. An important objective of the WUP is therefore to assist the riparian countries in building such capacity.

Activities in 1999

The initial implementation of the WUP started in late 1999. Successful negotiations on finalisation of the WUP plans were conducted with the World Bank in November 1999.



During its last meeting, the Joint Committee discussed all issues related to the Water Utilisation Program and directed the MRC Secretariat to place high priority on the implementation of the program.

The MRC WUP Unit was established in 1999. The unit consists of four highly qualified river basin planners recruited from the MRC Member Countries. An

"Initial Task Force on Modeling" was set up at the Secretariat in January 2000. In addition to the WUP Unit at the MRC Secretariat, national WUP units have been set up in the secretariats of each of the four National Mekong Committees.

Progress has been made on several WUP co-financed projects. Stage I of the sub-project "Identification of Modeling Needs, Data Requirements and Selection Criteria" has been approved by the Finnish government. A program for the study of Mekong river basin water quality will be submitted to the French government for their consideration and approval in March 2000. Negotiations on a Japanese study on hydrometeorological analysis and filling of data gaps is ongoing.

The WUP Launch Workshop to discuss and prepare the detailed first-year workplan is now tentatively scheduled to be held in Phnom Penh during the last week of April 2000.

#### Key Challenges Ahead

The WUP will directly address the key issues of water utilisation and ecological protection. It will provide the MRC with both analytical tools and a knowledge base for water resources planning and monitoring, and assist it in formulating the rules for water utilisation. The program will provide insight as to how future activities related to water resources development could be carried out. Together with the Basin Development Plan (BDP), the overall goal of the WUP is to contribute to optimum use of the Mekong water and water-related resources for the benefit of the people of the basin.

The challenges, however, are great. A number of technical difficulties must be overcome, data gaps must be filled, existing data and information must be validated and improved, and political differences must be overcome. The WUP will be a major test-case for the potential for regional co-operation on the development and use of the Mekong river basin resources. Its implementation will also be a major test-case on the effectiveness and relevance of the Mekong River Commission itself. The MRC is fully committed to the WUP, and will in the years ahead exert maximum effort to ensure the success of the program.

### BASIN DEVELOPMENT PLANNING

## Sustainable Development Through Basin Development Planning

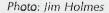
The Basin Development Plan (BDP) is envisaged as both a general planning tool and a process which will

be used by the Joint Committee as a blueprint for identifying and prioritizing programs and projects at basin-wide level. The BDP will be comprehensive, integrated and dynamic, in view of its wide coverage and the need to have it updated regularly. A short-list of basin-wide development programmes will be one of the outcomes of the planning process. The BDP is expected to have a clear interface

with national development plans of the riparian member countries as well as other regional initiatives. The secretariats of the National Mekong Committees and related line-agencies in the member countries will be key actors of the planning exercise.

The BDP formulation will start in 2000 and be com-

pleted by 2003. In addition to the BDP Process there will be the building up of a knowledge-base and the establishment of a BDP decision-making process.



#### Activites in 1999

From January to July 1999, a team of international consultants, in close collaboration with Planning Analysts from the riparian countries and the MRC BDP Team, completed a study confirming the feasibility of the BDP process. The work was carried out following a participatory approach in which a large number of line agencies and key stakeholders in the four countries have been involved.



The detailed planning phase for the BDP process was completed in July 1999. The following major outputs have been produced:

A Review Report, elaborating the current development situation and institutional systems of the countries in the region;

- A BDP Conceptual Framework Report, outlining the BDP Framework; and
- A Final Draft Project Document, containing an implementation plan and a financial proposal for support by donors.

The planning process has been assisted financially by Denmark (Danida) and Sweden (Sida), at a total cost of about USD 529,000. The Joint Committee endorsed the plan at its Tenth Meeting in July 1999. The Council, at its Sixth Meeting in October, urged for an early formulation stage.

#### Key Challenges Ahead

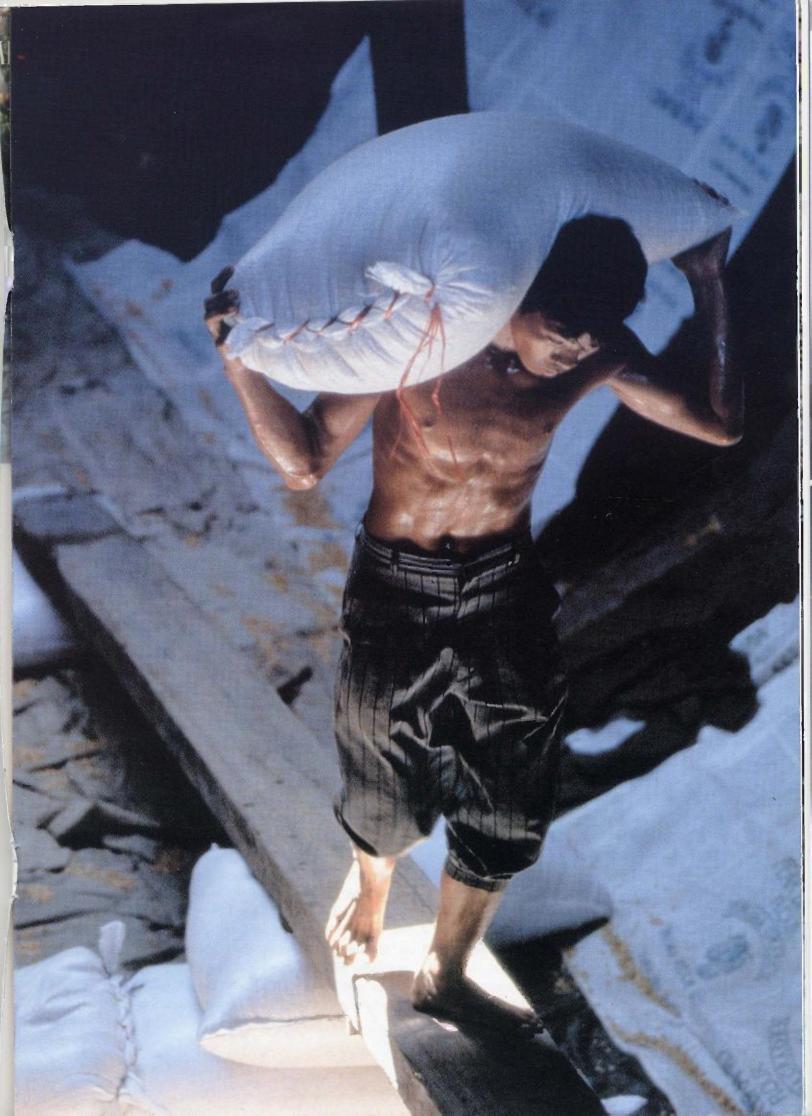
The BDP aims at sustainable development of water and related resources in the Mekong River Basin. To be successful, the BDP must be based on rules for water utilisation and related procedures which are yet to be developed. The development of these rules is the task of the Water Utilisation Programme, the second major programme of the MRC. Additionally, the BDP needs to follow and apply environmental guidelines and/or standards, which are yet to be established. This will be one major task of the new MRC Environment Programme, which will start its implementation during year 2000.

These three major Programmes of the MRC will need to be closely integrated. Implementation difficulties in one programme will affect the results of the others. Each of the programmes have ambitious and challenging objectives that will require great effort by the MRC and the MRC member countries to be achieved.

A further major challenge for the BDP is the availability of high-quality data and information. The BDP process will need to have available comprehensive, high-quality data for it to be able to produce results. At present there are significant data gaps, and the quality of existent data is in many cases also poor. Data collection must be improved and major databases and tools will need to be established, shared and operated jointly in order for the BDP to succeed.

The BDP programme will thus be a major undertaking for the MRC during the next three years. The challenges and risks are significant, but the potential rewards for success for the people of the Mekong River Basin will be great.





### LOTS OF FISH IN THE MEKONG BASIN

Wild fish production in the Mekong Basin is more than one million tonnes per year. The flood plains are the places where these huge quantities are produced, but they are linked to other areas in the Basin through important fish migrations. As an example, the huge fish production in the Great Lake Tonle Sap cannot be sustained if the spawning grounds at Stung Treng, some 500 km upstream from the Lake, are not protected.

#### Rice, Yes, and Fish Please!

Asian peoples' staple food is rice, but not alone. In the Mekong area, it is almost invariably accompanied by fish.

About 60 million people live in the Lower Mekong

Basin. Of these. some 45-50 million people are employed in the agriculture sector. Rice is the most important crop. but fisheries follow rice cultivation almost invariably, together with rice, fish forms the basis of the food security for the people in the

Lower Mekong Basin. The size of the inland fisheries sector, however, has historically been grossly underreported because of the difficulties in measuring it.

#### 800 Million Dollars Worth of Food Security

The size and value of the fisheries sector has been a main target for research under the MRC Fisheries Programme, and is leading to ever higher estimates of the fish production as the results come in. Annual production from capture fisheries alone is estimated to amount to more than one million tonnes. A conservative fish price of around 0.75 US\$/kg gives a total value of this fish production at retail market level of approx. US\$ 800 million.

Preliminary results from surveys in Laos show annual

consumption rates much higher than what was ever believed, at between 28 and 63 kg per person. For comparison, most countries in Europe consume between 15 and 20 kg per person per year. In Cambodia, new studies show that 47% of the total catch in the area is taken by family fisheries, or

Photo: Jim Holmes

approximately much as the production of the large and medium-scale fishery all together. The total estimate catch Cambodia is approximately 400,000 tonnes per year, with a percapita consumption around the Great Lake Tonle Sap close to 67 kg per year. This is among the highest in the world.

Mekong Delta of Viet Nam may have even more fish. A survey in An Giang Province, near the border with Cambodia, gave an annual capture fish production of 180,000 tonnes in that province alone.

#### Flood Plains Full of FIsh

Now, where are these fish? For an outsider, the most straightforward answer might be "in the river", and of course there are fish there as well, but the rural population would probably answer "in the flooded areas". The flood plains are what creates the fantastically high fish productivity in the Basin. Surveys carried out in the Mekong Basin under the MRC Fisheries Programme indicate that the productivity in a flood plain, which is flooded 4 - 6 months per year, is more than double the size of what is produced in a

permanent lake of the same size. It is also several times higher than the productivity per area in the most productive marine areas in the world. It is the periodical shift between flooded and dry areas which is particularly beneficial, and which may be lost if the annual cycle is changed.

The Great Lake Tonle Sap is part of such a flood plain system. The Lake fills up during the peak flood, and the young fish brought in, when the Tonle Sap River turns its current and runs north, thrive in the vast flooded areas. When the water recedes the fish migrate out of the lake back to its spawning grounds upstream of the river. Huge quantities of fish are caught in the set-bag-net fishery (dai fishery) in Tonle Sap River each year from December to February just before the full moon, when the migrations take place.

The value of the natural resources of the Great Lake Tonle Sap is recognized world-wide, and in the Mekong Basin it is considered the heart of the fish production. But the "heart" does not beat alone. It depends on other parts of the "body" as well. New surveys under the MRC Fisheries Programme have shown that a considerable part of the fish which live and grow in the Tonle Sap come from up-stream the Mekong River.

**Tonle Sap and Stung Treng Linked Through Migrations** 

It is esitmated that more than half of the fish caught in the dai fishery in the Tonle Sap River are a small species, in Cambodia called Trei Riel. They are used for the production of Pra Hok, the fermented fish paste which is a very important ingredient in Cambodian food. They spawn far upstream. Migrations back into the Great Lake start from May to July, at the onset of the rainy season. Many of them

continue
200-300
km further
downstream to
Viet Nam
and enter
the canals
and flooded areas
therethey
form the



basis of an important fishery as well.

At least four species of the River Catfish, which form the basis of a very prosperous fishery and inter-regional fish trade, are migrating from Tonle Sap and up to the area around Stung Treng, and maybe into the lower parts of the Se San and Sre Pok tributaries to spawn. They move downstream again when the waters begin to rise and find their way to the flooded forest of the Tonle Sap. Many other economically important fish species show similar migration patterns.

It all becomes clear that the Stung Treng and the Tonle Sap, and also the areas upstream from the Khone Falls, as well as the flood plains in the Vietnamese part of the Mekong Delta, form part of the same ecosystem in such a way that one part cannot be cut off without serious effects for the others, and not least for the Tonle Sap. To conserve the natural resources of the Tonle Sap, fish habitats many hundreds of kilometres away must be kept "alive" and migration routes back and forth between the Lake and these places must be left open.



#### Fish--An Inexhaustible Commodity?

For many people in the Basin, fish have come to be considered an inexhaustible environmental commodity like the air we breathe and water flooding the fields every year, which "is always there", wherever there is water.

But, as development all over the world has shown, with unplanned development even water and freshair may become scarce. Fish and all other aquatic life in river basins tend to disappear. The biggest threat to the fish resources in the Mekong Basin is not "overfishing" as seen in many marine areas. It is habitat destruction and constraints to fish migrations. What may be seen as an opportunity for one sector may appear as a threat to another. If not properly positioned and designed, development activities in the water systems may destroy important habitats or obstruct fish migrations and lead to the decimation of the resources. This can have very serious consequences for the rural population, and be very expensive in an overall national or regional economic context

#### The Basin Development Plan-Needed for Fisheries too

With the Basin Development Plan under preparation, by the MRC Secretariat, the Fisheries Programme may play a crucial role in supplying information to the plan on aquatic resources, their role, value and needs for management and conservation.

For this purpose a range of Components have been started up under the Fisheries Programme. The Assessment of Mekong Fisheries Component addresses fisheries management issues on the regional level. The Component Management of the Inland Capture Fisheries of Cambodia supports the development of fisheries management systems at the national level, and comprises also funds for the construction of a new Inland Fisheries Institute in Cambodia.

The Component Management of Reservoir Fisheries in the Mekong Basin addresses fisheries management issues at the local level, primarily by seeking to increase fish yield from reservoirs, but the scope is wider than that. It also supports the development of fisheries co-management systems for local wetlands, river reaches and lakes, which are important for the preservation of the resources in the area or region. In co-management, the fishermen take part in the responsibility of managing the resources in a water body, instead of leaving this task to the police alone. This way has proven far more efficient, and also gives the fishermen an understanding of their own role in securing the future.

Fisheries planning forms an important element of the MRC programme. With good planning, the fish will still be there for our children and grandchildren.

### ENVIRONMENT TRAINING PROGRAMME

Knowledge is the key to sustainability. To know that degradation of highland forests might reduce lowland fisheries, for example, is the first step to ensure the balance between economic development and a healthy environment. Awareness of such linkages must be fostered at all levels.

To this end, the Mekong River Commission, in March 2000, completed the first step of a long-term approach to regional ecosystem awareness and capacity building. The Environmental Training Programme (ETP) Block-I, with funding from Denmark, Sweden and Switzerland, strengthened capacities of the MRCS, NMCs and key line agencies. The ETP will also promote and facilitate knowledge and information exchange between the riparian countries. The ETP Block-I objectives were to:

- Improve the capability of the riparian personnel to define, analyse and assess environmental impacts related to the development of water and related natural resources;
- Provide knowledge of new environmental concepts and techniques and facilitate sharing of experiences with international organisations; and,
- Support and facilitate the introduction of sound environment and natural resources management policies and practices into planning and decision making for sustainable development.

Six training courses addressed the specific needs and priorities of each member country, while keeping the regional and cross-boundary context in focus.

The first course (Training on Environmental Awareness & Sustainable Development) enhanced the skills and capacity of key groups involved in socio-economic development and environmental protection. It raised awareness of the serious nature of environmental issues, increased understanding of the principles and practices of sustainable development, and inspired participants to take action to ensure sustainable development within their own sector and communities.

The second course (Environmental Management & Introduction to Environmental Management System

[ISO14000]) was designed for persons responsible for development activities. It promoted understanding of environmental protection and environmental management. Regional co-operation in development planning and environmental management was prominent and the course included a site visit to provide "hands-on" learning experience.

The following 3 courses were attended by 4 members of each country and hence allowed for a more in-depth approach, fostering exchanges of views on different national and institutional responses to environmental planning and management.

The third course (12 days: Training Course on Integrated Resource and Environmental Management) raised awareness of the interconnectivity of ecological systems and provided participants with practical tools for integrated resource and environmental management (IREM). Operative knowledge was gained through a 5 days field trip on the Tonle Sap River and Lake where participants analysed 6 case studies and discussed with local managers and regional and international experts.

The fourth course (16 days: Training Course on Environmental Assessment [EIA] and Review), demonstrated the importance of EIA and provided knowledge on its principles and practices. The requirement for EIA was discussed and the capacity of participants to manage EIAs was strengthened through a series of case study trips:

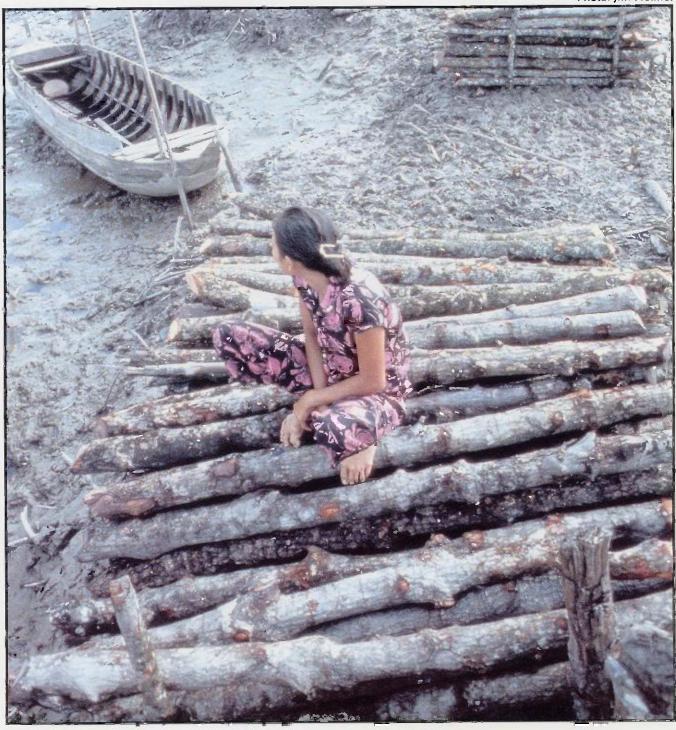
The fifth course (6 days: Training Course on Regional Environmental Impact Assessment [EIA] and Cumulative. Environmental Assessment), stressed the linkages between environmental assessment and environmental planning and demonstrated the importance of environmental assessment at the policy-level. Classroom analysis of selected "world experience" on cumulative environmental effects provided in-depth training on the principle and practices of cumulative impact assessment.

Building on the three previous training courses, the final course (12 days: Training of Trainers) provided understanding of training methodologies and design and of management of training programmes. Participants gained

skills and confidence by experimenting first-hand with the role of trainers, and are expected to contribute to further awareness and capacity building.

A total of over 160 official, senior level and operational staff from various institutions in Cambodia, Lao PDR, Thailand and Vietnam were exposed to information and processes crucial to the balance between economic development and a healthy Mekong River Basin. A range of comprehensive training material was produced. It is now available on CD for further use and is to be translated into the four riparian languages. The experience gained and lessons learned from the ETP Block-I are being incorporated into the MRC Environment Programme 2001-2095.

Photo: Jim Holmes



## RIVER WORKS AND TRANSPORT-NAVIGATION PROGRAMME

Waterways Transport: Environmentally Friendly at Low Cost

Inland and maritime waterway transport provides a low cost and environmentally friendly means of transport for regional and international trade. To improve inland waterway transport in the basin, MRC supports programmes such as feasibility studies for the improvement of access to the Bassac River, production of navigation maps, and upgrading of ferry facilities. These activities contribute to the socio-econom-

ic development of trade in the region, and stimulates small-scale industry and agricultural investment in the basin.

Mapping of the waterways is useful not only for navigation, but also for planning for irriga-

tion and agriculture, flood control, and river training. They are also important inputs to the MRC Water Utilisation Programme.

#### Activities in 1999

Following the Updating of the Hydrographic Atlas of the Mekong River in Laos and Thailand in 1997, the printing and mapping activities in Cambodia and Vietnam were completed in 1999. During the joint ceremony held on 23 September 1999 at the MRC Secretariat, H.E. Mr. Tauno Kaaria, Ambassador of Finland, handed over the maps to H.E. Mr. Khy Tainglim, Chairman of the MRC Council for 1999/2000 and Minister of Public Works and Transport of Cambodia, and to Mr. Le Huu Khang, Representative of the Ministry of Transport in Vietnam. The high accuracy hydrographic and topographic maps will promote maritime trade by facili-

tating access for sea-going vessels to Cambodia and Vietnam.

The Upgrading of Ferry Facilities in Cambodia funded by the Government of Denmark was completed in April 1999. During 1999 the final ferry Samaki 28 was rehabilitated and put into service at Prek K'dam where the landing facilities have been greatly improved. As a result, international transport links as well as access for rural communities to commercial-

ize their agriculture products centers have been sign i f i c a n t l y improved.

The Feasibility
Study for the
Improvement of
the Entrance
Channel to the
Bassac River, was
completed in
March 1999. This
Belgian-funded
project involved
extensive surveys

advanced mathematical modelling and related training for Vietnamese experts. The conclusions clearly show the potential of the Bassac River as an international access to Can Tho for fully loaded ships up to 10,000 DWT. The port of Can Tho has started significant rehabilitations to accept larger vessels, and recently foreign companies have obtained important concessions for terminals along the Bassac river banks near the port.

Cross-border facilitation for shipping to Cambodia still needs improvement. This will be initiated by the Assessment of Accessibility for Bassac / Mekong Maritime Navigation between Can Tho and Phnom Penh project.

At the end of 1-999 MRCS started international tendering for Consultancy services to the





Comprehensive Study on the Chaktomuk Area - Environment, Hydraulics and Morphology, funded by Japan. The Chaktomuk junction at Phnom Penh is the most important regulation point on the Mekong river. It is known as the natural "valve" system for the water distribution between the Bassac, Tonle Sap and Mekong rivers. The junction, however, is in continuous downstream movement, at the approximate rate of 10 m per year. This causes serious erosion, siltation and fish migration problems. The study will forecast the sediment transport and related aspects through intensive modelling exercises. Based on the results, an implementation program will be formulated to rectify the system.

Other activities which have started in 1999 include the Harmonization of Aids-to-Navigation Systems along the Mekong River, a joint MRC/ESCAP-project to provide a common base for international navigation along the Mekong river for the six Mekong River-countries.

#### The Future

To accommodate the new thrust of the MRC Strategic Plan, and to better respond to the basin-wide impor-

tance for the River Works and Transport interventions, the navigation program will be reviewed during year 2000. The review will be based on the 1995 Navigation Strategy.

In the future, the MRC focus will change from hard to soft infrastructure. Physical and non-physical restrictions to cross-border movement of people and goods by waterways in the Lower Mekong basin need to be considered. Special attention will be given to the social dimension to improve the living conditions for the remote and poorer communities who are presently unable to gain access to even the most basic social services.

Trained Cambodian naval constructors built two new ferries and rehabilitated three existing ones at the new shipyard at Neak Leung. The vessels, which were built according to International Standards, will serve the people and communities from both sides of the river at the most important crossings as Neak Leung, Kampong Cham and Prek Kdam. Although providing a regular service, these mobile means of transport can be put to vital use everywhere on the river, as deemed necessary.

PROJECT AND EXTERNAL FUNDING				TIM	E FR	ME			PROGRESS		
	7	'95	'96	'97	'98	199	'00	'01	T KOUKESS		
Key Result Area 3:											
I)-Policy and Plänning:											
a)-Mekong River Water Utilization Programme				4			-		Completed the Project Implementation Plan (PIP) in Dec. 20		
	\$10,000,000			8	i	1860			Completed the Project Implementation Plan (PIP) in Dec. 99 and negotiations with the World Bank in November 99, PIP		
(Trond Bank)	##11.500.000		,						approved by GEF Board in January 2000, by Bank Board on		
									4 February 2000. Completed setting up of NMCs WUP Units		
									in Jan.2000, MRCS WUP Unit in March 2000. WUP launch		
	1						111		workshop scheduled in late April 2000.		
					Į.		4				
o)-Preparation of Modeling of Tonle Sap				1					Agreement for the Phase I Study is expected to be signed in		
(Finland)	\$270,000								March 2000.		
c)-Preparation of MRC Rules for Water Quality									Co-financing part of the planned GEF-Water Utilization.		
(France)	\$600,000							1	Programme.		
			F			-			Co-financing part of the planned GEF-Water Utilization		
d)-Preparation for study on Hydrofogical			9			-					
Analysis and Filling Data Gaps	£1 000 000		1				-		Programme.		
Japan)	\$1,000,000					2					
e)-Preparation of Mekong River Basig					e i				Study on public participation finished in September 1998.		
Development Plan (BDP)							1		Detailed planning phase commenced in Jan. and completed		
Sweden: Consultancy Fund)	\$405,000						1		in July 99. Bridging activities continue in 2000 for the		
Denmark: Consultancy Fund)	\$265,000								formulation stage expected to commence in September 2000.		
II)-Watershed Management and Forestry:									Consultants were recruited. Study started in April 1999;		
management/forestry sector in Lower Mekong							_ 7		constraint were recruited. Study, started in April 1999s		
Basin.		-							AS LEGISLA STATE OF THE SECOND STATE OF THE SE		
Switzerland)	\$202,000										
o)-Watershed classification in LMB		,					1065		Phase II completed. On-going activities of Phase II are GIS		
Switzerland)	\$2,600,000						-h		training in watershed classification database, GIS manuals		
	42,000,000				15				and GIS database in the Lower Mekong Basin.		
:)-Sustainable management of resources (SMRP)		+							Phase II launched in Dec. 97 and will be completed in Nov.		
Germany)	\$4,300,000	-				W-72-7500	<u> </u>		2001. Annual planning workshop held in October 1999.		
Serinary)	,94,500,00,0								Plan of operation for 1999 finalized.		
III)-River Works and Transport:	Ē.										
)-Ferry facilities (Cambodia)									Two newly built ferries and three rehabilitated ferries were		
	18,600,000								fully completed in February 99 and are now in service at-		
							2		Neak Leung, Kompong Cham and Prek Kdam.		
o)-Updating of the hydrographic atlas			U				1		The components for <b>Ca</b> mbodia and Vietnam were completed		
Finland)	\$4,700,000	4		1			<u>.</u>		respectively in April and August 1999. To support the		
Finland), extension	\$1,920,000				1/3				database of the WUP, the Bassac River from Phnom Peah to		
	,						T		the Vam Nao Confluence will also be napped in 2000.		

PROJECT AND EXTERNAL FUNDING				TIA	ÆFR.	ME			PROCEETE?		
FROJECT AND EXTERNAL PONDING			196	'97	198	199	'00	'01	PROGRESŠ		
River Works and Transport (continued)											
c)-Feasibility study for improvement of access							5		The study was successfully completed in February 1999 and		
channel to Bassac								of .	be continued with the Assessment of Accessbility for Bassac		
(Belgium)	\$1,554,000								/Mekong navigation between Can Tho and Phnom Penh.		
h l han de se e e e e e	;,						1		As information invested the WHID and BDD is in our fround		
d)-UHA digitizing in Thailand/Laos and Bassac					i i		-		As information input to the WUP and BDP, it is envisaged to start the digitizing in '00, if funds have been allocated.		
Hydrography in Cambodia and Vietnam									to start the digitizing in 60, it funds have been allocated.		
(Finland)	\$355,000										
e)-Harmonization of Aids to Navigation System				4			- 1		After waiting for the financial contribution to the ESCAP		
along the Mekong River (MRC-ESCAP)		1		1					component, the consultants for the study are now under		
(Finland-Netherlands)	\$147,000								recruitment.		
			1	F		300					
f)-A Compreh <b>ensiv</b> e Study for the Chakto <b>myk</b>							1	10 mg	TOR revisions were finalized and the international		
area, Phase I, Morphology, Environment									tendering for Phase 1 has started. Execution planned to		
Hydraulics			r						start in March 2000.		
(Japan)	\$530,000				9	816					
IV)-Water Resources Development											
a)-Rural electrification				-	-				Cambodian site was selected through a feasibility study.		
(Japan)	\$120,000								Funds for implementation are being sought.		
b)-Flood control planning for development of the	Mekong Delta	्री		ž.					Interim and final workshops to be held in Jan, and Sept.		
		3	1						2000 respectively to discuss the draft interim and final		
(Republic of Korea)	\$872,000						1		reports and proposed the action plans and strategies.		
		j					.				
c)-Sekong-Sesan-Nam Theun river basins hydropov	er study	F			-				Final workshop to be held in Jan. 99 to discuss draft final		
									report and six selected schemes for further studies at		
(ADB)	\$133,000	i i							pre-feasibility or feasibility levels		
V)-Fisherieš								1			
a)-Assessment of Mekong fisherles		!							Project started in Sept. 97 and will complete in Aug. 2001.		
(Denmark)	\$5,213,000	1	1						National project offices established in riparian countries		
	l	1							and activities started up. All expatriate staff assigned.		
						100	,		Project (Phase I) completed in June 00. Paulinus in a select		
ó)-Management of teservoir, fisheries, Phase∉ (Denmark)	60 404 000	Î					-	- 4	Project (Phase I) completed in June 99. Reviewed recentify.  A proposed Phase II has been prepared.		
Denmark)	\$3,491,000								A proposed i hase it has been prepared.		
)-Cambodian capture fisheries project									With approval of the bridging period, the project ended		
Denmark)	\$2,269,000		-						in July 99. Phase II appraised by Denmark Final decision		
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,							-	on financing secured from the donor.		
A Comment Colonia and Colonia											
d)-Support to fisheries management and			4	-					Project completed in Dec. 99. Going according to		
development cooperation			80						plan. Problems: vacancies all through 98 and manpower		
Denmark)	\$1,056,000		*						shortage.		
e)-Aquaculture extension in the Mekong Delta									Project started in Viet Nam in January 98 and in		
Denmark)	\$1,893,000								Cambodia in July 98. Completion date! January 2001:		
	φ1,033,00 <u>0</u> 0								, , , , , , , , , , , , , , , , , , , ,		

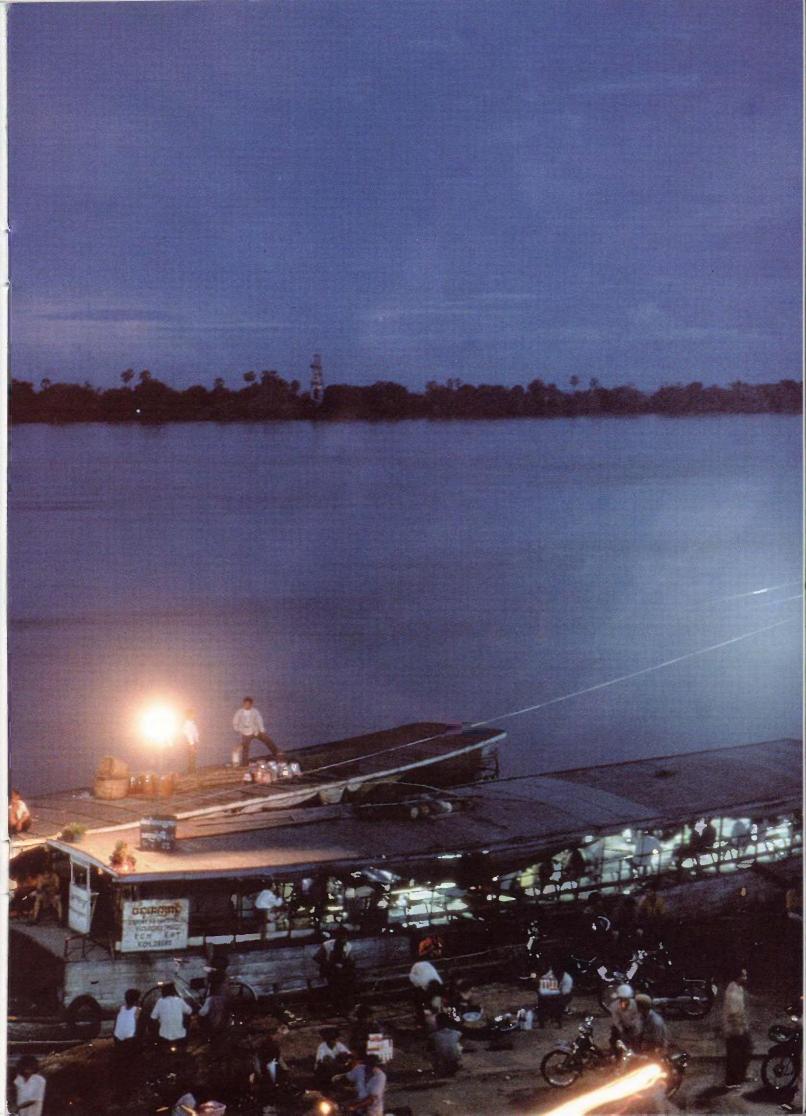
PROJECT AND EXTERNAL FUNDING			TIM	AE FRAME			PROGRESS		
PROJECT AND EXTERNAL PONDING	95	96	97	93 99	100	'01	PROGRESS		
VI)-Agriculture and Irrigation		1							
Project Formulation for Agriculture and							Formulation of priority projects and subsequent		
mplementation Programme.							project implementation plan will be finished until		
(Japan) \$100,000		lui		i in			August 2000. The outcome will be in mid-term MRC		
(Australia) \$50,000							programme for agriculture and irrigation development		
(Denmark) \$117,000							of the Basin.		
Key Result Area 2									
I)-Environment Sector a)-Environmental sound management of soil and water in the							Businet Dunmant hairs social as secureted by Cide		
Plain of Reeds (VN and Cambodia)				in the second			Project Document being revised as requested by Sida.  Implementation expected to start in 99.		
×,							implementation expected to stan in 99.		
(Sweden) \$1,440,000									
b)-inventory and management of wetlands in the Lower Mekong			- 4	0			Project document for Phase II prepared. Inception		
Basin							workshop held during 1999.		
(Sweden) \$825,000					ŧ				
2)-Inventory & management of Cambodian wetlands			F				Operational from September 1997. Extension till		
Denmark) \$1,899,000							Feb. '00 is approved. Phase II is being prepared to		
		1					submit to Danida.		
d)-Water quality monitoring network in the Lower.							Phase III due to start in 1999, Monthly monitoring		
Mekong Basin							of water chemistry and bacteria analysis.		
(Sweden) \$929,000									
e)-Soil erosion and sedimentation studies							Project document for Phase II prepared.		
Sweden) \$422,000							Implementation expected to complete during 99.		
							amplementation expected to complete during, 99.		
-Danida-MRC Environment Programme			ł		-		Phase Lovers 1997-99. CTA started in March 98.		
(Denmark) \$1,177,000				-					
						Ų.			
Environmental Training Programme (ETP)	9	1					Preparation of ETP framework and implementation		
Danida component \$653,000		1					plan carried out in late 98. Training commenced in		
SDC component \$330,000				1 4			May 1999.		
* Sida component, Phäse tt \$270,000									
)-Pilot study for water resources, and							CTA started in July 98. Approach & Methodology		
nvironmental management		1					Workshop held in January 99		
UK) \$625,000									
0-Environmental assessment programme in the		1					Activities related to environmental assessment.		
Greater Mekong Subregion							reporting and capacity-building.		
UNEP) \$393,000							and and and an		

PROJECT AND EXTERNAL FUNDING				TIM	E FRAME			PROGRESS		
			'96	197	'98 '99	'00	'01	PROGRESS		
Key Result Area 3.										
i la la caractería de la c	= 1 31			7						
I)-Hydrology Sector										
a)-Groundwater investigation programme								Review of all activities made with line agencies and		
Sweden), Phase	\$525,000							sampling of groundwater at more than 350 observation		
(Sweden), Phase II	\$75,000			4			I.	wells made basinwide.		
b)-Improvement of the hydromet, network								Rehabilitation and improvement of basinwide		
Japan)	\$1,941,000							hydrometeorological network, including provision of		
Australia)	\$1,039,000							logistics and training on hydrometry and data		
			Ė			ľ		processing.		
I)-Remote sensing, GIS and database										
and resources inventory for agricultural						Jan.		Soil, irrigation and inundation spatial databases of LMB		
development			1					will be developed for sustainable agricultural		
(Japan)	\$1,150,000	1			000	Ĩ		development and planning. A pilot study on inundation		
	,,		61		168			mapping is being conducted at Thabok.		
					(E)			mapping is being conducted at Thabok.		
Key Result Area 4		-	-		SHOTO	-				
)-Human Resources Development		1			1000					
A)-Role of women in water resources development				-				Major output: MRC Gender Strategy approved, Gendêr		
n the Lower Mekong Basin			- 1		1000	V	i	Guidelines and Checklists in English and four riparian		
New Zealand)	\$300,000	ŀ		l.				languages, the establishment of Gender Training Teams		
	100,000	_	ı					in four countries and training packages for trainers.		
			1	- 4				in four countries and training packages for trainers.		
o)-Strengthening the institutional framework for		j,						33 HRD Action Plan basin-wide has been formulated		
effective MRC/HRD system						T		in early 1999, followed by the formulation of four		
					3			National HRD Plan Formulation Guidelines and		
16 to	6000 COS	4	1					Training of Trainers for HRD Core Group. This		
Switzerland)	\$5,00,000	T		-						
		ŀ	1	1				project has been extended until December 2001		
Allerd Total Company of the Company			1			_		Solf evaluation of 2 National Making Co. 19		
:)-Legal Training and Capacity Building for	İ	1					- 5	Self-evaluation of 3 National Mekong Committees		
ffective Mekong Cooperation.		1	1					completed in early 1999. This followed by the		
		1		1				formulation of the action plan of extended phase		
apan)	\$363,000	J.	1	- 1				which aimed to strengthen the four National Mekong		
		1		* 1				Committees for Effective Mekong Cooperation.		
		1	1							
)-Capacity Building Programme for		1					+	Outputs of UNDP assistance in '99 were the		
nplementation of MRC Strategic Plan.		1	i	1				formulation of MRC and ratification of MRC		
								Capacity Building Programme for implementations		
indri	\$2,268,000	1					- 1	of MRC Strategic Plan. The Programme was		
	1	1		ŀ				approved by MRC Council in October 1999 and Will		
	Ĺ	1		-				be launched in January 2000,		
)-Programme Support		1								
Support for Mekong programme	ļ.			-	I KNOWN I			Outputs of UNDP assistance in 98 were the		
JNDP)	\$2,815,000		Ť					formulation of MRC Strategic Plan and the Capacity-		
								Building Programme for MRC and NMCs to		
								implement the Strategic Plan. Arrangements being		
			1					made for implementation of the UNDP assisted		
	1							programme		
			1							
-MDBC-MRC Cooperation Programme			1				,	Activities mainly executed by MDBC include: (†)		
sustralia)	\$571,428		5		1		,	Joint Meeting at Council and Joint Committee levels,		
	2.00							(2) Exchange of technical visits, (3) training on		
								Integrated Quantity and Quality Model (capacity-		
	1				145		- 1.	building), and (4) Streamwatch/Rivercare pilot		
					100			programme (initial stage)		

THE RESERVE THE PARTY OF THE PA				TIM	E FRA	ME			PROGRESS.
PROJECT AND EXTERNAL FUNDING			95 96 97				'00	'01	
Australian consultancy fund						28088			Funds are used for various studies and training.
Australia)	\$490,000		3						
Swedish consultancy fund			-		-				Funds are used for studies and training
(Sweden)	\$1,250,000						-		Funds are used for various studies.
apanese contribution to the Commission			4		-				Funds are used for various scioles.
Japan)	\$384,000								
III)-Others			200						The Country has been
a)-Improvement of Documentation Centre			-				5.3		Improvements ongoing. The Centre has been
(Francè)	\$1 14,000								equipped with new computer and software.
o)-Core contribution to the MRC		0	1						Funds allocated for staff establishment, restructuring
	\$1,496,000	, A	24						of the Secretariat, HRD and Secretariat running cost.
(Switzerland)	A. 46 M. A. 46 A. 6 M.	1							Another 3 years contribution being arranged.
€:	ě						1		Funds allocated for key posts at MRC Secretariat
c)-Mekong Trust Fund			1		- /				and capacity-building at NMCs.
(UNDP, Japan, New Zealand, Switzerland, MRC)	\$664,000								



Expected extension



# 1999 ADMINISTRATIVE AND FINANCIAL REVIEW

Consolidation of resources and the overall position of the Secretariat set the tone for 1999, following the previous year of a somewhat distracting relocation of the Headquarters from Bangkok to Phnom Penh.

The former Chief Executive Officer, Mr Matoba, left in August and handed over the management to the new Chief Executive Officer, Mr Joern Kristensen.

Good co-operation with National Mekong Committees, MRC donor community and partner organisations continued throughout the year. To further strengthen partnerships, a project to establish appropriate Internet and Esmail facilities was initiated. All staff will have their own email addresses. Electronic communication with National Committees will improve co-ordination of activities. An MRC homepage is also being planned.

#### Personnel

At the end of 1999 only 1/3 of the total staff of 104 people were the same as before the relocation in August 1998. The staff photo below shows most of the staff who were still working for the Secretariat in October 1999. Excluding short-term consultants, there are six different staff categories, with the following breakdown: 37 riparian professionals, 7 expatriate professionals, 5 seconded expatriate professionals, 2 junior professionals, 2 riparians on stipend, and 51 general service staff.

The staff of MRC represents expertise in hydrology, fishery, modeling, planning, economics, social science, engineering, forestry, environment, navigation, mapping, remote sensing and GIS, agriculture and irrigation, hydropower, general management, human resources management, finance, administration and public relations.

The Secretariat is implementing a project addressing gender issues. One third of the total staff are females. When recruitment takes place it is emphasized that MRC Secretariat is an equal opportunity employer.

The 1999 accounts we're audited by PricewaterhouseCoopers. A new Finance Management System, SOLOMON IV, will be fully operational in year 2000.

Strong measures were taken in the fourth quarter of 1999 to improve the situation. These are increased overhead charges (from 8 to 11%), freezing of recruitment of OEB-financed posts, and strict budgetary control. These measures will enable the MRC Secretariat to balance the OEB budget for year 2000 and balance the ARF budget by the year 2001. Increased donor confidence, reflected in new pledges, give reason for cautious optimism for securing the programmeme financially.



## DONORS' CONTRIBUTIONS RECEIVED: 1995-1999

DONORS	1995	1996	1997	1998	1999	TOTAL
Australia	784,025	1,213,468	ಡ	21,647	250,825	2,269,965
Canada	52,632	ي .	Rate of the state	(1.00 <u>k</u> )	<b>第</b> 7	52,632
European Union						
Austria	น์ต	73	-	Ę	4	27
Belgium	235,830	<u>n</u>	425,328	782,220	L	7,443,378
Denmark	2,834,470	6;897,396	1,981,724	2,80 <b>9</b> ,130	3,873,139	18,395,859
Finland	_	616,915	843,008	544,340	167,862	2,172,125
France	137,238			7-17)	75	137,238
Germany*	42,373	37,219	24,598	98,400	111,672	314,262
Italy	<b>*</b> 2		-	in the second se	1203	-
Netherlands	1,128,700	900,000	276,833	438,848	208,565	2,952,946
Sweden	657,506	5	1,861,082	221,832	1,515,216	4,255,636
United <b>Kingdo</b> m	Due	38,441	1/10	312,500	156,247	507,188
Commission of EC	<b>V</b>	-		-	4	-
Îsrael	for	5,000	31,500	33,000	·~	69,500
Japan	807,000	1,125,000	455,459	1,230,832	1,609,875	5,228,166
Republic of Korea	200,000	344,990	*284,401	633,000	291,468	1, <b>753,8</b> 59
New Zealand	38,868	158,777	93,000	5,462	67,325	363,432
Switzerland	629,990	90,774	1,559,000	-	1,150,000	3,429,764
UN Agencies						4
UNDP/Cambodia	175,900	109,428	350,661	-	237,214	873,203
UNDP/Thailand**	-	422,816	230,748	416,496	91,629	1,161,689
UNDP/OPS	5		249,591	5	<u> </u>	249,591
UNDP/World Bank		÷.	with the second	56A)*	声	
UNEP/AIT	98,000	197,324	<b>3%</b>	P <u>249</u> /	<u>v.</u> 4,	295,324
UNEP/Nairobi	219,980	91,750	**	1944	養	311,730
UN/FAO		7	70,900	<b>4</b> 50	>2	<b>7</b> 0,900
WHO		=-;	i.	2	107	Some in
Others:						
Asian Development Bank	21,385	36,000	30,000	79,862	£60,422	227,669
Japan Institute of Irrigation and	144	3000 3000	1-4	141,751	115,435	257,186
Drainage				84,976	77,474	162,450
Murray-Darling Basin Commission		726	100.000	57,439	122,406	279,845
World Bank**	<b>学</b> 统	\$2 <del>7</del> 07.50	100,000	J7, <del>4</del> J9	122,400	2/3,012
Mekong Trust Fund II	20.040	900	-	25.072	1,515	57,52€
Miscellany	20,040		- 	35,973		
Sub-Total	8,083,937	12,285,298	8,867,833	7,947,708	10,108,289	47,293,065
Other government contributions					201,551	
Interest earning from donors' funds					(154,569)	
Returned to donors  Total					10,274,739	

(all amounts in US dollars)

<sup>\*</sup> Secretariat support cost only, all other project contributions were managed by the donor,

<sup>\*\*</sup> Excluding direct payment from sources

## BALANCE SHEET

Statement of income, expenditure and changes in fund balances for the year ended 31 December 1999

	NOTES	1999	1998
INCOME		HULLIT F &	
Project contributions from donors	4	10,2 <b>7</b> 4, <b>738</b> .36	7,676,968.55
Riparian government contributions		916,658.64	525,000.00
Administrative		33,485.00	36,000.00
Professional		*111,821.54	77,000.00
Secretariat support costs		810,569.12	476,699.20
Interest income		2 <b>78,3</b> 16.51	679,583.54
Miscellaneous income		120,012.78	7,684.08
TOTAL INCOME		1,2,545,601.95	9,478,935.37
EXPENDITURE			
Project expenditure			
Personnel service		4,768,930.18	4,380,546.78
Sub-contracts		1,003,618.94	1,765,709.60
Training		<b>916,492</b> .30	1,178,766.20
Equipment		922,078.20	1,026,149.35
Secretariat support costs		810,569.12	1,408,740.36
Miscellaneous		876,572.40	474,713.20
Total project expenditure		9,298, <b>2</b> 61.14	10,234,625.49
Administrative expenditure			
Staff salaries and fees		1,279,952,51	7,016,629.30
Common staff costs		71 <b>2</b> ,337.61	364,724.33
Travel		6,397.15	10,442.65
Contractual services		47,020.34	30,886.70
General operating expenses		230, <b>2</b> 13.89°	668,005.69
Supplies		16,453. <b>72</b> *	35,651.43
Furniture and equipment		6,250.32	33,998.54
MRC meeting expenses		67,247.39	101, <b>20</b> 4.60
Support to National Mekong Committee		45,077.38	
Headquarters relocation expenditures		142.55	688,502.11
Total administrative expenditure,		2,411,092.86	2,950,045.35
Foreign exchange loss		51,560.41	<b>2</b> 52,803.56
TOTALEXPENDITURE		11,760,914.41	13,437,474,40
SURPLUS/(DEFICIT) OF INCOME OVER		784,687.54	(3)958,539.03)
EXPENDITURE FUND BALANCES AS AT 1 JANUARY 1999		9,055,826.32	13,014,365.35
FUND BALANCES AS AT 31 DECEMBER 1999		9,840,513.86	9,0 <b>5</b> 5,826.32





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