



Third Annual Flood Forum
Flood Management and Mitigation in the Mekong Basin
Don Chan Palace Hotel, Vientiane, Lao PDR
7-8 April 2005,

Summary Report of the Third Annual Flood Forum

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EXECUTIVE SUMMARY

The Mekong River Commission (MRC) conducted an Annual Flood Forum (AFF) from 7-8 April 2005 at the Don Chan Palace Hotel in Vientiane, Lao PDR in cooperation with the host Lao PDR National Mekong Committee (NMC) and Cambodian, Thai, and Vietnamese NMCs. The Forum was facilitated with generous contributions from the Royal Netherlands Government, the Government of the Federal Republic of Germany, and the Government of the United States of America. It was the third in the series of annual meetings that are dedicated to strengthening regional flood cooperation in the Lower Mekong River Basin.

Organised around the theme, "Flood Management and Mitigation in the Mekong Basin," the Forum focused on the recently launched MRC Flood Management and Mitigation Programme (FMMP). The FMMP was initiated as a result of floods in 2000-2002 that took hundreds of lives and caused hundreds of millions of dollars in property damages.

In 2005 the FMMP is implementing a Regional Flood Management and Mitigation Centre (RFMMC) as part of Component 1. Four additional FMMP Components are being launched that will strengthen structural measures, establish a regional transboundary dispute mediation capability, strengthen flood emergency management, and provide technical products and capacity development to support riparian land management. More than 120 members of national delegations from the MRC member countries; donors, managers, practitioners, and scientists from the Mekong Basin and the international community; Myanmar; MRC Secretariat staff representing other MRC programmes; and representatives from international development organisations, and international and national civil society organisations attended the Forum.

The Forum was organised around working sessions that reviewed Mekong Floods of 2003-2004 from regional and national perspectives, and presented information about each of the FMMP components and programmes that MRC partners are undertaking to implement aspects of the FMMP. Component-oriented working groups met concurrently in one of the subsequent sessions to make recommendations with respect to FMMP communications and component activities, and new areas of cooperation between the FMMP and the member states and partners. Several of the working groups also provided recommendations with respect to organisation and themes of subsequent Annual Flood Forums.

An analysis of working group recommendations is included in this summary report, and all of the speeches, presentations, and papers that were submitted to advance the exchange of Forum information—as well as working groups' questionnaire responses—are found in Annex 1 to this report. The Annex also contains the names and affiliations of all participants, and selected photographs.



ACRONYMS

ACF	Action Contre la Faim
ADB	Asian Development Bank
ADPC	Asian Disaster Preparedness Centre
AFF	Annual Flood Forum
AHNIP	Appropriate Hydrologic Network Improvement Programme
ARC	American Red Cross
AusAID	The Australian Government's overseas aid program
BDP	Basin Development Plan
CBDRMP	Community Based Disaster Risk Management Programme
CEO	Chief Executive Officer (of the MRC)
CRC	Cambodian Red Cross
DIPECHO	The European Community's Humanity Aid Office
FFW	Flash-Flood Warning
FMC	Flood Management Centre
FMMP	Flood Management and Mitigation Programme
H.E.	His Excellency
HYCOS	Hydrologic Cycle Observing System
ISLAND	Information Systems for Local Authorities Needs to face Disasters
IWRM	Integrated Water Resources Management
LMP	Living Mekong Programme
LMRB	Lower Mekong River Basin
MRC	Mekong River Commission
MRCS	Mekong River Commission Secretariat
NDMO	National Disaster Management Office
NFC	National Forecast Center
NGO	Non Government Organisation
NMC	National Mekong Committee
NOAA	National Oceanic and Atmospheric Administration
NTFP	Non Timber Forest Product
OFDA	Office of US Foreign Disaster Assistance
PDR	Peoples Democratic Republic
PIP	Project Implementation Plan
RANET	Radio internet
RFC	Regional Forecast Centre
SPE	Satellite Precipitation Estimation
USAID	U.S. Agency for International Development
USGS	US Geological Survey
WMO	World Meteorological Organisation
WWF	World Wildlife Fund

BACKGROUND

The Mekong River Commission (MRC) conducted an Annual Flood Forum (AFF) from 7-8 April 2005 at the Don Chan Palace Hotel in Vientiane, Lao PDR in cooperation with the host Lao PDR National Mekong Committee (NMC) and Cambodian, Thai, and Vietnamese NMCs. The Forum was facilitated with the generous contributions from the Royal Netherlands Government, the Government of the Federal Republic of Germany, and the Government of the United States of America, and was the third in the series of annual meetings that are dedicated to strengthening regional flood cooperation in the Mekong River Basin.

The first AFF, held at the Cambodiana Hotel in Phnom Penh, Cambodia from 23-24 April 2002, provided opportunities for the MRC "...to support the riparian countries and relevant international and civil society organisations to communicate and coordinate their policy and action plan towards a better regional integration of flood management and mitigation"¹ and to strengthen flood preparedness for the immediate upcoming 2002 flood season and flood seasons up to 2005.

The second AFF, held at the Inter-Continental Hotel, Phnom Penh, Cambodia from 28-29 October 2003, was organised around the theme, "*Information Flow, Networking and Partnership.*" It included working group discussions that focused on priorities for regional cooperation, which included; Capacity development; Medium- and long-term weather and river forecasts; Data and information sharing; Flash-flood monitoring and warning; Integration of flood and drought management; Collaboration with China and Myanmar; Dialogue with grass-root level communities; Inter-agency coordination (nationally and regionally); FMM information dissemination; and Support by MRC to projects at the national level.

The third AFF was organised around the theme, "*Flood Management and Mitigation in the Mekong Basin,*" a timely theme because major components of the MRC Flood Management and Mitigation Programme (FMMP) are being implemented at the time of the Forum, and are intended to minimise, prevent or mitigate loss of life and suffering, and economic losses due to floods. The FMMP was adopted as a result of floods in 2000-2002 that, in 2000 alone, took as many as 500 lives and caused an estimated loss of at least US\$500 million in property damages. Under the FMMP, a Regional Flood Management and Mitigation Centre (FMC) is being launched in 2005, along with activities that support FMMP Components that strengthen structural measures, trans-boundary dispute mediation, flood emergency management strengthening, and land management. MRC must find an appropriate balance among cost, complexity, and human capacity if FMMP Component technologies and institutional partnerships are to be sustainable. The third AFF provided a venue to review, discuss, and coordinate FMMP implementation, and national flood management and mitigation plans.

¹ Proceedings of the First Annual Flood Forum, presented at the Second Annual Flood Forum by MRCS

The Forum was organised toward the expected outcomes of:

1. A raised awareness and better understanding of the importance of, and necessity for, a regional, balanced and holistic approach for flood management and mitigation in the Mekong River Basin
2. A Review of the Mekong Floods of year 2003-2004 from a national and regional perspective
3. Familiarisation and explanation of the MRC FMMP
4. Effective coordination arrangements between the participating agencies and institutions, and the MRC FMMP to achieve maximum synergy and impacts
5. Sharing of technical knowledge and best flood management practices
6. Identification of future needs within the four member countries

This summary report offers a narrative overview of the Forum and does not provide the level of detail that was included in the numerous speeches and presentations delivered at the Forum, and submitted reports, all of which comprise nearly 400 Megabytes of storage when organised in digital format. These digital data provide the interested reader with far more detailed information than a narrative report alone can convey and are found in Annex 1 to this report.

Annex 1 is organised into five major subsections, entitled:

- Annex 1.1. Third Annual Flood Forum Agenda
- Annex 1.2. Submitted Papers
- Annex 1.3. Presentations
- Annex 1.4. List of Participants
- Annex 1.5. Selected Photographs

Annex 1.1 contains the Forum agenda and an MRC press release, whereas Annex 1.2 contains four national reports on FMM that were prepared by the MRC Riparian Countries and several miscellaneous reports. Annex 1.3 is further organised into seven subsections, each of which contains speeches and presentations² made during a Forum session. Annex 1.4 and Annex 1.5 contain a list of participants and selected photographs, respectively.

Throughout this report, the reader's attention is referenced to specific subsections of Annex 1 where more detailed source material is contained in numerous speeches, presentations, and papers. Finally, because of the volume of information in Annex 1, this report and the Annex have been formatted on a Compact Disk (CD) entitled "*Proceedings of the 3rd Annual Mekong Flood Forum*"

PARTICIPATION

The Forum was intended for National delegations from the MRC member countries of Cambodia, Lao PDR, Thailand, and Viet Nam; managers, practitioners, and scientists from the Mekong Basin and the international

² The MRCS has changed the file names of submitted papers and presentations in Annex 1 to show the order of presentation and make them more self identifying

community: China³ and Myanmar; MRC Secretariat staff representing various MRC programmes; and representatives from international development and international and national civil society organisations. The names and affiliations of the more than 120 Forum participants are found in Annex 1.5

AGENDA

The AFF agenda was organised around an introductory session that was followed by six working sessions and a concluding session.

The six working sessions were entitled:

- Session 1. National Flood Management and Mitigation Experiences
- Session 2. FMMP Component 1 – Regional Flood Management and Mitigation Centre
- Session 3. Component 2 – Structural Measures and Flood Proofing
Component 3 – Trans-boundary Mediation on Flood Issues
- Session 4. Component 4 – Flood Emergency Management Strengthening
Component 5 – Land Management
- Session 5. Other Partner Presentations
- Session 6. New Areas of Cooperation between the FMMP and the Member States, Partners

The Introductory Session and Sessions 1-4 took place on 7 April 2005 and the remaining Sessions took place on 8 April.

Introductory Session

MRC Chief Executive Officer Dr Olivier Cogels formally convened the Forum and was joined on the dais by (1) His Excellency Mr Sitaheng Rasphone, Vice-Minister of Agriculture and Forestry, Vice-Chairman of Lao National Mekong Committee and Member of the MRC Joint Committee for Lao PDR, (2) Mr Nico Bakker First Secretary of the Embassy of the Royal Government of the Netherlands, (3) His Excellency Mr Erwin Starnitsky, Ambassador Extraordinary and Plenipotentiary of the Federal Republic of Germany, and (4) Dr Ayse Sezin Tokar, Hydrometeorological Hazard Advisor, USAID Office of US Foreign Disaster Assistance

In his welcoming remarks, Dr Cogels thanked H.E. Sitaheng Rasphone, for presenting the opening address, and the governments of the Netherlands, Federal Republic of Germany, and the United States of America for their generous support to the Forum. He also welcomed the distinguished representatives of the MRC Riparian Countries and other distinguished participants. He stressed that partnership is one of the cornerstones of the FMMP and that the achievement of practical results at the grass-roots level is one of MRC's goals. He noted that the FMMP is being implemented in coordination with other MRC programmes and that they comprise a regional approach to Integrated Water Resources Management (IWRM).

H.E. Mr Sitaheng Rasphone offered words of welcome from the MRC Council and noted that the development of the FMMP is a result of the devastating floods

³ Representatives of the People's Republic of China were unable to attend the Forum.

of 2000 and 2001, and cited the cooperation among Cambodia, Lao PDR, Thailand and Viet Nam to formulate the FMMP Components in a way that will allow MRC and its partners to address vital trans-boundary issues. In their remarks the distinguished representatives of the Royal Government of the Netherlands, Federal Republic of Germany, and the United States of America—among many other issues— then cited the cooperation among MRC and the Riparian Countries for preparation of the FMMP, the importance of sustainable development and their governments' interests in supporting this important regional initiative, and welcomed the participants to the Forum. Several of the speakers also acknowledged the 10-year anniversary of the signing of the 1995 *“Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin,”* which the four Riparian countries signed on 5 April, 1995, an event celebrated at the Secretariat just before the Forum convened.

The session was concluded with two summary presentations, one about the outcome of the Second AFF and the second an overview and expected outcomes of the Third AFF. The latter presentation also provided a general overview of the MRC FMMP. The speeches and presentations made at the Introductory Session are found in Annex 1.3.0.

Session 1: National Flood Management and Mitigation Experience

Session 1 provided a venue for Forum participants to be briefed on recent floods and flood preparation from the national perspectives of the MRC member countries. The session began with regional overview of recent Mekong Floods that concluded that—in contrast to the severe flooding of 2000 and 2001—rainfall was lower than normal in 2003 and 2004, especially after September each year, resulting in lower-than-normal flows during the following dry seasons. However, flood peaks and volumes were only slightly below or comparable to average levels.

Country presentations generally echoed the findings of the regional overview and noted that 2003 was a year of drought and 2004 a year of severe drought (Cambodia), an analysis has identified provincial vulnerability to floods and droughts (Lao PDR), and flood-related loss of life and damages were reduced dramatically in 2003 and 2004 (Viet Nam). All the presentations emphasised how the countries are organising themselves for FMM and, for example, that Thailand was integrating flood and drought monitoring into its IWRM programme. (See Annex 1.3.1)

During the discussion period at the end of the presentations, there was considerable discussion about the FMMP using flood-related monitoring, analysis, and warning tools to assist the countries with drought-related responses as well. Flash-flood warning was another issue that was raised during the discussion, which MRCS noted was an activity already identified in FMMP Component 1. Finally, many participants asked MRC to strengthen communication about the FMMP within the framework of its cooperation with the Riparian Countries.

Prior to the Forum, organisers requested each country to submit a summary

report on national flood management and mitigation (FMM) experiences to:

- Document Mekong River floods during 2003-2004 from a national perspective
- Summarise social, economic, and technical flood effects of this period, especially in contrast to the severe floods of 2000 and 2001
- Share lessons learnt
- Identify national flood management and mitigation plans and initiatives that complement FMMP regional components
- Offer national suggestions to improve coordination to maximize synergy and impacts on the regional level

Country reports for Cambodia, Lao PDR, and Thailand are in Annex 1.2.1.

Session 2: Component 1--Regional Flood Management and Mitigation Centre

Session 2 was the first of three sessions in which MRCS briefed Forum participants on the characteristics and status of implementation of FMMP components. This session focused on Component 1 and began with an overview that presented the status of FMMP funding (the programme is principally funded by the Royal Government of the Netherlands); plans for constructing the Regional Flood Management and Mitigation Centre (RFMMC) with funding from Japan; the establishment of a temporary Centre in Phnom Penh in the short term; recruitment of staff, and specific activities already taking place within the component. These included plans to strengthen automated hydrometeorological data collection in the Lower Mekong River Basin (LMRB) and the Flood-Referencing Project, now in its third year and expanding to Lao PDR from the project base in Cambodia.

The MRCS then presented an overview of the current regional river monitoring, forecasting, and warning system as well as plans to increase the real-time monitoring network, improve access other sources of data, update MRC regional forecasting models, develop improved data-exchange standards, and strengthen technical capacity for acquisition and processing of satellite-based weather information and forecasts from numerous sources. The presentation also acknowledged the need to improve data dissemination techniques to transfer regional flood forecasts for 21 forecast points on the river to a format that is understandable to nearby communities at risk (as discussed in the subsequent presentation and presentations in Session 5)

The next presentation provided an overview of the technical aspects of the project, Flood Early Warning to Flood-Vulnerable Communities (OFDA Project), in which daily MRC flood forecasts are provided to communities at risk in Cambodia—beginning in 2003—and daily community water-level data are provided back to MRC. These forecasts are referenced to community based water-level systems in a pilot area of six villages in 2003, which increased to 40 villages in Cambodia in 2004, and will be introduced to five pilot villages in Lao PDR in 2005. Short-term forecasts and other information are displayed on community bulletin boards in each village as a result of this exchange.

The programme to improve the hydrometeorological monitoring network in the LMRB was provided by the next presentation, which focused on the Appropriate Hydrologic Network Improvement Project (AHNIP) and the Mekong Hydrologic Cycle Observation System (HYCOS) project. The AHNIP project is funded by AusAID, the Australian Government's overseas aid programme, from April 2001 to March 2006 and is automating the operation of 18 hydrological stations on the mainstream of the Mekong River—of which two are operated in China during the flood season. The Mekong HYCOS is to be funded by the French Government with facilitation by the World Meteorological Organisation (WMO) and will establish as many as 50 near real-time hydrologic stations on the main tributaries of the river. This five-year programme is intended to begin implementation in January 2006.

The subsequent two presentations concerned organisation of forecast centres. The first was a thought-provoking hypothetical example of a coordinated operation of National Forecast Centres (NFC) in the MRC Riparian Countries with a Regional Forecast Centre (RFC) at the Flood Management and Mitigation Centre at the former MRC Secretariat building in Phnom Penh, and suggested the roles of each with respect to data collection, forecasting, and warning. The key to success depends upon communication and cooperation, which was abundantly demonstrated by the second presentation, as well. This presentation concerned a State Flood Forecasting Centre in Baden-Württemberg, a State in the Federal Republic of Germany, which operates in a complex hydrometeorological environment, relies on a domestic network of hydrometeorological stations that use a variety of sensors and communications techniques, receives international data from France, Austria, and Switzerland, and coordinates its forecasts with both upstream and downstream forecasting centres. The Centre takes into consideration the operation of water-control structures on the international Rhine River and disseminates warning information to flood-response organisations throughout the State.

The discussion that followed the presentations highlighted the need for a strengthened communication of programmatic and technical information about the component among the MRCS, NMCs, Riparian line agencies, and other partners.

Session 3: Component 2 – Structural Measures and Flood Proofing Component 3 – Mediation of Trans-boundary Issues

Session 3 focused on Component 2, which deals with structural measures and flood proofing, and Component 3, which deals with mediation of trans-boundary issues.

The first MRC presentation introduced Component 2 and listed anticipated activities that will:

- Characterise Mekong River floods
- Evaluate flood-proofing measures
- Evaluate possible structural interventions
- Select consultants to prepare an implementation plan and develop staff capacities.

The Component will be implemented with the generous support of the Royal Netherlands Government and the Asian Development Bank (ADB) and the next presentation focused on ADB's perspective on flood management, which

suggested that the flood community move away from flood control and towards flood management, in which risk assessment is a key factor. Moreover, the determination of risk is difficult, risks change as development goes forward, and sectors of societies bear different risks⁴.

The next two presentations were real-world examples of reassessments of flood control in two densely populated, developed countries in which complex infrastructure has encroached on floodplains and is at increasing risk to flood destruction.

In a presentation on risk reduction in Germany, participants heard how a flood in the Elbe River Basin in 2003 (that also affected the Czech Republic) caused Germany to reassess its flood management concept and to move towards strengthening risk reduction, preparing flood-hazard maps to a common standard, inviting public involvement and awareness, improving building measures, reassessing approaches to flood insurance, and strengthening preparation for emergency response.

In Japan, which is even more densely populated than Germany, there is a growing realization that traditional flood-control measures must be augmented through river-basin management plans that include more local government, academic, and stakeholder participation, restore meanders and other nature-friendly river works, and strengthen public awareness.

The remainder of the session focused on Component 3 and consisted of presentations of an overview of the Component, trans-boundary aspects of the MRC's ongoing Basin Development Plan (BDP), and an international example of a flood centre in South Asia that does not operate to its full potential because of the need to strengthen trans-boundary cooperation.

The overview noted that the overall FMMP Coordinator will function within this Component, and that it will develop facilitation and mediation tools, trans-boundary pilot projects, and recommendations on trans-boundary emergency management. Recruitment of key positions—FMMP Coordinator and a Chief Technical Advisor—is under way, and a Programme Implementation Plan (PIP) and tender document for consultancy services are to be prepared.

Trans-boundary issues are commonly encountered when considering BDP project concepts and trans-boundary issues can be resolved without conflict by national and sub-area working groups that continue to build upon a framework of cooperation, action, and commitment. The second presentation cited another real-world example in which Bangladesh has developed a sophisticated flood forecasting system that has not reached its full potential because of insufficient rainfall and hydrologic data from upstream catchments in neighbouring countries, a shortfall that could be reduced by improved trans-boundary cooperation.

At the conclusion of the session, a brief presentation summarised Session 3 and 4. All of the presentations from Session 3—with the exception of the closing

⁴ A supporting paper to this presentation is found in Annex 1.2

summary—are in Annex 1.3.3.

In the evening, the MRCS hosted a social hour and dinner at the Secretariat building, where Forum participants enjoyed a relaxing dinner and performances of traditional Lao music and dance.

Session 4: Component 4 – Flood Emergency Management Strengthening Component 5 – Land Management

Session 4 was convened on the morning of 8 April and focused on Components 4 and 5.

An initial overview presentation on Component 4 discussed anticipated outputs of strengthened flood-preparedness programs in target areas, development of flood preparedness capacities and awareness campaigns, and enhancing regional knowledge sharing and facilitating Province-to-Province trans-boundary emergency assistance. The component was launched in September 2004, start-up meetings were convened with NMCs in October and November, implementation arrangements began with line agencies, pilot-programme work plans were developed for pilot provinces and districts, recruitment of staff was launched, and dialogue with partners began. The presentation also listed achievements under The European Community's Humanity Aid Office (DIPECHO), which included the adaptation of training curriculum, pilot training courses, and an institutional training plan.

The subsequent presentation provided more details on implementing Component 4 and the role of the Asian Disaster Preparedness Centre (ADPC) in doing so. Since the launch in September 2004, key partner institutions have been identified in Viet Nam and Cambodia, pilot Provinces (An Giang and Dong Thap Provinces in Vietnam and Kandal and Prey Veng Provinces in Cambodia) were identified, and a Provincial project office opened in Prey Veng. Furthermore, implementing arrangements with the partner institutions in the two countries were finalised, to include NMCs, National Disaster Management Offices (NDMO), and non-government organisations (NGOs).

The final presentation in the Session was made on the Implementation of the Land Management Component. The intent of the Component is to make more reliable flood information available, strengthen riparian capacity to prepare and implement improved land-use plans, and facilitate regional knowledge sharing on improved floodplain land management. Towards those goals, the Component will conduct national and regional workshops, organise technical workshops on the current state of geodetic networks and the status of other topographic information—augmented by topographic surveys of selected areas of Cambodian and Vietnamese floodplains—and compile flood probability data sets and maps for inclusion in an open access database⁵. All of the presentations in this section are in Annex 1.3.4.

The discussion after the presentation included Cambodian and Vietnamese requests for more communication about the component. It was agreed that the

⁵ A supporting paper to this presentation is found in Annex 1.2

MRC will evaluate how to further strengthen coordination with NMCs and line agencies for all components and, with respect to Component 5, the MRC acknowledges that the NMCs and line agencies have land use responsibilities in the basin and MRC's role is to help with capacity development and the provision of improved tools for management. It was also noted that it is common to have adequate land-use regulation, with too little enforcement.

Session 5: Other Partner Presentations

Session 5 provided a venue for FMMP partners to present information about their flood-related programmes.

The initial presentation provided information about the World Wide Fund for Nature (WWF) Living Mekong Programme (LMP) and an attempt to characterise and quantify the economic benefits of floods. The presentation highlighted the agricultural, non-timber forest products (NTFP), and habitat benefits of floods that counterbalance their well-recognised destructive aspects. It also discussed a WWF programme to promote road and bridge structures that are more resistant to floods, yet have minimal negative impacts on biodiversity, agricultural and fisheries productivity, and river morphology; WWF anticipates that the programme will benefit both financial investment in development and conservation of biodiversity. The presentation concluded that, as many benefits are difficult to quantify, qualitative approaches may be more appropriate, and the benefits are important aspects of sustainability.⁶

The next presentation by the American Red Cross (ARC), Action Contre la Faim (ACF), and the Cambodian Red Cross (CRC) provided a partner's view of implementing the OFDA Flood Referencing project that was first described in Session 2. It described their coordination of the provision of flood-forecasting information to flood-at-risk communities via one-way and two-way communication systems. The one-way system, which also has DIPECHO co-funding, does not provide community-based water level information back to MRC to support flood-forecast preparation, whereas the two-way system does. Both systems support billboard display of information at the community level and are developing insight into sustainability and benefits of alternative approaches to providing community level flood information.

The Vietnamese Red Cross Society gave a presentation on the Community Based Disaster Risk Management Programme (CBDRMP) to reduce and mitigate the effects of natural disasters on communities most at risk. It seeks to develop human and material resources at different levels, to increase public awareness about disaster management, to reduce risk for the most vulnerable communities and to provide humanitarian relief to disaster-vulnerable people in Viet Nam. The CBDRMP conducts an outreach programme to instruct children and teachers about disaster preparedness, to distribute Living with Floods brochures and videos, to replant mangrove trees to stabilise vulnerable shorelines and to restore fisheries habitat, to plant trees as windbreaks, and to position household kits for use in time of emergency. These are all tangible steps to reduce human suffering and economic loss.

⁶ A supporting paper to this presentation is found in Annex 1.2

The next presentation of OFDA's Asia Flood Network (AFN)⁷ promoted an end-to-end view of flood forecasting and warning, with monitoring and data collection at one end and the provision of timely flood early warning information to communities at risk on the other. AFN is intended to provide US Geological Survey (USGS), National Oceanic and Atmospheric Administration (NOAA), and other flood-related technologies to fill in the gaps in MRC and other flood early warning systems, provide capacity development, and mitigate the effects of floods via projects of the type discussed in the preceding presentation. The presentation also announced three workshops that OFDA and MRC are conducting in mid April to early June in Siem Reap, on Satellite Precipitation Estimation (SPE), Flash Flood Warning (FFW) and Radio Internet (RANET)

The next presentation on Information Systems for Local Authorities Needs to face Disasters (ISLAND) presented an alternative approach to sustaining an end-to-end to flood information to communities at risk. Backed by a consortium of European organisations and on-the-ground partners in Lao PDR, Cambodia, and Viet Nam, the ISLAND project seeks to strengthen local flood preparedness and management so that end users can tailor the flow of information that is needed at the local level. The intent is to listen to the needs of the vulnerable communities, provide access to adapted communication and information tools, and convey reliable and understandable messages from national and international sources needed for a sustainable development of communities

The next presentation proposed how to strengthen MRC FMM information exchange via an FMM newsletter and other awareness materials as additional steps towards strengthening a Mekong FMM partnership. The presentation praised MRC as a dedicated, intergovernmental river basin organisation with distinguished technical capacities, and a core FMMP that positions it to take a legitimate leadership role among disaster management stakeholder (NDMOs, Red Cross Societies, UN Agencies, technical institutions). The presentation further proposed National FMM Forums—conducted at the Provincial level in riparian languages—as a tool to strengthen FMM coordination at grass-root levels. Additional suggestions included establishing a Mekong FMM Newsletter, preparing extensive FMM awareness materials, and establishment of a dedicated FMM website as tools to strengthen the FMMP across the basin⁸.

The final presentation provided participants with an overview of flood management in Myanmar, which acknowledged that flash floods are as destructive in Myanmar as they are in other Lower Mekong countries. The presentation provided a description of hydrometeorological data networks, flood frequencies on major rivers, tabulations of flood damage estimates, mitigation and preparedness measures, flood preparedness planning, and long-term flood-related measures being implemented. Finally, the presentation identified the hydrometeorological stations that operate in the Mekong River drainage region, a relatively remote part of the country.

⁷ A supporting paper to this presentation is found in Annex 1.2

⁸ A supporting paper to this presentation is found in Annex 1.2

All of the information presented during this session is found in Annex 1.3.5.

Session 6: New Areas of Cooperation between the FMMP and the Member States, Partners

This session was dedicated to providing Forum participants with opportunities to comment on, and make recommendations with respect to, strengthening the FMMP. The participants were asked to organise themselves into five component-specific working groups and consider the following questions.

With respect to Communications, what new communications mechanisms might be effective with respect to this Component?

With respect to Planning, are there activities or omissions in the existing Component that need to be reconsidered?

With respect to Implementation, Coordination, and New Areas of Cooperation, how can the MRC and partners better strengthen coordination of MRC FMM Component programmes with partner programmes? Also, what new areas of cooperation with respect to this Component should the FMM Programme and partners explore?

Finally, the working groups were asked to make recommendations with respect to the organisation and theme of the 4th Annual Flood Forum

After a presentation that posed these questions and other guidance to participants, the five component-specific working groups met concurrently and, at the end of the session presented their findings.

The guidance presentation and the working group findings are in Annex 1.3.6. A compilation of their findings is presented in the section below, entitled Principal Forum Findings and Recommendations.

Session 7 Concluding Session

The concluding session consisted of a final presentation that summarised the workshop and closing remarks by Mr. Te Navuth, Director of MRCS Technical Services Division

Mr. Te Navuth again thanked the Royal Government of the Netherlands, the Government of the Federal Republic of Germany and the Government of the United States of America for their generous support for the forum. He also thanked all the delegates and presenters from MRC member countries of Cambodia, Lao PDR, Thailand and Vietnam and dialogue partner, Myanmar, and all those participants from the region and elsewhere who dedicated time and effort to prepare and conduct the Forum. His remarks noted that the Forum provided a chance to talk and discuss in depth a broad range of topics about the MRC FMMP and acknowledged the importance of drought as a severe disaster during the past two years, which was extensively discussed at the Forum. Mr. Navuth further acknowledged that lessons from participants and from other regional experiences will be invaluable to MRC future planning, and that the group discussions have "...been of particular value to the MRC..." as "...your

recommendations on how we can improve and refine certain elements...” will be carefully considered. Finally, he acknowledged MRC’s need to get down to the practical business of implementing the FMMP and expressed an expectation of seeing the participants at the 4th AFF next year.

The Forum then adjourned.

The closing remarks and the workshop summary are found in Annex 1.3.7.

PRINCIPAL FORUM FINDINGS AND RECOMMENDATIONS

This section analyses the findings and recommendations that were made by the five working groups in Section 6 and integrates them below. Such an integration cannot contain the full breadth of recommendations that the working groups made and it attempts to “read between the lines” in interpreting working group responses. The reader is referred to Annex 1.3.6 to see the recommendations in the form they were presented.

Communication—The first question concerned communications and asked what new communications mechanisms might be effective with respect to this Component? The responses included recommendations about:

- Energising existing mechanisms that need to be more effective, such as
 - Assuring that NMCs strengthen their coordination between MRC and line agencies
 - Making all pages in the MRC website accessible in the four riparian languages
- Establishing linkages between regional and national centres, and regional and national websites
- Conducting output oriented Annual Flood Forums that focus on recommendations made at previous Forums.
- Kickoff meetings being held when components are launched, with partner and donor participation
- Establishing steering committees at regional, national, and lower levels.
- Assuring an information dissemination system directly to the local community as well as through provinces, districts and communes.
- Conducting regional meetings on special FMM technical topics.
- Engaging partners more fully in the FMMP

Planning—The second question concerned planning and asked the question whether there are activities or omissions in the existing Component that need to be reconsidered? The responses included recommendations about:

Component 1.

- a. Setting up a FMM Steering Committee of MRCS and National FMM Teams
- b. Providing detailed Project Implementation Plans for each component
- c. Including dry season and flood information in MRC’s early warning to provinces
- d. Maintaining the focus of Component 1 on floods, but using the tools developed for drought as well

Component 2.

- a. Considering new construction tools for structural measures
- b. Evaluating types and priority of intervention from the commune through national governments
- c. Planning being integrated with the BDP
- d. Conducting cost-benefit analysis and estimating component benefits

Component 3.

- a. Emphasizing consensus building, mechanisms for balancing interests, consensus decision making, and fairness

Component 4.

- a. Providing training on drafting emergency plans, which will be updated regularly
- b. Conducting evacuation drill exercises and training on incident command systems
- c. Broadening consideration to cover all water disasters

Component 5.

- a. Focusing on soil erosion and shoreline protection
- b. Conserving biodiversity, wetlands, reforestation and conserving flood retention zones

Implementation, Coordination, and New Areas of Cooperation —The final questions concerned how the MRC and its partners can better strengthen coordination of MRC FMMP components with partner programmes, and what new areas of cooperation with respect to these components should the FMMP and partners explore?

The responses recommended

- Staff exchanges between the RFC and NFCs
- Identification and harmonising flood forecasting and warning tools
- Exchange visits with other river-basin counterparts
- Development of structural intervention case studies from among the member countries, for interventions to date and those planned for the future
- Consideration of building codes and lessons learned from other parts of the world.
- Focus on protecting children
- Better information exchanges between upstream and downstream countries
- Compliance with national policies
- Linkage of regional and national programs
- MRC Forums to cover wider audiences
- Taking advantage of the existing knowledge base
- Strengthening data and technical exchange mechanisms

Fourth Annual Flood Forum—As a final consideration, the working groups were asked to comment on and suggest themes for the next Forum. They suggested:



- Working Group 1. More output-oriented flood forums and review of follow up on recommendations of the last forums
- Working Group 2. Successful examples, lessons learned and future plans for the implementation of the FMMP in all four MRC countries
- Working Group 3. No suggestion
- Working Group 4. MRC's forums and meetings should cover wider audiences
- Working Group 5. No suggestion

Summary

The Third Annual Flood Forum (AFF) was held from 7-8 April 2005 at the Don Chan Palace Hotel in Vientiane, Lao PDR in cooperation with the host Lao National Mekong Committee (LNMC) and Cambodian, Thai, and Vietnamese NMCs.

The Forum was organised around working sessions that reviewed Mekong Floods of year 2003-2004 from regional and national perspectives, and presented information about each of the FMMP Components and programmes that MRC partners are undertaking to implement aspects of the FMMP. Component-oriented working groups met concurrently on the second day to make recommendations with respect to FMM communications and Component activities, and new areas of cooperation between the FMMP and the member States and partners. Several of the working groups also provided recommendations with respect to organisation and themes of subsequent Annual Flood Forums.

An analysis of working group recommendations indicates that the participants support the Forum and have numerous ideas about improving communication, strengthening FMM components, and establishing new mechanisms of cooperation and coordination. In a closing address, the MRCS stated that group discussions are particularly valuable because they provide feedback on the FMMP, and it pledged to take the recommendations under consideration as the FMMP is implemented.