

## Overview of 5<sup>th</sup> Annual Mekong Flood Forum (AMFF-5)

### I. Aim

The main objectives of the AMFF-5 are:

- To raise the awareness of the current state of data collection, transmission and exchange (especially, water level and rainfall) at the national and regional levels in the Mekong River Basin;
- To exchange information on the database systems and tools used for dissemination of the flood forecasting and early warning products that are produced by the MRC-Regional Flood Management and Mitigation Centre and the National Centers of the MRC member states;
- To provide an opportunity for participants to discuss emerging needs related to flood forecasting and floods within the basin and to share the progress each country has made towards a holistic and balanced flood management plan.

### II. Names of participated countries:

- |              |                     |
|--------------|---------------------|
| 1. Australia | 10. Myanmar         |
| 2. Cambodia  | 11. Philippines     |
| 3. China     | 12. Singapore       |
| 4. France    | 13. Thailand        |
| 5. Germany   | 14. The Netherlands |
| 6. India     | 15. United Kingdom  |
| 7. Japan     | 16. USA             |
| 8. Lao PDR   | 17. Vietnam         |
| 9. Malaysia  |                     |

### III. Numbers of participants: 132

### IV. Topics

- Topic I: Meteorology and Weather Forecast with Respect to Short and Medium Term Flood Forecasting and Warning*
- Topic II: Short and Medium Term Flood and Water Level Forecasting*
- Topic III: Data and Information Requirements for Effective Early Warning and Flood Preparedness Measures*
- Topic IV: Data and Information Requirements for Emergency Management, Relief and Reconstruction*

### V. Summary

132 participants - including those from the Mekong River Commission (MRC) member countries of Cambodia, Lao DPR, Thailand and Viet Nam and their National Mekong Committees and line agencies, Dialogue Partners China and Myanmar, regional and international scientists and experts, and representatives of international and national civil society organizations and local communities - attended the 5th Annual Mekong Flood Forum on "Improving Inputs Towards Medium-term Flood Forecasting and Warning in the Mekong Basin". They were involved in two days of interesting presentations, discussions and exchanges of information on the theme and topics of the Forum. Based on this, the following statements were supported by the participants at the concluding session of the Forum.

- The increasing population, the value of private and public property, impacts of climate change and the on-going changes in land use bring with them the potential to make the flood prone areas within the Mekong River Basin (MRB) increasingly vulnerable to flood damage. Therefore there is an urgent need to improve the quality and timely exchange of flood information most importantly to save human life, but also to protect property, agricultural land and livestock in the MRB.
- The MRC member countries and dialogue partners have established or are establishing a range of actions to enable them to cope with these changes. However, interstate collection and exchange of information with respect to flood forecasting - both at short (1 - 5 days) and medium term (6 - 10 days) scale - as provided by the Regional Flood Mitigation and Management Centre (MRC-RFMMC) of the Mekong River Commission (MRC) are of great value. It will support the countries in preparing their own flood forecasting and early warning messages, taking of flood preparedness measures and emergency management, relief and reconstruction. This may substantially contribute to reduction of casualties and damages.

- In order to take care of up to date provision of information state of the art data, tools, and information will be required. Crucial elements with respect to the development of such an integrated approach are on the one hand optimal quality and on the other hand optimal flexibility of the tools to be applied. This will require strong cooperation of the MRC member countries, the dialogue partners and the MRC-RFMMC.
- Data and information requirements necessary for reliable short to medium term flood forecasting include those concerning meteorology and weather forecasting, water level forecasting, information on the topography and land use in the flood prone areas. Such data and information would have to be easily and clearly accessible for those who have to decide on measures to be taken. In this respect exchange of data, information and experiences is extremely important and needs to be continued and further promoted.
- Flood forecasting systems are composed of a set of interlinked tools and activities. The MRC-RFMMC is modernizing its tools aimed at improving its flood forecasts. In light of this it has recently decided to work with the hydrological database HYMOS and the hydrological flood routing model URBS. This approach enables automatic exchange of data and immediate generation of information for accurate flood forecasting at short and medium term for the mainstream of the Mekong River. In addition it allows better exchange of information between the MRC member countries, dialogue partners and the MRC-RFMMC. It will also enable them to improve their own flood forecasting and early warning systems. In order to achieve this the coming months will have to be used to make this approach fully operational. It is expected that this can be reported in the 6th Annual Mekong Flood Forum (AMFF-6).
- There has been a range of recommendations for the themes of AMFF-6. With respect to this it is of importance that the broader goal of the Annual Mekong Flood Forums is that the MRC Member States will use them as a mechanism to exchange experiences and improve their own flood policies, strategies, plans and projects. Based on the status of the development of the flood forecasting systems, the broader goal, the on-going concerns with respect to floods and flooding in the MRB, the following themes are recommended for the AMFF-6:
  - Main theme: Integrated approaches and applicable models towards flood forecasting and early warning in the Mekong River Basin
  - Sub-themes:
    - \* new developments with respect to flood forecasting;
    - \* requirements for flood forecasting and early warning systems under mixed land use in flood prone areas;
    - \* costs and benefits of flood forecasting and early warning in flood prone areas.