

August 2011



Mekong River Commission

REPORT

SIXTEENTH DIALOGUE MEETING

29 August 2011

Vientiane, Lao PDR

Meeting the Needs, Keeping the Balance

**REPORT
OF
THE SIXTEENTH DIALOGUE MEETING**

between

**the Mekong River Commission
and
the People's Republic of China
and
the Republic of the Union of Myanmar**

29 August 2011, Vientiane, Lao PDR

GENERAL

1. The MRC and its Dialogue Partners, the People's Republic of China and the Republic of the Union of Myanmar held the Sixteenth Dialogue Meeting (hereinafter referred to as "The Meeting") on 29 August 2011 in Vientiane, Lao PDR.

2. Distinguished participants at the Meeting included Delegates from the People's Republic of China (China), the Republic of the Union of Myanmar (Myanmar), Members of the MRC Joint Committee and the MRC Delegations. Professional and support staff from the MRC Secretariat also attended the Meeting. (Attachment No. 1: List of Participants)

3. The Meeting was chaired by Dr. Le Duc Trung, Director-General of Viet Nam National Mekong Committee, Member of the MRC Joint Committee for the Viet Nam and Chairman of the MRC Joint Committee for 2011-2012. Dr. Le Duc Trung was assisted by Mr. Tran Duc Cuong, Officer in Charge of the MRC Secretariat (the OIC).

A. OPENING ADDRESS BY THE CHAIRMAN OF THE MRC JOINT COMMITTEE FOR 2011-2012

4. The Chairman opened the Meeting by welcoming the distinguished Members of the Joint Committee, Heads and Members of Delegations from the People's Republic of China and the Republic of the Union of Myanmar, and other participants including MRC Secretariat staff. (Attachment No. 2: Opening Statement). The Chairman also provided the Meeting with an update of MRC's work over the past year.

B. STATEMENT BY THE HEAD OF DELEGATION OF THE PEOPLE'S REPUBLIC OF CHINA

5. The Head of the Delegation of the People's Republic of China, Mr. Pang Sen, thanked the MRC Secretariat for organising the Meeting and the Government of Lao PDR for the generous hospitality accorded to the Delegation. China expressed great appreciation to the MRC for its constant pursuit of strengthening cooperation between countries in the upper and lower Mekong basin. China's technical cooperation has brought tangible benefits for both the upper and lower basin countries by enhancing mutual understanding and trust. China added that there is vast room to advance cooperation in the future. As all MRC Member Countries are also members of the Association of Southeast Asian Nations (ASEAN), China considers MRC and the China-ASEAN strategic partnership as good opportunities for dialogue and cooperation to contribute to prosperity and sustainable development of the Mekong sub-region. (Attachment No. 3)

C. STATEMENT BY THE HEAD OF DELEGATION OF THE REPUBLIC OF THE UNION OF MYANMAR

6. The Head of the Delegation of the Republic of the Union of Myanmar, Mr. Sein Tun, expressed his great pleasure to participate in this Sixteenth Dialogue Meeting organised by the Mekong River Commission and thanked the Lao Government for the excellent arrangements made for the Meeting. Myanmar has been participating in several MRC activities over the years. Myanmar expressed its willingness to explore further the four new areas of cooperation between MRC and Dialogue Partners identified during the fifteenth Dialogue Meeting. Myanmar would also like to enhance future works under the MRC-ASEAN cooperation and Mekong-Japan cooperation frameworks, especially in the fields of Integrated Water Resources Management and Climate Change Adaptation Initiative. Myanmar also requested the MRCS to provide advance information to the Directorate of Water Resources and Improvement of River Systems (DWIR) of the Ministry of Transport for invitations to meetings, workshops, and forums (Attachment No. 4).

D. ADOPTION OF THE AGENDA

7. The Meeting noted there were no comments on the agenda and it was adopted as proposed. (Attachment No. 5: Agenda)

E. REPORT ON THE HYDROLOGICAL CONDITIONS IN THE LOWER MEKONG BASIN INCLUDING REPORT ON 2010 DRY SEASON

8. The Officer-in-Charge (OIC) of the Secretariat invited the Operational Hydrologist, to brief the Meeting on the Hydrological Conditions in the Lower Mekong Basin from 15 January to 31 July 2011 (Attachment No.6). The Hydrological Conditions Report in the Lower Mekong River Basin, which includes the analysis of hydro-meteorological data, the dry season conditions and the onset of the 2011 wet season, was presented at the Meeting.

9. The report concluded that the hydrological condition along the Mekong mainstream during the year 2011, so far, is in general slightly higher than the year 2010's range that might be defined as a normal year condition, except in the Tonle Sap Lake. The main cause of low water levels in the dry season in the Mekong mainstream during the dry season of 2011 is due to the combination of an early end to the 2010 wet season, low monsoon rainfall and low inflow from its tributaries.

10. Deficient seasonal rainfall meant that natural catchments water storage towards the end of the flood season in terms of groundwater and soil storage was already low from January to April but increased from May to July in 2011. The sudden non natural further reduction in Mekong mainstream water levels from late January to March 2011 suggests reduced flows from reservoir releases from China and from April to July water level was higher than its long-term average due to sporadic rainfall distribution over the LMB.

11. Thailand expressed appreciation for the report but requested for more information on the transitional period between September to November. In addition, Thailand questioned whether a general summary for the whole reporting period was the most accurate way to characterize conditions for the whole year. Thailand suggested that the Secretariat provide separate summaries for the wet season, the dry season as well as the transitional period. Referencing the First MRC Summit in Hua Hin in April 2010 when China shared additional information and data during the dry season which is not currently covered by the 2008 Agreement on the Provision of Hydrological Information between China and MRC. Thailand highly appreciates information provided on the operational impacts of the upstream hydropower plants, especially on fluctuation at the Chiang Saen monitoring station. However, the information provided should be presented by the Secretariat as a time-series basis and not the current yearly basis which is of limited use.

12. Because Member Countries are currently experiencing several floods along the Mekong, Cambodia requested that future reporting on the Mekong hydrological condition is

expanded to cover the period up to the time of the Dialogue Meeting. If possible the MRCS should look for available observed soil moisture data to add to its current report which is based on satellite data from the United States Department of Agriculture.

13. China took note of the comments and indicated that the monitored water level at Yunjinhong hydrological station from January to May is above normal year condition. In this respect, China indicated that it would consider sharing dry season information with MRCS again if conditions were similar to that in the 2010 dry season.

F. ACHIEVEMENTS SINCE THE FIFTEENTH DIALOGUE MEETING

14. The OIC informed the Meeting of the organisational changes of the MRC and programmes' achievements since the Fifteenth Dialogue Meeting in August 2010, Phnom Penh, Cambodia. (Attachment No.7)

15. The OIC informed the Meeting of some major milestones in its work towards sustainable development of the Lower Mekong Basin. These milestones include the approval of the Integrated Water Resources Management-based Basin Development Strategy and the Strategic Plan for 2011-2015 which provide good guidance and planning framework to the Commission. Good progress on the implementation of the Independent Organizational Review recommendations has also been made. Thanks to continuous and growing support from Development Partners, the MRC and its Programmes have generally achieved their expected outputs during the past year.

16. Developments regarding MRC Work Programme include the approval of the new phases of key MRC programmes, such as those for the Environment, Flood Management and Mitigation, Fisheries and Information and Knowledge Management programmes. The Basin Development Plan, Drought Management and Climate Change and Adaptation Initiative documents for 2011-2015 are being considered by countries.

17. The OIC referred to a Meeting with the Chinese Ministry of Water Resources in November 2010 on sharing of dry season data, secondment of Chinese MWR officials, China joining the Junior Riparian Professional project, and joint studies on sediment management and the follow up to the Strategic Environment Assessment (SEA) of mainstream hydropower development.

18. Much effort has been put into strengthening partnerships between the MRC and other development partners. MOUs with the United States Geological Survey (USGS) and with the Murray Darling Basin Authority (MDBA) were signed. Overall, the Secretariat has substantially increased its cooperation with regional development partners since the Fifteenth Dialogue Meeting. Similarly, the trend towards increasing dialogue and engagement with Non-Governmental Organizations, the academic world and civil society has been maintained. MRC gained much exposure through such events and were able to explain and promote its role and share experiences with other organizations and regional bodies.

19. Finally, the Meeting was also informed of the official response from the Republic of the Union of Myanmar regarding the invitation to become a member of the MRC that Myanmar will continue to cooperate with MRC as a Dialogue Partner.

20. China noted that MRC has been very active inside and outside the region and appreciated the MRC's efforts and achievements. In terms of cooperation, China reminded the Meeting that it organised visits for the MRC Secretariat and joined several meetings of the MRCS and dispatched a Chinese expert to join the Junior Riparian Professional Programme.

G. AREAS OF COOPERATION BETWEEN DIALOGUE PARTNERS AND THE MEKONG RIVER COMMISSION

G.1 INFORMATION SHARING

G.1.1 PROGRESS REPORT ON SHARING OF HYDRO-METEOROLOGICAL INFORMATION AND FUTURE AREAS OF COOPERATION

21. The OIC, assisted by the Information and Knowledge Management Programme Coordinator, Technical Support Division, informed the Meeting on the progress of the sharing of hydro-meteorological data (Attachment No. 8). After providing background information on previous cooperation, the MRCS presented the progress to date, mainly focusing on the two hydrological stations, namely Jinghong and Man'An, in Yunnan Province that MRC has been upgrading with the help of China.

22. Water level and rainfall data are sent weekly from China to the MRC for flood forecasting. During 2010 and 2011, the two Chinese stations were upgraded to transfer standard data to a server based in Kunming. This information is used by MRC to conduct hydrological condition analysis and assessment. In early 2010, China also decided to provide the MRC with hydrological data from the two stations during the dry season. MRC and China are also sharing expertise and modeling knowledge to reach a consensus understanding about water regimes.

23. Some future areas for cooperation were also proposed for discussion. These include continuation and extension of the cooperation on the Provision of Hydrological Information of the Lancang/Mekong River; dissemination of MRC hydrological data; dry season data sharing; training in flood and drought management, etc.

G.1.2 DISCUSSION

24. Viet Nam highlighted the necessity of increasing the frequency of data transfer during the wet season and called on China to provide hydromet data during the dry season on a regular basis and establish a data sharing mechanism for that purpose similar to the existing wet season mechanism.

25. China noted the progress and appreciated the efforts of MRCS to meet with China to increase mutual understanding on the hydrological conditions. For the sharing of information, China follows the current agreement signed between MRC and China. China reassured MRC that it was willing to share information with LMB countries should a drought situation similar to 2010 occur again. China would also like to study further to fully understand MRC's proposal, including the technical requirement and study further the necessity of provision of dry season data, under the new hydrological condition, when the upstream hydropower station operates normally. China also expressed an interest in joining training programmes on flood and drought management.

26. Myanmar informed the Meeting that an auto water level recorder has been installed at the Wang Pog port in 2010. Some data and information have already been provided to the MRC during the 8th Annual Mekong Water Flood Forum. Myanmar will also install a bench mark with above mean sea level near the station and the station will be upgraded soon. Myanmar would like to establish cooperation for data sharing with MRC and is processing the dispatch of an expert from the DWIR to join the Junior Riparian Professional Programme.

27. The Chairman requested the Secretariat to take note of observations and improve on hydrological information reporting.

G.2 HYDROPOWER AND WATER RESOURCES DEVELOPMENT

G.2.1 LANCANG RIVER HYDROPOWER AND WATER RESOURCES DEVELOPMENT AND ENVIRONMENTAL MANAGEMENT PLAN

28. China announced that it will continue to update the MRC and its Member Countries on current hydropower development on the Lancang river. China has conducted thorough reviews on the current and future projects and presented the progress of hydropower development and protection on the Lancang-Mekong river (Attachment No. 9).

29. Since the 15th Dialogue Meeting, the Ecosystem Study Commission for International Rivers (ESCIR) has conducted several technical exchanges and cooperation programmes and contributed to the Strategic Environmental Assessment of Mainstream Dams

commissioned by the MRCS. The ESCIR presented the progress of hydropower development on the Lancang river since the approval of the hydropower development plans for the Lancang river by Chinese authorities in 1987.

30. ESCIR is carrying out long term studies in the hydropower development and environmental protection. The ESCIR presented the environmental protection measures taken in accordance with environmental protection laws. ESCIR is conducting environmental monitoring and environmental management to mitigate impacts on the Lower Mekong River. The ESCIR also presented the progress of its recent Fish Protection activities along the Lancang River and the progress of stratified water intake measures being applied on hydropower projects along the Lancang river.

31. ESCIR sees opportunities for technical exchange with MRC in late 2011 and in 2012 to promote mutual understanding of the laws and regulations, evaluation standards, technical methods, environmental management and monitoring between upstream and downstream countries. This could also be an opportunity to discuss counter-measures and criteria for environmental protection during the exploitation of hydropower in the Lancang-Mekong River Basin to boost sustainable development in the region.

32. Myanmar presented the particular features of the Mekong Basin in Myanmar and informed the Meeting that the Department of Hydroelectric Power is responsible for the development, management and exploitation of water for power production. This Department is also collecting and disseminating hydrological data. The Irrigation Department is also developing multipurpose water resources projects, some of which are for hydropower generation. In the eastern Shan State area, small scale hydropower, irrigation and water supply development schemes have been developed on the tributaries of the Mekong River, which contribute to the development of these rural areas.

33. The Chairman thanked China and the ESCIR for their presentation and Myanmar for the useful information on the Mekong Basin in Myanmar.

G.2.2 PROGRESS ON HYDROPOWER AND WATER RESOURCES DEVELOPMENT

G.2.2.1 – THE RAPID SUSTAINABILITY ASSESSMENT TOOL AND BENEFIT SHARING MECHANISM FOR HYDROPOWER PROJECTS

34. The OIC, assisted by the Programme Manager of the Initiative on Sustainable Hydropower, informed the Meeting on the background information of the agenda item (Attachment No. 10). The MRC appreciates the cooperation of Dialogue Partners on Sustainable Hydropower activities and especially China through the ESCIR in 2009-2010.

35. The MRC presented its approach to develop sustainability assessment tools and benefit sharing mechanisms. In light of this, the MRCS identified three topics for enhanced cooperation on hydropower throughout the new MRC strategic period 2011-2015. These topics include cooperation with the ESCIR to develop a programme for multi-year technical cooperation on sustainable hydropower, cooperation on the exchange of information and experience to trialling the new generation of hydropower sustainability assessment tools and finally to share knowledge on benefit sharing mechanisms suited to the Mekong hydropower context.

36. China expressed its appreciation to the MRC for its efforts on sustainable hydropower and ensured that China is willing to continue to cooperate with the MRC on this matter.

37. The Chairman asked the MRC to take note and follow up with China on this matter.

G.2.2.2 – ROADMAP ON THE FOLLOW-UP OF THE MRCS PRIOR CONSULTATION REVIEW REPORT

38. The Meeting was informed that the agenda item originally proposed with the view that MRC would have organised the 4th Meeting of the Joint Committee Working Group on PNPCA in early August 2011, in which the Roadmap to follow up on the MRCS Prior Consultation Review Report was one of the discussion topics. However, this Meeting has been postponed to a later date. Therefore, this agenda item was not discussed at the Meeting. However, the planned Roadmap was briefly outlined for the Meeting.

G.3 NAVIGATION

G.3.1 COOPERATION ON THE LANCANG/MEKONG RIVER

39. China presented the progress on the development of navigation along the Lancang-Mekong River (See attachment No.11). China, Lao PDR, Myanmar and Thailand signed a quadripartite Agreement on Commercial Navigation in April 2000 and since then the Joint Committee on Coordination of Commercial Navigation on the Lancang-Mekong River (JCCCN) met nine times to coordinate on commercial navigation. The navigation channel has become much more important and is playing a pivotal role in promoting the exchanges of trade, economy and culture between and among the JCCCN member countries.

40. China has invested 400,000,000 RMB Yuan for the development of the channel section within Yunnan province and the construction of many ports including the Jinghong Port. The current Agreement has brought many benefits for the four Countries involved and China is seeking to increase cooperation with downstream countries to develop navigation on the River.

41. China endeavors to make sure that channels are navigable for 500 ton vessels with agreed specifications. The different technological standards between countries means that navigation dimensions are not consistent between countries, which could affect navigation on the River. China suggested MRC cooperate with the JCCCN in setting the standards for navigation channels to guarantee the uniformity of navigation standards between the upstream and downstream sections of the River.

42. Lao PDR informed the Meeting that in the current guideline of the JCCCN, the air-clearance for bridges is set at 8 meters for 500 ton vessels and that the current bridges planned in the Lao part are following these guidelines.

43. The Chairman noted with appreciation the efforts of China to improve navigability in cooperation with the MRC Member Countries and asked the Secretariat to continue cooperation with the JCCCN Member Countries for the establishment of navigation standards.

G.3.2 ENHANCED COOPERATION ON NAVIGATION

44. The OIC, assisted by the Programme Coordinator of Navigation Programme, informed the Meeting on the background information of the agenda item (Attachment No.12).

45. The cooperation activities during 2010 to 2011 were briefly presented including the recent Regional Risk Assessment Workshop, as part of the MRC activity on the 'Risk Analysis of the Storage, Handling and Carriage of Dangerous Goods' and participation of the JCCCN to the Navigation Advisory Body (NAB).

46. Planned activities were presented to the Meeting. NAP will continue to join JCCCN meetings as well as to invite representatives of the JCCCN to its future Navigation Advisory Body meetings. NAP will also involve both, China and Myanmar, in the Risk Analysis of the Storage, Handling and Carriage of Dangerous Goods project.

47. Planned activities were presented to the Meeting. NAP will continue to join JCCCN meetings as well as to invite representatives of the JCCCN to its future Navigation Advisory Body meetings. NAP will also involve both, China and Myanmar, in the Risk Analysis of the Storage, Handling and Carriage of Dangerous Goods project.

G.4 FLOOD MANAGEMENT

G.4.1 PROGRESS ON JOINT TRAINING ACTIVITIES

48. China reported its progress on joint training activities through effective cooperation and exchange with the MRC and its Member Countries (Attachment No.13). The activities presented included the provision of hydrological information during the 2010 flood season, participating at the MRC International Conference on Watershed Management, dispatching a

junior expert to join MRC's JRP programme, receiving the CEO of MRC and receiving a delegation of MRC experts on technical maintenance of flood data reporting systems. The Ministry of Water Resources of China invited flood forecasting experts from the MRC Member Countries to join an international training project on flood forecasting technologies at Wuhan, China in November 2011.

49. Myanmar informed the Meeting that they have joined several trainings on flood management. Several departments are working on flood and Myanmar is very willing to continue cooperating with other countries and join future training programmes.

50. The Chairman thanked China for their invitation to the training in Wuhan, China, and requested the MRC Secretariat to follow up with China.

G.4.2 UPDATE ON FLOOD FORECASTING ACTIVITIES

51. The OIC with the assistance of Programme Coordinator of Flood Management and Mitigation Programme (FMMP) informed the Meeting on the background information of the agenda item (See Attachment No.14). The FMMP and the Regional Flood Management and Mitigation Center provide technical products and services to assist the MRC Member Countries with flood management and resolution of water and related issues, especially transboundary flooding issues. The main products are flood forecasting and warning during the flood season as well as flash flood guidance and alerts during critical weather situations. The current hydromet network in the LMB makes accurate flood forecast, although exchange of data and information with Dialogue Partners would help improve the quality of flood forecasting. China and Myanmar have been invited to participate in several trainings and workshops and data from China is transferred daily during the flood season.

52. For further cooperation, the MRC suggested to continue training and exchange visits on flood and drought management and proposed to continue and extend the provision of data and information to support flood forecasting and warning as well as drought monitoring.

G.4.3 DISCUSSION

53. Thailand expressed concerns about the accuracy of MRC flood forecasting. During this current flood season Thailand is relying mainly on flood information from its national lines agencies and not from the MRC as the information provided on the MRC website does not fully match the expectation of Thailand. Referring to the Secretariat briefing note on this matter which outlines key factors that impact on the accuracy of flood forecasting, Thailand acknowledges the complexity of flood forecasting activities in the region, but since these issues have been identified early on Thailand is requesting that the FMMP's Action Plan take its observation into consideration.

54. The Chairman thanked the Secretariat for their presentation and requested the MRCS to take the comments from Thailand in consideration in the FMMP's Action Plan.

H. EXISTING AND OTHER AREAS OF POTENTIAL COOPERATION

55. The OIC, with the assistance of the Chief of International Cooperation and Communication Section, briefly presented to the Meeting the agenda item (See Attachment No.15). The MRC sustains cooperation and communication with Dialogue Partners by sharing documentation and information on key issues and events.

56. The first JRP from China joined MRCS in early March 2011 to work at the Information and Knowledge Management Programme (IKMP) until June 2011 and then at the Initiative on Sustainable Hydropower (ISH/MRC) for two more months from July to August 2011. The first JRP from Myanmar will join the JRP Project in September 2011 and will work at the Mekong IWRM Project in December 2011. Further areas of potential cooperation were presented to the Meeting. They include (i) Staff Exchange and secondment and (ii) Collaboration on Mekong Climate Change Knowledge.

57. Thailand commented that climate change is an important emerging issue that requires regional concerted efforts. Thailand welcomes the opportunity to share knowledge, technical expertise and findings with Dialogue Partners on climate change and adaptation matters.

58. Viet Nam thanked the Dialogue Partners for their efforts, especially in the areas of data and information sharing, flood management, sustainable hydropower and navigation. Since climate change is an international problem in nature, Viet Nam strongly encourages Dialogue Partners to work with MRC on this issue. In addition, MRC is now implementing its new IWRM-based Basin Development Strategy and Viet Nam suggests that further cooperation with Dialogue Partners be on these two new areas as well as existing ones.

59. The Chairman asked the Secretariat to take note and was pleased to see that potential collaboration in the area of Climate Change was mentioned.

I. DATE AND VENUE OF THE SEVENTEENTH DIALOGUE MEETING

60. The Joint Committee Chair proposed to the Meeting that the next Dialogue Meeting be held back to back with the Thirty-sixth Joint Committee meeting during the end of July or early August 2012, in Phnom Penh, Cambodia, (Attachment No.16).

61. China and Myanmar said that they were flexible with the date, but would need to be consulted in advance.

K. CLOSING STATEMENT BY THE CHAIRMAN OF THE MRC JOINT COMMITTEE FOR 2011-2012

62. Dr. Le Duc Trung, Chairman of the MRC Joint Committee for 2011-2012, delivered his closing statement and thanked all delegates for their constructive engagement during the meeting (Attachment No. 17).

LIST OF ATTACHMENTS

ATTACHMENT NO. 01	LIST OF PARTICIPANTS
ATTACHMENT NO. 02	OPENING ADDRESS BY THE CHAIRPERSON OF THE MRC JOINT COMMITTEE FOR 2011/2012
ATTACHMENT NO. 03	STATEMENT BY THE HEAD OF DELEGATION OF THE PEOPLE'S REPUBLIC OF CHINA
ATTACHMENT NO. 04	STATEMENT BY THE HEAD OF DELEGATION OF REPUBLIC OF THE UNION OF MYANMAR
ATTACHMENT NO. 05	AGENDA
ATTACHMENT NO. 06	REPORT ON THE HYDROLOGICAL CONDITIONS IN THE LOWER MEKONG BASIN
ATTACHMENT NO. 07	ACHIEVEMENT SINCE THE FIFTEENTH DIALOGUE MEETING
ATTACHMENT NO. 08	PROGRESS REPORT ON SHARING OF HYDRO- METEOROLOGICAL INFORMATION AND FUTURE AREAS OF COOPERATION
ATTACHMENT NO. 09	PRESENTATION BY CHINA ON LANCANG RIVER HYDROPOWER AND WATER RESOURCES DEVELOPMENT AND ENVIRONMENTAL MANAGEMENT PLAN
ATTACHMENT NO. 10	PROGRESS ON HYDROPOWER AND WATER RESOURCES DEVELOPMENT
ATTACHMENT NO. 11	PRESENTATION BY CHINA ON COOPERATION ON NAVIGATION ON THE LANCANG/MEKONG RIVER
ATTACHMENT NO. 12	ENHANCED COOPERATION ON NAVIGATION
ATTACHMENT NO. 13	PROGRESS ON JOINT TRAINING ACTIVITIES
ATTACHMENT NO. 14	UPDATE ON FLOOD FORECASTING ACTIVITIES
ATTACHMENT NO. 15	EXISTING AND OTHER AREAS OF POTENTIAL COOPERATION
ATTACHMENT NO. 16	DATE AND VENUE OF THE SEVENTEENTH DIALOGUE MEETING
ATTACHMENT NO. 17	CLOSING STATEMENT BY THE CHAIRPERSON OF THE MRC JOINT COMMITTEE FOR 2011-2012

ATTACHMENT 1

LIST OF PARTICIPANTS

LIST OF PARTICIPANTS

A. MRC MEMBER DELEGATIONS

CAMBODIA

1. H.E. Mr. Te Navuth
Secretary-General
Cambodia National Mekong Committee
Member of the MRC Joint Committee for Cambodia
Head of delegation
2. H.E. Mr. Kol Vathana
Deputy Secretary-General
Cambodia National Mekong Committee
3. Mr. Ngoun Kong
Deputy Director General of Technical Affairs
Ministry of Environment
4. Mr. Tuy Ry
Director, International Organization Department
Ministry of Foreign Affairs and International Cooperation
5. Mr. So Im Monichot
Deputy Director of Hydrology and River Works Department
Ministry of Water Resources and Meteorology

LAO PDR

6. Mr. Phonechaleun Nonthaxay
Secretary General
Lao National Mekong Committee
Alternate Member of the MRC Joint Committee for Lao PDR
Head of Delegation
7. Mr. Phoxay Khaykhamphithoune
Deputy Director General
Department of International Organisation, MOFA
8. Mr. Singthong Pathoummady
Deputy Director General
Department of Meteorology and Hydrology, MONRE
9. Mr. Vanthong Somphavath
Director General
Department of Waterways, MPWT
10. Mr. Aloune Sayavong
Chief of Mekong Affair Division, Department of Water Resources
Water Resources and Environment Administration

Observers:

11. Mr. Kongngeun Chounlamountry
Assistant Director-General
Department of Water Resources
Water Resources and Environment Administration
12. Mr. Oudomsack Philavong
Dir. of Policy and Legislation Division
Department of Water Resources
Water Resources and Environment Administration
13. Mr. Keomany Luanglith
Dir. of Administration Division
Department of Water Resources
Water Resources and Environment Administration
14. Mr. Phonepaseuth Phouliphanh
Dir of Planning and Cooperation Division
Department of Water Resources
Water Resources and Environment Administration
15. Mr. Ketsana Sayasane
Technical staff, Mekong Affair Division
Department of Water Resources
Water Resources and Environment Administration

THAILAND

16. Mrs. Pakawan Chufamanee
Director, Bureau of Mekong Management
Department of Water Resources
Ministry of Natural Resources and Environment
Head of Delegation
17. Associate Professor Chaiyuth Sukhsri
Head of Water Resources Engineering Department
Faculty of Engineering, Chulalongkorn University
18. Mr. Surasak Suparat
Director of Development Affairs Division
Department of International Organizations
Ministry of Foreign Affairs
19. Ms. Nuanlaor Wongpinitwarodom
Policy and Plan Analyst, Senior Professional Level
Bureau of Mekong Management, Department of Water Resources
Ministry of Natural Resources and Environment

Observers:

20. Ms. Kesarin Phanarangsarn
Diplomatic Officer, Development Affairs Division
Ministry of Foreign Affairs

VIET NAM

21. Dr. Le Duc Trung
Director General, Viet Nam National Mekong Committee
Member of MRC Joint Committee for Viet Nam

Chairman of the MRC Joint Committee for 2011-2012

22. Dr. Truong Hong Tien
Deputy Director General
Viet Nam National Mekong Committee
Head of Delegation
23. Mr. Do Hung Viet
Deputy Director General
Department of International Organizations, MoFA
24. Mr. Pham Van Tan
Deputy Director General
Department of International Cooperation, MONRE
25. Mr. Nguyen Anh Duc
Senior Programme Officer
Viet Nam National Mekong Committee
26. Ms. Nguyen Hong Phuong
Senior Programme Officer
Viet Nam National Mekong Committee

Observers:

27. Mr. Nguyen Van Bang
Senior Programme Officer
Viet Nam National Mekong Committee

B. DIALOGUE PARTNERS

China

28. Mr. Pang Sen
Deputy Director-General
Department of International Organizations and Conferences
Ministry of Foreign Affairs (MFA) Beijing
29. Mr. Yang Shichao
Deputy Director
Department of International Organizations and Conferences
Ministry of Foreign Affairs (MFA) □Beijing
30. Ms. Zhi Luying
Third Secretary
Department of International Organizations and Conferences
Ministry of Foreign Affairs (MFA) □Beijing
31. Mr. Zhou Shichun
Architect
Hydropower and Water Resources Planning and Design General Institute □Beijing
32. Ms. Shan Jie
Architect
Hydropower and Water Resources Planning and Design General Institute □Beijing
33. Mr. Li Ge
Director, Department of International Cooperation, Science and Technology
Ministry of Water Resources (MWR) □Beijing

34. Mr. Wang Hongming
Senior Staff member
Department of International Cooperation, Science and Technology
Ministry of Water Resources (MWR), Beijing
35. Ms. He Hui
Director, Bureau of Hydrology
Ministry of Water Resources (MWR), Beijing
36. Mr. Wang Dongsheng
Deputy Director-General
China Institute of Water Resources and Hydropower Research (IWRHR), Beijing
37. Mr. Yang Zechuan
Engineer, International Economic Technical Cooperation and Exchange Centre
Ministry of Water Resources (MWR), Beijing
38. Mr. Sun Gaohu
Engineer
China Institute of Water Resources and Hydropower Research (IWRHR)
39. Mr. Li Guoliang
Senior Staff member, Department of International Cooperation
Ministry of Transport and Communication □ Beijing
40. Mr. Wang Dezhong
Deputy Director-General
Navigation Administration Bureau of Yunnan Province, Kunming
41. Mr. Zhao Jin
Secretary, Navigation Administration Bureau of Yunnan Province, Kunming
42. Ms. Xie Zhangwei
Assistant to Permanent Representative of China to UNESCAP

Myanmar

43. Mr. Sein Tun
Deputy Director, Directorate of Water Resources and Improvement of River System
Ministry of Transport, Myanmar
44. Ms. Thandar Thadoe Nwe Win
Assistant Director
Directorate of Water Resources and Improvement of River System
Ministry of Transport, Myanmar

C. MRC SECRETARIAT

45. Mr. Tran Duc Cuong
Officer-in-Charge
Assistant CEO, Head of OSP, and
Director of Technical Support Division
46. Mr. Pich Dun
Director of Operations Division

47. Mr. Sourasay Phoumavong
Director of Environment Division
48. Mr. Satit Phiromchai
Director of Planning Division
49. Ms. Nguyen Thu Mai
Chief of Finance and Administration Section
50. Ms. Weena Aksornkaew
Chief of Human Resources Development Section
51. Ms. Klomjit Chandrapanya
Chief, International Cooperation and Communication Section
52. Dr. Vitoon Viriyasakultorn
Technical Coordination Advisor
Technical Coordination Unit, Office of the Chief Executive Officer
53. Dr. Lam Hung Son
Programme Coordinator, Flood Management and Mitigation Programme
Technical Support Division
54. Mr. Nicolaas Bakker
Chief Technical Advisor, Flood Management and Mitigation Programme
Technical Support Division
55. Mr. Tran Van Tuan
Programme Coordinator, Information and Knowledge Management Programme
Technical Support Division
56. Mr. Erland Jensen
Chief Technical Advisor, IKMP
Technical Support Division
57. Dr. Khem Sothea
Operational Hydrologist
Information and Knowledge Management Programme
Technical Support Division
58. Mr. Voradeth Phonekeo
Project Manager
Initiative on Sustainable Hydropower
59. Dr. Phoumin Han
Programme Coordinator
Mekong-IWRMP
60. Mr. Phirun Hiek
Programme Coordinator, Navigation Programme
Operations Division
61. Mr. Lieven Geerinck
Chief Technical Advisor, Navigation Programme
Operations Division
62. Mr. Sophearin Chea

- Programme Officer, MRC Procedures and Policies
International Cooperation and Communication Section
63. Ms. Siliphone Sisavath
Programme Officer, MRC Governance
International Cooperation and Communication Section
64. Mr. Julien Simery
Interim Donor Coordination Officer
International Cooperation and Communication Section
65. Mr. Surasak Glahan
Communication Officer
International Cooperation and Communication Section
66. Ms. Nguyen Nhu Hue
Interim Officer on Development Partners and Policy Coordination (Strategic Plan)
International Cooperation and Communication Section

D. ORGANISERS

MRC Secretariat

67. Ms. Manivanh Phanouvong
Senior Programme Assistant
International Cooperation and Communication Section
68. Ms. Chansouk Souphanthavong
Secretary to Chief
International Cooperation and Communication Section
69. Ms. Palamy Soukhathammavong
Secretary, Communication Unit
International Cooperation and Communication Section
70. Ms. Sengkeo Thongvanna
Programme Assistant, Donor Coordination Unit
International Cooperation and Communication Section
71. Mr. Souphanh Thongouane
Senior IT Assistant
Finance and Administration Section
72. Mr. Mr. Khamphet Phiphattana
Maintenance Supervisor, Finance and Administration Section
73. Mr. Khampheng Thavykham
Maintenance Assistant/Foreman, Finance and Administration Section

ATTACHMENT 2

OPENING ADDRESS BY THE CHAIRPERSON OF THE MRC JOINT COMMITTEE FOR 2011/2012

OPENING STATEMENT

By

Dr. Le Duc Trung

Director General

Viet Nam National Mekong Committee

Member of the MRC Joint Committee for Viet Nam

Chairperson of the MRC Joint Committee for 2011-2012

H.E. Mr. Te Navuth

Secretary General

Cambodia National Mekong Committee

Member of the MRC Joint Committee for Cambodia

Head of Delegation

Mr. Phonechaleun Nothaxay

SG

Lao National Mekong Committee

Alternate Member of the MRC JC for Lao PDR

Head of Delegation

Mr. Pakawan Chufamanee

Director, Bureau of Mekong Management

Department of Water Resources

Ministry of Natural Resources and Environment

Head of Delegation

Dr. Truong Hong Tien

Deputy Director General

Viet Nam National Mekong Committee

Head of Delegation

Mr. Pang Sen

Deputy Director General,

Department of International Organizations and Conferences

Ministry of Foreign Affairs

Head of Delegation of China

Mr. Sein Tun

Deputy Director, Department of Water Resources and Rivers Development

Ministry of Transport of the Union of Myanmar

Head of Delegation of Myanmar

Excellencies,

Distinguished Delegates,

Ladies and gentlemen,

Colleagues and friends

It is my great honour to welcome you all to the 16th Dialogue Meeting today. In the last one-year time was a period full of milestone achievements for the Mekong River Commission and I am pleased to see we have every opportunity in the upcoming year to commence the implementation of the strategies set forth in 2010. Today, as usual, we will share progress on a number of MRC programme activities and will brainstorm together on ways to work closer to our annual goals.

We begin our meeting today with one of the most important areas for the MRC – regional cooperation. In early March, to our delight, the first Junior Riparian Professional joined the MRC from China's Ministry of Water Resources. The following month, the first JRP for Myanmar was nominated by their Ministry of Transport and will join Phase III of the project by September this year. I am pleased to announce that eight more JRPs from upper riparian countries will also join Phase III of the project in the near future.

The development of the MRC's JRP project symbolises the direction the organisation that is moving forward with its Dialogue Partners. Through this project, the MRC hopes to intensify an exchange of technical knowledge and dialogue with China and Myanmar primarily on navigation, flood and drought and sediment management.

***Excellencies,
Distinguished Delegates,
Ladies and gentlemen,
Colleagues and friends***

You may all agree with me that hydropower is another topic of no less vital that touches on several agenda items today. For your information, in May this year, the Rapid Sustainability Assessment Tool (the RSAT) was tested for the first time at a workshop in Vientiane. Currently, Initiative of Sustainable Hydropower is working towards updating information on the RSAT and developing capacity building materials to be used in 2012 through 2015.

In the afternoon, our discussion on regional cooperation will continue as we table the topic of navigation. We look forward to learning from our Dialogue Partners' presentation on enhancing cooperation in this area.

As we discuss the potential for exchanging technical staff with our Dialogue Partners, we will also review the progress the Flood Management and Mitigation Programme has made on flood forecasting information provided daily to MRC countries, the knowledge it has transferred to national forecasting agencies as well as challenges and improvement in flood forecasting.

Additionally, later in the meeting today we will discuss for the first time collaboration with our Dialogue Partners in the areas of climate change.

The exchange of staff with upper Mekong countries is closely linked to another one of our meeting's agenda items – flood forecasting and the sharing of hydro-meteorological data. With staff exchanges we will gain new perspectives and technical know-how on these two very important topics. Ultimately, it is our hope that this project will equip us with more up-to-date information on flood and drought preparedness throughout the Mekong basin.

Though there is a long day ahead, but I do anticipate that by the end we will have a better idea on how to enhance work with our Dialogue Partners. Together with our upper Mekong neighbours, we can continue to expand our cooperation. Our programme activities would benefit greatly from fruitful interactions with Dialogue Partners, Development Partners and other stakeholders to whom I also wish to convey my sincere thanks and appreciation to.

Before closing, I would like to express my sincere thanks to all Delegates for your presence today and MRC Secretariat for tirelessly organising this event.

With this, I wish the meeting every success and now therefore declare the Meeting open.

Thank you.

ATTACHMENT 3

STATEMENT BY THE HEAD OF DELEGATION OF THE PEOPLE'S REPUBLIC OF CHINA

**Statement by
Mr. Pang Sen
Deputy Director-General
Department of International Organizations and Conferences
Ministry of Foreign Affairs (MFA) Beijing
The Head of Delegation of the People's Republic of China**

I am very pleased to lead the Chinese Delegation to attend the 16th Dialogue Meeting with the MRC. This is my first time to attend the meeting. I would like to build friendship with all of you, and work closely to deepen our communication and cooperation. On behalf of the Ministry of Foreign Affairs of China, I also would like to express our sincere appreciation to the MRC Secretariat and the Laotian Government for all the well-organized preparation works and warm hospitality accorded to the Chinese delegation.

It is Chinese government's consistent policy to strengthen dialogue and cooperation with the MRC. Over the years, China have participated Dialogue Meeting with the MRC for 15 times, provided hydrological data of the Lancang River during the flood season, conducted technical and personnel exchanges with the MRC and downstream countries, and enhanced water resource management capacity of all participants.

China also took an active part in various meetings and programs organized by the MRC, and expanded cooperation from water resources management to navigation. Our substantial cooperation proved to be effective and successful on enhancing mutual understanding and trust between the upper and the lower basin countries, brought tangible benefits to the people and countries in the region. The communication and cooperation between China and the MRC yielded positive results, and there exists vast room to advance.

This year marks the 20th anniversary of the establishment of the Dialogue relations between China and ASEAN, and the ASEAN-China Year of Friendly Exchanges. China and ASEAN will take this opportunity to further cooperation in economy, trade and cross-border connectivity, push for new development of China-ASEAN strategic partnership.

The MRC countries are important members of the ASEAN, and China's good neighbors as well. The Significant of constants development of China-ASEAN cooperation is two-fold. First, it is conducive to China and ASEAN's economic growth and vitality, and to boost their sustainable development. Second, it will bring good opportunity for the dialogue and cooperation between China and the MRC. In the spirit of mutual benefit and common development, China would like to push the communication and cooperation with the MRC while we advance the development of China-ASEAN strategic partnership, so as to contribute to prosperity and sustainable development of the Mekong sub region.

I am looking forward to candid and fruitful discussion with you in the following sessions.

Thank you.

ATTACHMENT 4

STATEMENT BY THE HEAD OF DELEGATION OF REPUBLIC OF THE UNION OF MYANMAR

**Statement by
U Sein Tun, Deputy Director,
Directorate of Water Resources and Improvement of River Systems,
Ministry of Transport,
Leader of Myanmar Delegation to the Sixteenth Dialogue Meeting, Vientiane, Lao PDR
on 29th, August, 2011**

Mr. Chairman, Distinguished Delegates, Ladies and Gentlemen:

First of all, let me greet all of you a very good morning and warm welcome to today's sixteenth dialogue meeting here in this beautiful capital of Laos People's Democratic Republic, Vientiane. On behalf of the Myanmar delegation, may I express our thanks to Mekong River Commission for holding this important meeting.

Mr. Chairman,

My first engagement with MRC is as one of the Myanmar Participants to attend the Seminar on Water Quality Management in Mekong Basin which conducted at Phnom Penh in year 2000. Since then, I have being involved in several activities of MRC with various statuses, Trainings, Workshops, Seminars, Dialogue Meetings, Jointing Committee Meeting, Council Meetings and Navigation Advisory Body Meeting including First MRC Summit.

Mr. Chairman,

My experience gained over the last 11 years reveals that strong link between MRC and Myanmar is well established particularly in the areas of human resource development, technical cooperation and information sharing. Myanmar is good dialogue partner of MRC and had active participations in Trainings, Workshops, Seminar and Forums conducted by MRC and in celebration with other international and regional organizations.

Mr. Chairman,

During the fifteenth dialogue meeting, we explored four new areas of cooperation between MRC and dialogue partners. Myanmar can coordinate in some new areas of cooperation with MRC.

Mr. Chairman,

As you all aware that, for the Republic of the Union of Myanmar, Ministry of Foreign Affair is the focal ministry for MRC. Our Directorate, DWIR, under the Ministry of Transport is acting as so call executive directorate for MRC. Personals from our directorate involve with

most of the MRC activities. And we assist other government agencies concerning with the MRC.

Here I would like to request MRCS for advance information to our directorate, such as invitation of meetings, workshops, forums, etc... This request is just for information and advance preparation and necessary assistances to other government agencies, not for the action.

Mr. Chairman,

As I mentioned earlier, cooperation strong link between MRC and its dialogue partner, Myanmar is well established. We should also enhance our future works under MRC-ASEAN cooperation and Mekong- Japan cooperation frameworks, especially in the fields of Integrated Water Resources Management and Climate Change Adaptation Initiative.

Mr. Chairman,

Before I conclude, I would like once again to express our great honour to the Government of Laos People's Democratic Republic for hosting this valued meeting. I wish you all a successful and fruitful discussion.

Thank you Mr. Chairman.

ATTACHMENT 5

AGENDA

AGENDA

Monday 29 August 2011

8:00 – 8:30		Registration
8:30 – 8:40	A.	Opening Address by the Chairperson of the MRC Joint Committee for 2011-2012
8:40 – 8:45	B.	Statement by the Head of Delegation of the People's Republic of China
8:45 – 8:50	C.	Statement by the Head of Delegation of the Republic of the Union of Myanmar
8:50 – 8:55	D.	Adoption of the Agenda
8:55 – 9:25	E.	Report on the Hydrological Conditions in the Lower Mekong Basin
9:25 – 9:40	F.	Achievements Since the Fifteenth Dialogue Meeting
9:40	G.	Areas of Cooperation between Dialogue Partners and Mekong River Commission
9:40	G.1	Information Sharing
9:40 – 9:55	G.1.1	Progress Report on Sharing of Hydro-meteorological Information and future areas of cooperation (by MRC)
9:55 – 10:10	G.1.2	Discussion
10:10 – 10:30		Coffee Break
10:30	G.2	Hydropower and Water Resources Development
10:30 – 10:45	G.2.1	Lancang River Hydropower and Water Resources Development and Environmental Management Plan (by Dialogue Partners)
10:45 – 11:05	G.2.2	Progress on Hydropower and Water Resources Development (by MRC) <ul style="list-style-type: none">- The Rapid Sustainability Assessment Tool and Benefit Sharing Mechanism for Hydropower Projects- Roadmap on the follow-up of the MRCS Prior Consultation Review Report
11:05 – 11:20	G.2.3	Discussion

11:20	G.3	Navigation
11:20 – 11:35	G.3.1	Cooperation on the Lancang/Mekong River (by Dialogue Partners)
11:35 – 11:50	G.3.2	Enhanced Cooperation on Navigation (by MRC)
11:50 – 12:05	G.3.3	Discussion
12:05 – 13:30		Lunch hosted by the Chairperson of the MRC Joint Committee for 2011-2012
13:30	G.4	Flood Management
13:30 – 13:45	G.4.1	Progress on Joint Training Activities (by Dialogue Partners)
13:45 – 14:00	G.4.2	Update on Flood Forecasting Activities (by MRC)
14:00 – 14:15	H.	Existing and Other Areas of Potential Cooperation (by MRC) <ul style="list-style-type: none"> • Junior Riparian Professional Project • Staff Exchange • Collaboration on Mekong Climate Change Knowledge • Other Areas
14:15 – 14:20	I.	Date and Venue of the Seventeenth Dialogue Meeting
14:20 – 15:40		Coffee Break/Preparation of Report of the Meeting
15:40 – 16:20	J.	Review of the Draft Report of the Fifteenth Dialogue Meeting
16:20 – 16:25	K.	Closing Statement by the Chairperson of the MRC Joint Committee for 2011-2012
16:25 – 16:30		Group Photo
18:30		Reception Dinner for Delegates of the Sixteenth Dialogue Meeting hosted by the Chairperson of the MRC Joint Committee for 2011-2012

ATTACHMENT 6

REPORT ON THE HYDROLOGICAL CONDITIONS IN THE LOWER MEKONG BASIN

NOTE FOR INFORMATION

REPORT ON THE HYDROLOGICAL CONDITIONS IN THE LOWER MEKONG BASIN FROM 15 JANUARY TO 31 JULY 2011

1. In response to the request from the Joint Committee at its Thirty-second Meeting in August 2005 the MRC Secretariat continues a routine monitoring of the hydrological situation in the Mekong Basin, this document was prepared as a briefing note of the current hydrological conditions in the Lower Mekong Basin (LMB) for presenting to the Sixteenth Dialogue Meeting.
2. This Hydrological Conditions Report in the Lower Mekong River Basin includes the analysis of hydro- meteorological data from 15th January to 31 July 2011, covering the low flow of dry season conditions and the onset of the 2011 wet season.
3. An analysis on water level probability is attempted to report on the hydrological low flow condition of 2011. The report applies a user-friendly and readable approach but still maintains a comprehensive analysis.

Hydrological Conditions:

4. Over the last two to three years, there have been reports of high frequency water level oscillations on the Mekong mainstream, discernable during the low flow season between Chiang Saen and Luang Prabang in particular. A summary of a study undertaken of these short term fluctuations is presented, concluding that they are indeed present and have a pattern and structure that appears to be linked to upstream hydropower operation.
5. For the LMB, the timing of the onset of the SW Monsoon during 2010 was amongst the latest that has been historically observed, which combined with deficient storm rainfall and uncharacteristically long dry spells during August and September resulted in very low water levels and flows throughout the region.
6. Figure 1 shows the comparison of the 2011 water level hydrographs based on a probability analysis at Chiang Saen with their long term average (1960-2010). It shows the increasing values above its long-term average in the upper Mekong mainstream from late January onwards up to May 2011 suggesting that reservoir releases upstream could increase dry season levels. This corresponds with Information received from China during the MRC Summit which indicated that over the dry season more water was released from storage dams than was stored. The rapid fluctuated in water levels from late December 2010 to February 2011, as shown in Fig 1 is not a natural feature of the dry season recession flows and suggests that it is due to the releases from reservoirs upstream of Chiang Saen in response to the reservoir operation and was not created by rainfall.
7. The sudden non-natural further reduction in Mekong mainstream water levels from late January this year onwards suggests reduced flows from China as reservoir releases could not be sustained as storage fell to critical levels. Further analyses and discussion with China are planned.
8. At Chiang Saen water levels fluctuation from January to May 2011 were above average conditions. However, the water level at Luang Prabang and Vientiane (<http://www.mrcmekong.org/>), was the opposite from January to March with the actual water levels fluctuating around their average and the annual recurrence interval (1:5 year). This

strongly suggests that the water levels at Chiang Saen were kept artificially high by upstream reservoir releases until late January when they receded significantly.

9. Soil moisture displayed low values in the LMB beginning from January to March (0 to 20%), corresponding to significant low amounts of rainfall in LMB. But from April to July 2011, following monsoon rainfall, moisture levels across the region gradually rose to more than 20% in May and 90% in July. Some improvement is evident in late June as a result of sporadic rainfall conditions in some parts of the LMB, which increased moisture levels to above 90% within the eastern highland margins of the basin in Lao PDR and the southern part of Cambodia and the Mekong Delta. Figure 2 presents the mapped status of the regional soil moisture conditions over the Lower Mekong Basin from January to June 2011.

10. Figure 2 showed the Tonle Sap flow condition in 2011, compared to the long term average and the year 2010. It showed that the outflow of the Tonle Sap was considered below average conditions from January to May 2011. The reversed flow occurred on 16 May 2011, corresponding to the average time of flows coming from the mainstream of the Mekong River.

Conclusions:

11. With the exception of the Tonle Sap, the hydrological condition along the Mekong mainstream during the year of 2011 was slightly increased in general above the year 2010's range which might be defined as a normal year condition.

12. Between Chiang Saen and Kratie, the dry season in 2011 began earlier than usual in the middle of November 2010 which offset the 2010 flood season.

13. The sudden non natural further reduction in Mekong mainstream water levels from late December 2010 onwards suggests reduced flow from China as reservoir releases could not be sustained as storage levels fell to critical levels. It is recommended that dry season data be requested from China in the future.

14. Also, It is acknowledged that the operation of the Jing Hong hydroelectric power plant some 3 km upstream from the Jing Hong gauge is likely to have some impact on the downstream fluctuations of water levels, and that there is some evidence of this in the dry season daily water levels transmitted to the MRCS and available on our website. (www.mrcmekong.org)

15. It is concluded that the operational impacts of the upstream hydropower plants are detectable but generally quite small at the diurnal and weekly timescales. They are most evident at Chiang Saen but are filtered out by natural hydrological processes towards Luang Prabang and Vientiane. This reveals the basin scale effect on the smaller variances of the annual flood hydrograph.

The JC Meeting may wish to take note of the hydrological conditions in the Lower Mekong Basin in 2011.

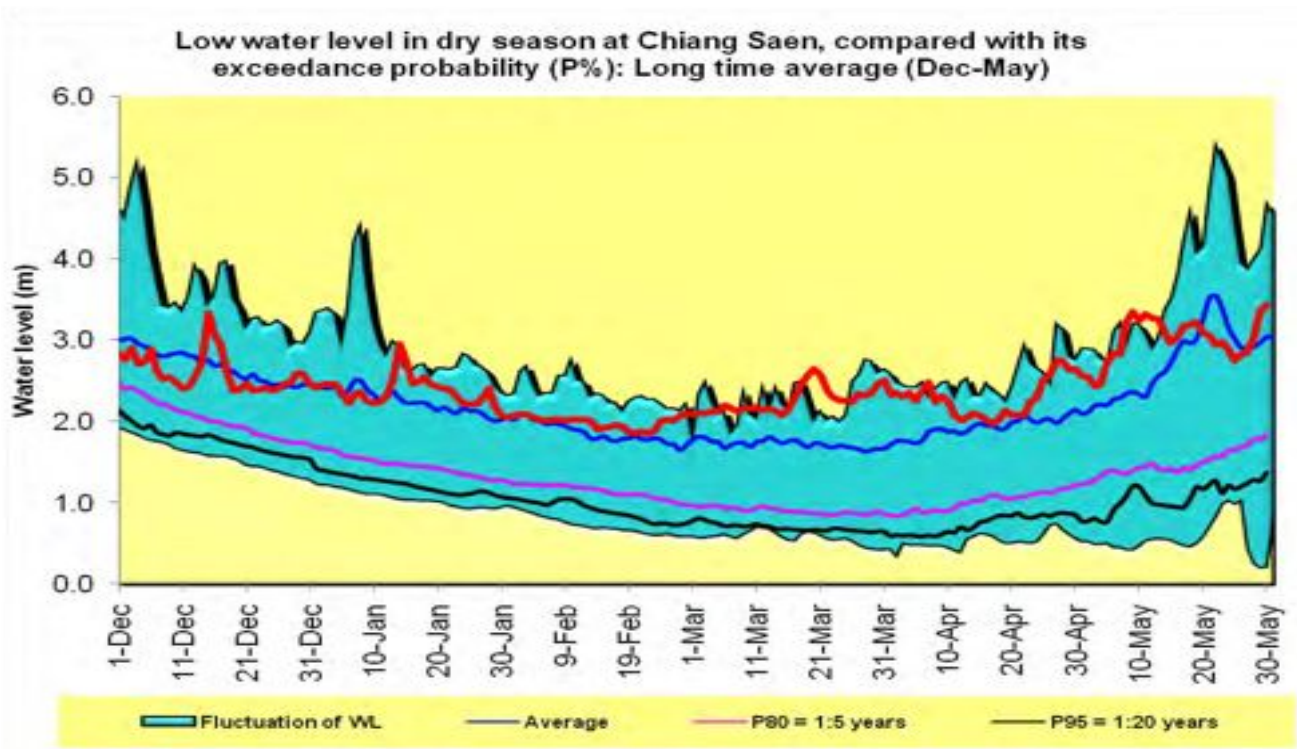


Fig. 1 The 2011 low flow hydrograph at Chiang Saen, compared to the long term average.

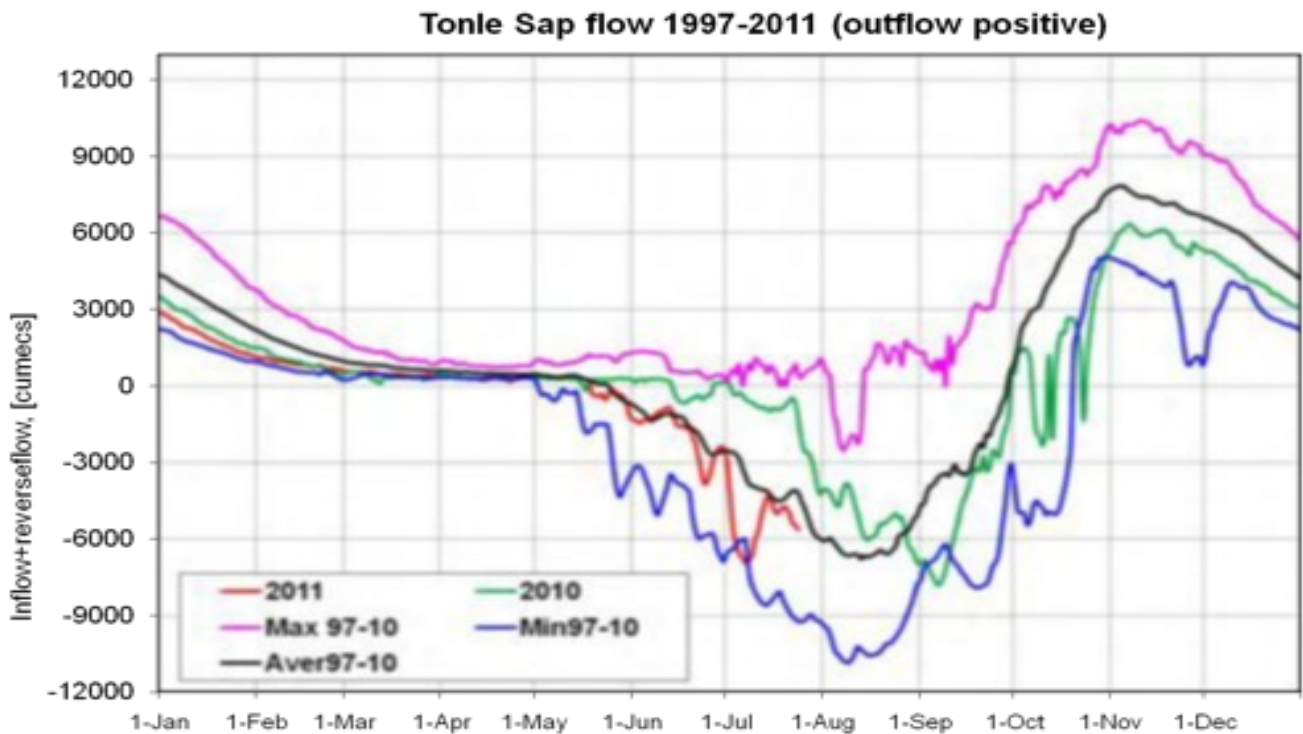


Fig. 3 The 2011 annual hydrograph at the Tonle Sap, compared to the long term average.

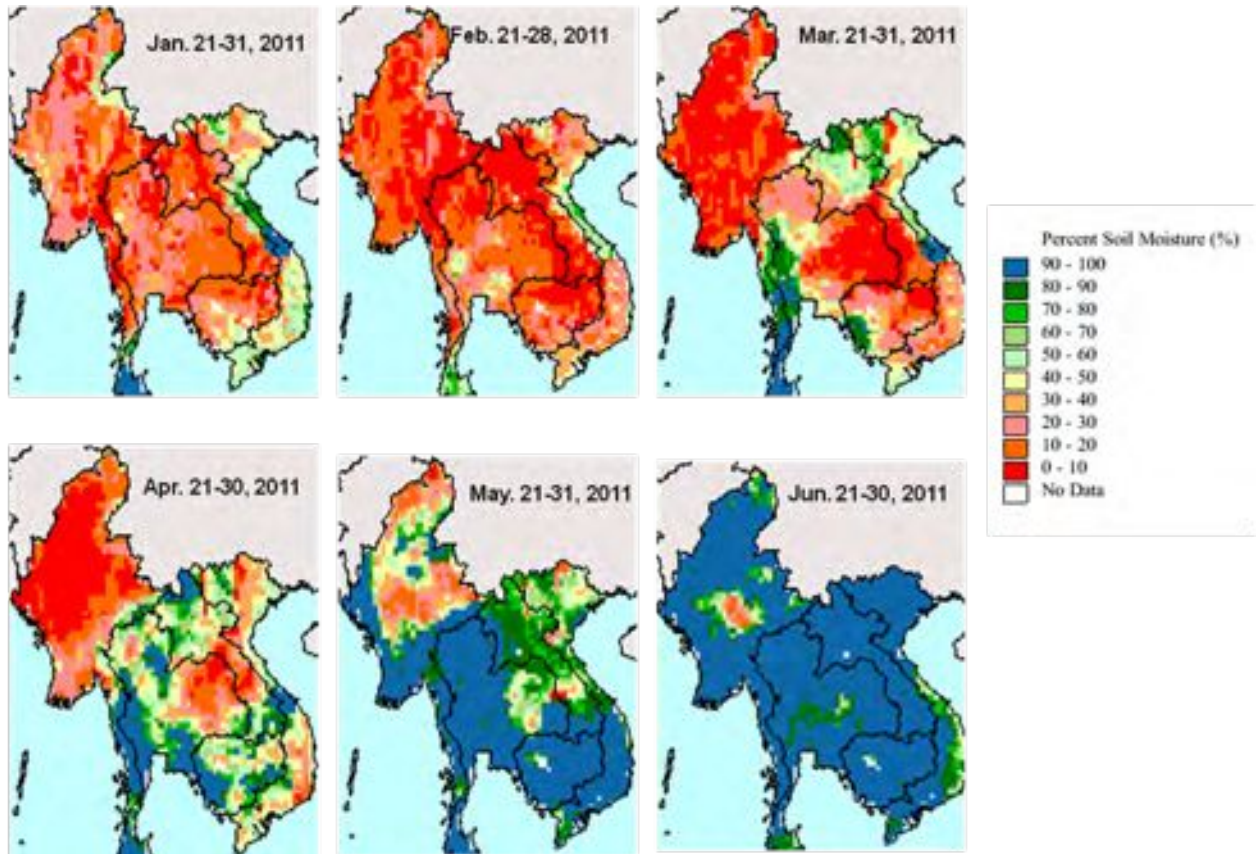


Fig. 2 Deficient soil moisture during January to June 2011 based Satellite Image

ATTACHMENT 7

ACHIEVEMENT SINCE THE FIFTEENTH DIALOGUE MEETING

NOTE FOR INFORMATION

MRC ACHIEVEMENTS SINCE THE FIFTEENTH DIALOGUE MEETING

1. Since the Fifteenth Dialogue Meeting was held on 27 August 2010 in Phnom Penh, Cambodia, the MRC has reached some major milestones in its work towards sustainable development of the Lower Mekong Basin. These milestones include the approval of the Integrated Water Resources Management-based Basin Development Strategy and the Strategic Plan for 2011-2015 which provide good guidance and planning framework to the Commission. Good progress on the implementation of the Independent Organizational Review recommendations has also been made. Thanks to continuous and growing support from Development Partners, the MRC and its Programmes have generally achieved their expected outputs during the past year.
2. Developments regarding MRC Work Programme include the approval of the new phases of key MRC programmes, such as those for the Environment, Flood Management and Mitigation, Fisheries and Information and Knowledge Management programmes. The Basin Development Plan, Drought Management and Climate Change and Adaptation Initiative documents for 2011-2015 are being considered by countries. The MRC is also developing a more expanded approach of MRC's Role in Agriculture and Agricultural Water Management, in which issues and opportunities surrounding the sector and rationale for MRC's engagement in the agriculture sector were proposed. The future direction of the Agriculture and Irrigation Programme is currently being prepared for consideration by the Countries.
3. Much effort has been put into strengthening partnerships between the MRC and other development partners. An MOU between MRC Secretariat and United States Geological Survey (USGS) was signed in April 2011 for water resources management matters including especially ground water management. The MRC Secretariat and the Murray Darling Basin Authority (MDBA) signed an MOU in May 2011, supported by AusAID and facilitated by the International Centre of Excellence in Water Resources Management (ICE WaRM).
4. With regard to the cooperation with our Dialogue Partners China and Myanmar, there is a significant progress witnessed in recent years with more frequent interactions at both strategic and technical levels. Where understandings have been reached on cooperation, then direct lines of communication have been established between MRCS programmes and assigned agencies in the Dialogue Partner countries. Technical cooperation is clearly increasing in a number of areas, including flood management, fisheries, sustainable hydropower, exchange visits and both Dialogue Partners have joined MRC's Junior Riparian Professional project..
5. The MRC Secretariat discussed with the Chinese Ministry of Water Resources in November 2010 on sharing of dry season data, secondment of Chinese MWR officials, China joining the Junior Riparian Professional project, and joint studies on sediment management and the follow up to the Strategic Environment Assessment (SEA) of mainstream hydropower development. A discussion with the Hydropower and Water Resources Planning and Design General Institute was also held to explore how MRC and the Ecosystem Study Commission for International Rivers (ESCIR), China's designated focal point to MRC on technical hydropower related issues can continue their cooperation. Some potential areas of cooperation were also discussed and considered, such as further exchange of experts and modelling teams including issues relating to modelling and discussion on the future flow regime in the Lancang-Mekong during implementation and

operation of the remaining dams in the Lancang cascade. Joint research on past as well as expected changes to sediment and nutrient flows resulting from the Lancang cascade as well as joint studies on climate change were also discussed.

6. After considering an official invitation letter from the Chairman of the MRC Council for 2010/2011 regarding the accession of the Republic of the Union of Myanmar to the MRC, Myanmar informed the Secretariat in early May 2011 that for the time being Myanmar will continue to cooperate with MRC as a Dialogue Partner.

7. Overall, the Secretariat has substantially increased its cooperation with regional development partners since the Fifteenth Dialogue Meeting. Similarly, the trend towards increasing dialogue and engagement with Non-Governmental Organizations, the academic world and civil society has been maintained. MRC gained much exposure through such events and were able to explain and promote its role and share experiences with other organizations and regional bodies. These events include the International Conference on Deltas-Climate Change on 29 September-1 October in Rotterdam; the Bonn 2011 International Dialogue and Conference on Water, Energy and Food Security Nexus on 12-13 October 2010 in Bonn and the International ADB and Partners Conference on Water crisis and choices on 11-15 October 2010 in Philippines. In addition, the MRC also participated at the 9th Asian Fisheries Forum in Shanghai, China on 22-25 April 2011, sharing 29 scientific papers and disseminating information on MRC's role in sustainable Mekong development. The MRC was awarded a Gold Medal for its efforts towards sustainable Mekong fisheries development at this conference.

ATTACHMENT 8

PROGRESS REPORT ON SHARING OF HYDRO-METEOROLOGICAL INFORMATION AND FUTURE AREAS OF COOPERATION

NOTE FOR INFORMATION

PROGRESS REPORT ON SHARING OF HYDRO-METEOROLOGICAL INFORMATION AND FUTURE AREAS FOR COOPERATION

Progress to Date

1. The cooperation on the Provision of Hydrological Information of the Lancang/Mekong River in the Flood Season was initiated in 2002 when the Agreement on the Provision of Hydrological Information and its Implementation Plan was signed between the Ministry of Water Resources of China (MWR) and the Mekong River Commission. The agreement was renewed in 2008 with a five-year extension and has provided a foundation for the cooperation between the MRC and the People's Republic of China on sharing of hydro-meteorological information.
2. As a result MRC in cooperation with MWR has invested in the improvement of two hydrological stations, namely Jinghong and Man'An, in Yunnan Province. This included the establishment of a Data Centre at the Provincial Bureau of Hydrology and Water Resources in Kunming, the provision of automatic water level equipment and related installation, telecommunication and data management systems, the provision of a discharge measurement motor boat and one set of electronic discharge measurement (Acoustic Doppler Current Profiler) and the provision of technical training for operators at the Data Terminal and at both hydrological stations in using these new hydrological equipment.
3. In 2010, the MRC continued to provide supplementary funds to cover parts of the communication and operation expenses for this system. Twenty-four hourly water level and twelve hourly rainfall data have been sent daily from China to the MRCS for flood forecasting via a telemetry system from 15 June to 15 October each year. The data collection and transmission have been working very well.
4. Under financial and technical support from the MRC during 2010 Jinghong and Man'An were successfully upgraded into fully automatic data transferred standards with interval of data transfer every 15 minutes using advanced technology of GPRS provided by mobile phone services. Data loggers of these two stations were also completely improved to be consistent with other hardware and software parts of the stations. Currently, hydrological data generated by these stations are automatically transferred to and stored into the FTP server based in Kunming. During the wet season data covering the previous week were provided to the MRC Secretariat by email every Monday morning.
5. Under the management of MWR during the last nine years China has provided both human and capital resources to maintain the facility and equipment of the two stations in order to ensure the smooth provision of hydrological data to MRC. Data provided by China have been essential for MRC in conducting hydrological condition analysis and assessment as well as running the MRC Flood Forecasting system which are significant for people living in the downstream of the Mekong River.
6. In order to facilitate drought relief efforts of the MRC Member Countries during early 2010, China decided to provide the MRCS with hydrological data from Jinghong and Man'An stations in Yunnan province from 22 March up to 17 May 2010 which was during the wet season. This provision of hydrological data indicated a strong commitment from China in cooperating with the MRC in the areas of information and data exchange and sharing.

7. MRC, through the Information and Knowledge Management Programme (IKMP) has strengthened the cooperation with China on data, information exchange and sharing and staff exchange. A visit was made by IKMP's Modelling Team during 2010 to Kunming to discuss and exchange views on input data and modelling results with Chinese counterparts. It was agreed that both sides will strengthen the exchanges of modelling work in terms of input data, model set up and calibration and other related issues in order to create a consensus understanding about water regimes in the Lancang/Mekong River. A Junior Chinese Expert had started working in IKMP since early March 2011 under the Junior Riparian Professionals (JRP) modality which aims to strengthen cooperation between both sides in information and expertise exchange.

8. To respond to the effects of drought hazards on riparian people's livelihood, a proposal was jointly prepared by MRC programmes and shared with China for defining the threshold of water levels in the mainstream which, if reached, would signal that a drought condition may affect agriculture, water supply and navigation. The threshold level will allow China to automatically send hydrological information to MRC without waiting for the situation to be declared an emergency or without having to receive a formal request from MRC or any of its Member Countries.

9. In response to the needs from MRC Member Countries in Disaster Management and Mitigation, in June 2010, China provided assistance to MRC that allowed MRCS staff and officers from Member Countries to attend the 2010 International Training Program on Management of Flood Control and Disaster Mitigation. The training programme which was sponsored by the Ministry of Water Resources and organized by the China Institute of Water Resources and Hydropower Research, and co-organized by the Yellow River Conservancy Commission and Bureau of Hydrology of the Ministry of Water Resources, has provided significant benefits to enhance the capacity of MRC in Disaster Management in general and food management and mitigation in particular.

10. A great progress was made when a MRC delegation led by the Chief Executive Officer (CEO) of MRCS made a visit to China in June 2010. The delegates had the opportunity to understand water resources development in China by visiting hydropower structures in Yunnan province. In addition, in November during his visit to Beijing, the CEO of MRCS was warmly received by the MWR and was invited to participate in the 2010 Beijing Forum. The Forum provided an excellent opportunity to share views with scholars and practitioners from different backgrounds on concerns and issues related to governance of water resources and in particular the Lancang-Mekong River.

Future Areas for Cooperation

11. **Continuation and extension of the cooperation on the Provision of Hydrological Information of the Lancang/Mekong River:** Data and information related to hydrological condition of the Lancang/Mekong River will be continuously provided to MRC by China through maintaining and improving the operation of two stations namely Jinghong and Man'An. Moreover, internal discussion and consultation should be made by both sides and with each other in order to extend the cooperation in terms of the scope and time-scale when the current agreement expires in 2013.

12. **Dissemination of MRC hydrological data:** Data and information from the MRC Information System has been available through its web-based data portal at <http://portal.mrcmekong.org>. The portal aims to provide access to the Master Catalogue, interactive maps, Atlases, relational databases, model visualization, interactive products etc and to the Virtual Mekong Basin (VMB) with four start balances for water, sediments, nutrients and carbon. An internal prototype is available. The Virtual Mekong Basin is being developed and tested before its launch. The MRC portal now has been opened to the public and will have a link to the MRC Website when the website is successfully upgraded.

13. **Dry Season Data Sharing:** a short proposal on defining the threshold of water level for low flow condition has been shared with China for further study and review. A consensus technical view in this issue needs to be further discussed and agreed by both sides in order

to better reduce the vulnerability of people living downstream to the threat of drought hazards.

14. **Training in Flood and Drought Management:** MRC will follow up with MWR and its Line Agencies to identify the scope of training that would be most appropriate to Member Countries and MRCS staff.

15. **Secondment of a Chinese Expert:** Further communication with and preparation of a proposal to MWR needs to be carried out to define a modality and mechanism for MRCS to host a seconded staff from China.

16. **Junior Riparian Professional Programme (JRP):** Following up with the success of the On the Job Training of the first Chinese JRP in IKMP/MRC. It is strongly recommended that this model be continued in order to enhance the cooperation between China and MRC.

ATTACHMENT 9

PRESENTATION BY CHINA ON LANCANG RIVER HYDROPOWER AND WATER RESOURCES DEVELOPMENT AND ENVIRONMENTAL MANAGEMENT PLAN

NOTE FOR INFORMATION

**PRESENTATION BY CHINA ON LANCANG RIVER HYDROPOWER AND WATER
RESOURCES DEVELOPMENT AND ENVIRONMENTAL MANAGEMENT PLAN**

Strengthen Cooperation between upstream & Downstream
Promote Development and Protection on Lancang-Mekong River

*For
The 16th Dialogue Meeting between MRC and China*

*August 28, 2011
Vientiane, Lao PDR*

**Presenter: Zhou Shichun
Deputy Secretariat General, ESCIR, China
Email: zhoushichun@vip.sina.com**

Outlines

1. Review on Technical Exchanges and Cooperation since 15th dialogue
2. Progress of Hydropower Development on Lancang River
3. Environmental Protection Measures for Lancang River Hydropower Development
4. Further Cooperation Plan

1. Review on Technical Exchanges and Cooperation since 15th dialogue

Since the 15th Dialogue Meeting between MRC and China, the Ecosystem Study Commission for International Rivers (ESCIR) has conducted several technical exchanges and cooperation programs with MRCS, which enhanced mutual communication and understanding.

- *Jinghong Xiaowan*
- On June 7 to 9, 2010, a delegation headed by Mr. Jeremy Bird, former CEO of the MRC Secretariat, was invited to visit *Jinghong* and *Xiaowan* hydropower stations on the Lancang River, during which the Chinese delegates briefed on the project composition and layout, operation scheduling, and environmental protection



1. Review on Technical Exchanges and Cooperation since 15th dialogue

- 2). Regional Stakeholder Workshop on "Avoidance, Mitigation and Enhancement" of Strategic Environmental Assessment (SEA) of Proposed Hydropower Dams on the Mainstream Mekong.
- On June 28-29, 2010, the Regional Multi-Stakeholder Workshop on "Avoidance, Mitigation and Enhancement" of Strategic Environmental Assessment (SEA) of Proposed Hydropower Dams on the Mainstream Mekong was held in Ho Chi Minh City, Vietnam. At the invitation of the MRC, three ESCIR delegates attended the workshop



1. Review on Technical Exchanges and Cooperation since 15th dialogue

- 3). The SEA Cooperation project between ESCIR and MRCS on the Mainstream Dams of the Lower Mekong River was successfully finished in October, 2010.



1. The Final Report of SEA for Hydropower on the Mekong Mainstream was publicized in October, 2010.
2. The said report has been translated into Chinese by ESCIR in March, 2011.
3. Preliminary Analysis and Comparison on the Final Report of SEA for Hydropower on the Mekong Mainstream.

1. Review on Technical Exchanges and Cooperation since 15th dialogue

- 4). 3rd Regional Stakeholders Forum on Mekong Basin Development Plan,
 - MRC held the 3rd Regional Stakeholder Forum on the Mekong Downstream Development Plan in Vientiane, Lao PDR from July 29 to 30, 2010. ESCIR delivered a keynote speech entitled "Strengthening Cooperation among Riparian States, and Promoting Common and Sustainable Development for Basin".



1. Review on Technical Exchange and Cooperation since 15th dialogue

- 5). Jeremy Bird, former CEO of MRC visited ESCIR
 - On November 4, 2010, Mr. Jeremy Bird, former CEO of the MRC, paid a visit to the ESCIR upon invitation. In the meeting, both sides discussed about the issues of common concerns, such as the hydrological situation and sediment changes in the mainstream of the Lancang-Mekong River, fish protection and climate change, as well as the potential collaborations in these aspects. It was unanimously expected to further step up exchange and cooperation.

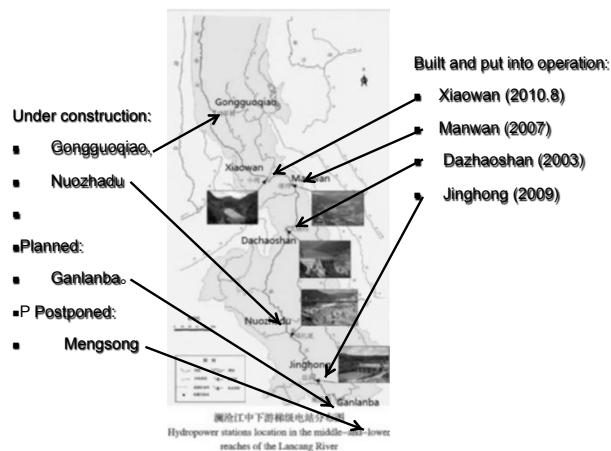


2. Progress of Hydropower Development on Lancang River

- The hydropower development planning for the middle- and lower- Lancang River was approved by China government in 1987. Eight cascades hydropower stations were planned. The development tasks are: giving priority to power generation, while combining benefits such as navigation, flood control and water supply.



Source: MRC SEA for Hydropower on the Mekong Mainstream Inception Report (Vol 2), ICEM, Oct., 2009



2. Progress of Hydropower Development on Lancang River

- ESCIR has paid closed attention to and carried out long-term studies on the hydropower development and environmental protection of the Lancang River. The latest progress of the hydropower development of its middle and lower reaches is as follows:
 - 1) *Gongguoqiao* Hydropower Station is intended for impoundment this September and its first generating set will be put into operation in the following October;
 - 2) *Xiaowan* Hydropower Station have gone into operation, and in September this year, the Phase-IV water storage project will be implemented to reach the normal pool level;
 - 3) *Nuozhadu* Hydropower Station is going to initiate impoundment this November, and bring its first generating set into operation in July next year;
 - 4) *Ganlanba* Hydropower Station has launched the construction site preparations, and work of access to water, power supplies and transport;
 - 5) *Mengsong* Hydropower Station has postponed development.

3. Environmental protection measures for Hydropower Development on Lancang River

- During their construction and operation, hydropower cascades on the Lancang River have rigorously observed the relevant environmental protection laws and regulations, earnestly carried out the environmental protection measures, conducted environmental monitoring and environmental management to mitigate impacts on the lower Mekong River.
 - 1) *Initial impounding plan for Xiaowan Hydropower Station*
 - In consideration of its impacts on the lower Mekong River, the initial impounding plan of Xiaowan Hydropower Station has taken in order to mitigate its adverse impact on the downstream hydrologic.
 - The initial impounding plan lasts three years from 2008 to 2011 in four phases. This year marks the fourth phase and the impoundment work will be finished at the end of the wet season this year.
 - 2) *Operation of Jinghong Hydropower Station*

Before the completion of *Ganlanba* Hydropower Station, Jinghong Hydropower Station will maintain its shipping and ecological flow at 504m³/s, control downstream water-level fluctuation at no more than 1m/hr. Moreover, ESCIR is scheduled to join hands with the scientific research institutions concerned to further study the optimal scheduling scheme of the Jinghong Hydropower Station.

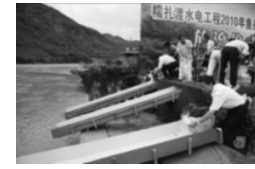
3. Environmental protection measures for Hydropower Development on Lancang River

3) *Recent Fish Protection Activities along Lancang River*

- on September 26, 2010, the Department of Agriculture of Yunnan Province and the Government of Xishuangbanna Dai Autonomous Prefecture carried out a campaign named "Enhancement and Releasing of Fishery Resources in the Lancang-Mekong River in 2010". More than 80,000 channel catfish fries were released into Lancang River.



- Nuozhaodu Fish Enhancement and Releasing Station was completed and put into production in April 2010. And On July 26, 12,000 channel catfish with a length of 6-10cm were successfully released in the Lancang River.



3. Environmental protection measures for Hydropower Development on Lancang River

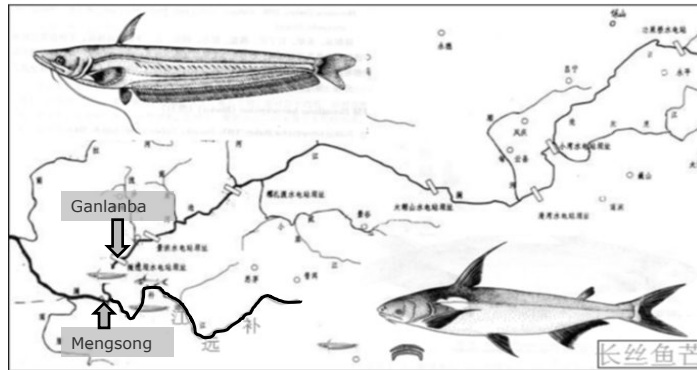
3) *Recent Fish Protection Activities along Lancang River*

- Gongguoqiao Hydropower Station has finished catching fish in nets to pass the dam for three times from July 2010 to April 2011, involving over 10,000 fish falling into nine categories of the Lancang River water system

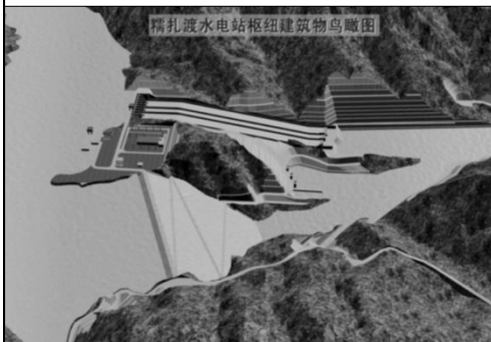


- 4) Mengsong Hydropower Project to be postponed

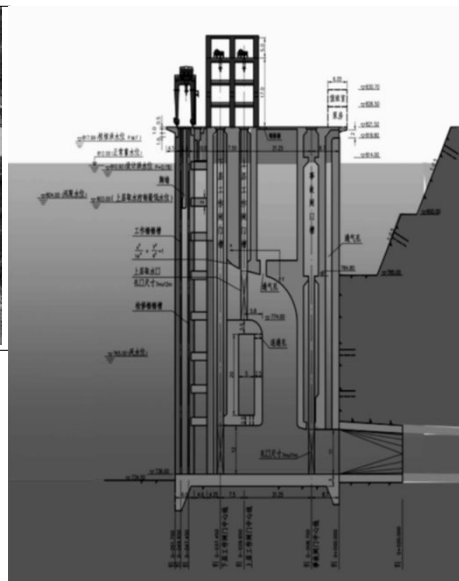
- In order to maintain the passage to Buyuan River for migratory fishes, Mengsong Hydropower Station shall be postponed, although the local government and community have strong desire to build it.



- 5) Stratified Water Intake in Nuozhadu Hydropower Plant



The stratified water intake measure is applied in Nuozhadu Hydropower Plants, the said measure can reduce the adverse effect of low temperature discharge upon the downstream reaches, especially for aquatic life.



6) Updates on Environmental Protection Measures in Nuozhadu Hydropower Station



① Stratified Water Intakes



② Rare Plant Protection Garden



③ Production Wastewater Treatment



④ Resettlement Town



⑤ Fish Protection Station



⑥ Construction Site View

Note: All pictures were taken on August 25, 2011

7) Other Common Environmental Protection Measures

- The following environmental measures are common in hydropower stations in Lancang Rivers.



渣场绿化措施
坡
Spoil yard
landscaping measures



进场公路绿化措施
Accessing road
landscaping measures



边坡绿化措施
Slope
landscaping measures



砌石挡墙护
Stone retaining wall
at gravel yard



小湾水电站珍稀植物移植区
Rare Flora Replanting Garden
at Xiaowan Reservoir



景洪水电站珍稀植物移植区
Rare Flora Replanting Garden
at Jinghong Reservoir



金光寺自然保护区野生动物救助站（小湾资助）
Wildlife Rescue and Rehabilitation Station in
in Jinguang Temple Nature Reserve



4. Further Cooperation Plan

- ESCIR preliminarily expects that there will be an opportunity to conduct a technical exchange with MRC in late 2011 or early 2012, promoting mutual communication and understanding of the laws and regulations, evaluation standards, technical methods, environmental management and monitoring between the upstream and the downstream.
- It is expected that, through such technical exchange, we can jointly discuss the countermeasures and criteria for environmental protection during the exploitation of hydropower in the Lancang-Mekong River Basin, and make positive contributions to boosting sustainable development in this region.

ATTACHMENT 10

PROGRESS ON HYDROPOWER AND WATER RESOURCES DEVELOPMENT

PROGRESS ON HYDROPOWER AND WATER RESOURCES DEVELOPMENT

I. BACKGROUND

1. The MRC has made considerable progress in advancing awareness of sustainable hydropower issues and developing practical tools for the Lower Mekong River Basin since the MRC Initiative on Sustainable Hydropower (ISH) was formulated in 2008-2009, and formally endorsed by the MRC Joint Committee in July 2009.

2. The MRC appreciates the cooperation with Dialogue Partners on sustainable hydropower activities, especially China for the constructive engagement through the Ecosystem Study Commission for International Rivers (ESCIR) in 2009-2010. To date, this cooperation has included technical exchanges, ESCIR participation in key strategic assessments of LMB hydropower, and site visits to hydropower facilities on the Lancang-Mekong River by MRC Member Country officials and MRCS.

3. The new ISH strategy for 2011-2015 provides additional opportunities to expand cooperation with China and Myanmar on sustainable hydropower matters, and move beyond basic data sharing toward greater sharing of experiences with the development and use of practical tools that advance sustainable outcomes in the management and development of Mekong hydropower.

4. In this instance the MRC highlights three topics for enhanced cooperation on hydropower issues over the MRC Strategic Plan period 2011-2015, namely:

- Ongoing MRC Cooperation with China's ESCIR in 2011, with a view to having a programme for multi-year technical cooperation on sustainable hydropower
- Cooperation on the exchange of information and experience on trialling the new generation of hydropower sustainability assessment tools, and
- Knowledge sharing on benefit sharing mechanisms suited to the Mekong hydropower context, focusing on national-to-local benefit sharing mechanisms.

II. ONGOING COOPERATION WITH ESCIR

5. MRC's technical cooperation on sustainable hydropower issues with China is mainly through ESCIR, recognizing that ESCIR brings all PRC hydropower constituencies together. On the MRC side, this technical cooperation is coordinated through the ISH and involves other MRC Programmes, NMCS and line agencies of MRC Member Counties.

II.1 MRC Approach and ISH Activities

6. In regional forums sponsored by the MRC, China has indicated it wants to continue the ESCIR-MRCS relationship successfully developed in 2009-2010. Thus the ISH strategy for 2011-2015 was formulated with a multi-year activity called "Ongoing Cooperation with China through the Ecosystem Study Commission for International Rivers" (Output 3.1d).

7. Preparations have now been made to have the first MRCS-ESCIR meeting for 2011 possibly in September. MRCS proposes, firstly, to brief ESCIR on the key outcomes of recent MRC activities that relate to LMB hydropower; secondly, to invite the ESCIR to brief the MRCS on recent developments in Lancang-Mekong hydropower; and thirdly, to discuss and agree on a provisional programme for multi-year technical cooperation.

8. MRCS can provide technical briefings on issues both of interest to China, and important for technical-level dialogue, from the perspective of the lower riparian countries in the Lancang-Mekong River system. These include, for instance:

- the outcome of the SEA of proposed Lower Mekong Basin (LMB) mainstream hydropower schemes;
- the status of first MRC Prior Consultation process including outcomes of key studies on basin-level sediment flow;
- results of recent MRCS modelling of sediment and low season water flows
- the LMB Basin Development Strategy (BDS) adopted by the MRC Council in January 2011, and
- The 5-year Strategy for the Initiative on Sustainable Hydropower (2011-2015).

9. MRCS proposes that elements of a multi-year technical cooperation programme may include further (i) report & data exchange (ii) technical staff exchanges, seminars and visits including modelling staff and staff from other MRC Programmes (iii) site visits to Lancang-Mekong dams (iv) ESCIR participation in the key regional workshops concerning sustainable hydropower themes, and (v) other forms of technical exchange and research cooperation (e.g., joint preparation of case studies around various sustainable hydropower topics). MRC proposes that discussions on multi-year technical cooperation include the two other topics mentioned in this Brief, under III and IV.

II.2 Modes of Potential Cooperation

10. Arrangements are underway for the ESCIR-MRCS meeting in the September 2011 timeframe. The MRC would also further consult with Myanmar if it wishes to participate in regional cooperation activities with MRCS-ESCIR.

III. COOPERATION ON HYDROPOWER SUSTAINABILITY ASSESSMENT TOOLS

11. Sustainability assessment tools are not only essential to monitor and measure progress in introducing sustainable hydropower consideration in the Mekong, they also help to target areas for improvement and to compare current practice with good practice. Assessment tools also offer a systematic, practical approach to structure dialogue, raise awareness and build capacity to advance sustainable forms of hydropower.

IV.1 MRC Approach and ISH Activities

12. Two new hydropower sustainability assessment tools were developed in 2010 after multi-year processes. Both have the potential to make a significant contribution to sustainable outcomes with Mekong hydropower over the longer term. The first is the Hydropower Sustainability Assessment Protocol developed in a multi-stakeholder international process (2007-2010) led by the International Hydropower Association (IHA).

13. The Protocol is largely a project-specific assessment tool. The MRCS closely followed progress with the Protocol development and offered advice on various aspects. MRCS hosted the HSAF¹ meeting in Vientiane in June 2010, and contributed to the international trialling of the Protocol working with NMCS and other MRC stakeholders.

14. The second tool is the Rapid Sustainability Assessment Tool (RSAT) developed by the MRC with regional Partners (ADB and WWF) in close cooperation with NMCS. RSAT is a flexible tool that enables the consideration of single or multiple hydropower projects at different stages of planning and development in a basin / sub-basin setting. It can also be used to reinforce SEAs and project level EIAs / SIAs.

15. The MRC launched RSAT at a side-meeting at the MRC Council meeting in January 2011. Final field trials are being completed on Mekong tributary sub-basins by all four Member Countries at this time. Results to date are positive and indicate broad consensus

¹ Hydropower Sustainability Assessment Forum (HSAF)

among government, private and civil society participants on the value RSAT adds as a dialogue and assessment tool. The final version of RSAT and its associated package of capacity building products to support its implementation are to be completed in the second half of 2011 - aiming for targeted implementation of RSAT in LMB tributaries during 2012-2015.

16. The MRC expects that there will be considerable synergy in the use of the project-specific Protocol and the multi-project basin / sub-basin RSAT tool, as experience with implementation in government-led processes grows, and as the hydropower industry uses the tools flexibly on a voluntary basis.

IV.2 Modes of Potential Cooperation with Dialogue Partners

17. Representatives from the China Institute of Water Resources and Hydropower Research and China Hydropower Engineering were part of the multi-stakeholder Forum that developed the international Hydropower Sustainability Assessment Protocol. It is understood also that China will proceed with trials of the voluntary Protocol.

18. At this time the MRC would like to indicate to Dialogue Partners its interest to:

- i. Share experience on implementation of the international Hydropower Sustainability Assessment Protocol in the Mekong region in the coming years, and also, cooperate in evaluating the value added in the Mekong context;
- ii. Brief Dialogue Partners on the content and application of RSAT, and otherwise routinely brief Dialogue Partners on progress in RSAT implementation in the period 2011-2015, and
- iii. Explore a mechanism for regular interaction between MRCS and Dialogue Partners on practical uses of hydropower sustainability assessment tools, including involvement of the hydropower industry in these discussions.

19. This recognizes both the voluntary nature of the Protocol and the fact that hydropower developers and operators in the wider GMS Region have an important role to play in advancing sustainable practices in Mekong hydropower.

IV. KNOWLEDGE SHARING ON BENEFIT SHARING MECHANISMS

Benefit sharing has been a recurrent theme in international and national debates about hydropower and cooperation on sustainable management of water resources for over two decades. Today benefit sharing is widely seen as one of the most practical and powerful ways to advance cooperation on sustainable water infrastructure development and management, and done properly, could be a positive approach for all stakeholders.

IV.1 MRC Approach and ISH Activities

20. The MRC Basin Development Strategy (BDS) noted that benefit sharing can be considered at different scales (e.g., at region, national, sub-basin, and local scales). Transboundary forms of benefit sharing result from negotiated outcomes as there is no binding international law. In contrast, national-to-local forms of benefit sharing are normally prescribed in national laws and regulation. The MRC BDS also calls for “benefit sharing options for Mekong tributaries to be evaluated and reported upon by 2013”..

21. The ISH Strategy (2011-2015) includes multi-year support to Member Countries on benefit sharing. The ISH is to facilitate knowledge sharing among Member Countries and cooperate in drawing lessons not only from the Mekong and the wider Asian Region, but also from the growing pool of relevant world-wide benefit sharing experience (under Output 4.1c).

22. Initial activities on benefit sharing to date include preparation of a knowledge base (compendium) consisting of 5 Volumes and more than 120 documents, including.

- Volume I: Summary and Guide to the Knowledge Base (KB)
- Volume II: Compilation of Articles and Reports
- Volume III: Compilation of PowerPoint Presentations
- Volume IV: Compilation of Case Studies from around the world, and
- Volume IV: Examples of Legislation and Regulations

23. National workshops and briefings are planned in each Member Country in September and October 2011 to explore benefit sharing topics more in-depth. In the first half of 2012, a regional benefit sharing workshop with invited practitioners from other developed and developing country regions is scheduled. A regional / international study tour to view benefit sharing practices first-hand in different developing and developed county settings is also scheduled. A multi-year plan for benefit sharing support to Member counties is to be prepared in early 2011.

24. All Mekong Counties have experience with one or more forms of benefit sharing including the four main forms on hydropower projects, namely (i) monetary forms (ii) non-monetary forms (iii) equitable access to project services, and (iv) the most common form in the absence of a clear policy; indirect or additional benefits.

IV.2 Modes of Potential Cooperation

25. China has made considerable advancements with different forms of benefit sharing in the hydropower sector in the past two decades, including the allocation of hydropower revenues for reservoir reconstruction and development funds and the enhancement of long-term compensation arrangements for resettled groups.

26. The MRC would therefore appreciate the opportunity to:

- i. Learn more about the PRC experience in benefit sharing (direct and indirect), such as through ESCIR participation in the ISH Output for Benefit Sharing (or appropriate agency and practitioners, including HydroLancang).
- ii. Involve Dialogue Partners in regional technical exchanges on knowledge of benefit sharing, and particularly to participate in the regional benefit sharing workshops.

V. NEXT STEPS

Next steps are proposed as follows:

- **With China** – proceed with the planned MRCS-ESCIR meeting, with a view to set out a multi-year technical cooperation arrangement.
- **With Myanmar** – meet with the MRCS (ISH Team) at an appropriate time to explore Myanmar's interest in having their representatives participate in the activities noted above, including attending the regional workshops.


Ideally these arrangements would be completed in time to be reflected in the ISH 2012 Work Plan.

ATTACHMENT 11

PRESENTATION BY CHINA ON COOPERATION ON NAVIGATION ON THE LANCANG/MEKONG RIVER

NOTE FOR INFORMATION

PRESENTATION BY CHINA ON COOPERATION ON NAVIGATION ON THE LANCANG/MEKONG RIVER



Cooperation for Navigation

16th Dialogue Meeting
August 29, 2011
Vientiane, Lao PDR

August 29, 2011

Part 1 Introduction to the navigation on the Lancang- Mekong River

Part 2 China's Recent Efforts in Developing the Navigation on the Lancang- Mekong River

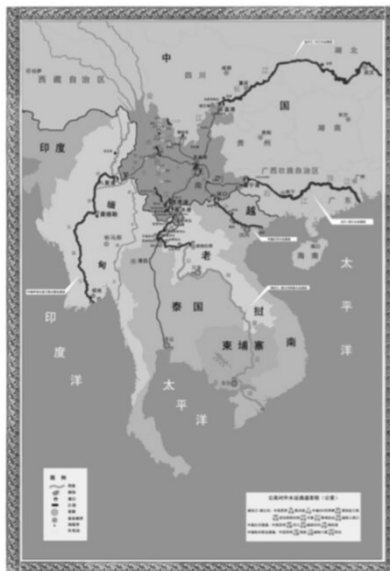
Part 3 Suggestions on Navigational Cooperation between China and MRC

August 29, 2011



Part 1 Introduction to the navigation on the Lancang-Mekong River

The Quadripartite Agreement on Commercial Navigation signed by China, Lao PDR, Myanmar and Thailand in April 2000 to jointly develop the navigation on the Lancang-Mekong River (Hereinafter referred to as “the River”)



16th Dialogue Meeting



Part 1 Introduction to the navigation on the Lancang-Mekong River

With a view to effectively and efficiently implementing the Agreement in general and Articles 9, 21 and 22 of the Agreement in particular, the four Parties agreed to establish a coordinating mechanism — the Joint Committee on Coordination of Commercial Navigation on the Lancang-Mekong River (hereinafter referred to as “the JCCCN”). So far the member countries have successfully convened 9 JCCCN Meetings and the 10th Meeting will be held next month in Yunnan, China





Part 1 Introduction to the navigation on the Lancang-Mekong River

The joint improvement of the 331-KM section of the Upper Mekong River from China-Myanmar Boundary Mark 243 to Huayxay of Laos performed by JCCCN member countries from 2002 to 2004 with a grant of 5 million USD from Chinese government



16th Dialogue Meeting



Part 1 Introduction to the navigation on the Lancang-Mekong River

Continuous development: vessels transporting not only single sundry cargos that were only traded at the beginning, but also containers, heavy and large-sized cargos, refrigerated fresh cargos and tourists as well.

The maximum load increased from 80 Tons to 380 Tons.

The navigation channel has become an important waterway connecting China and countries in Southeast Asia, playing a pivotal and unique role in building China-ASEAN Free Trade Zone, enhancing economic cooperation between GMS countries and promoting the exchanges of trade, economy and culture between and among the JCCCN member countries.

16th Dialogue Meeting



Part 2 China's Recent Efforts in Developing the Navigation on the Lancang-Mekong River



Since the beginning of the navigation, China has attached importance to building and maintaining the channel, totally investing over 400,000,000 RMB Yuan on the channel section within Yunnan Province and constructing many ports including Jonghong Port.

16th Dialogue Meeting



Part 2 China's Recent Efforts in Developing the Navigation on the Lancang-Mekong River

China steps up efforts on the construction of navigational infrastructure on the River.



The completion of Phase 2 of the project to improve the section from Simao Port to China-Myanmar Boundary Mark 243 to be ClassV, which is planned to be completed in 2013, will make the 178-KM section navigable for 300-Ton vessels all the year round.

16th Dialogue Meeting



Part 2 China's Recent Efforts in Developing the Navigation on the Lancang-Mekong River

The Menghan Operation Area under construction consists of 4 berths for cargo vessels of 300 tonnage and 2 berths for passenger vessels of 150 tonnage, with designed cargo volume of 1 million tons per year and designed passenger volume of 400,000 passengers per year.



Part 2 China's Recent Efforts in Developing the Navigation on the Lancang-Mekong River

China is seeking cooperation from the downstream countries to exert efforts in developing the navigation on the River.



On April 20-26, 2011, Mr. Weng Mengyong, Vice Minister of the Ministry of Transport of China led a delegation to conduct an on-site survey on the River which included delegates from Thailand and held meetings respectively with the Ministry of Transport of Lao PDR and Thailand.

16th Dialogue Meeting



Part 2 China's Efforts in Developing the Navigation on the Lancang-Mekong River

In the survey and at the meetings, the three countries agreed:

a. Through 10 years of development, the navigation on the River has benefited the people's life, economic and social development of JCCCN countries, setting an example of win-win situation created by quadripartite cooperation between and among China, Lao PDR, Myanmar and Thailand.

b. The economic and social development has posed higher requirement on conditions of navigation channel. Hence it is urgent to improve the traffic capacity.

c. It is of great necessity to ameliorate and upgrade the channel and to exert active



Part 3 Suggestions on Navigational cooperation between China and MRC

The examination and approval of dammed structures in China shall be subject to the *Guidelines on the Maintenance and Improvement of the Navigability of the Lancang-Mekong River* and shall be navigable for 500-Ton vessels.

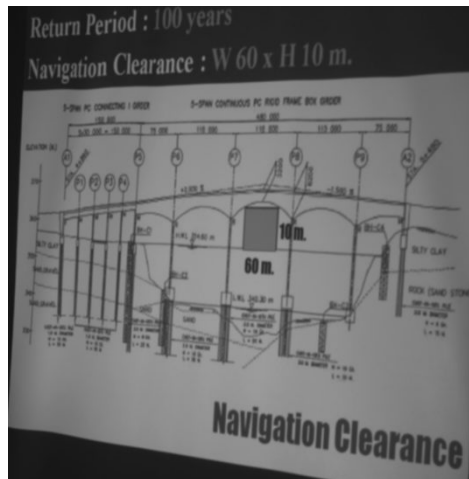


The bridges over the Lancang River are examined in accordance with National Navigation Standards of China and shall also be navigable for 500Ton vessels, with a clear height of 12 meters and a clear width of over 100 meters.

16th Dialogue Meeting



Part 3 Suggestions on Navigational cooperation between China and MRC



The Chiangkong-Huaxay Bridge has a clear height of 10 meters and a clear width of 60 meters, which, according to Chinese standards, cannot satisfy the two way navigation for 500-Ton vessels.

16th Dialogue Meeting



Part 3 Suggestions on Navigational cooperation between China and MRC

The discordance of technological standards between countries will probably cause the inconsistency of the navigation dimensions, which will affect the development of the navigation on the River.

It is suggested that MRC organize the setting of the standards of navigation channels and that JCCCN member countries also participate in the setting and the examination and approval of the result, to guarantee the uniformity of navigation standards in the upstream and downstream sections of the River, thus realizing the navigational smoothness and safety.

16th Dialogue Meeting



Conclusion

China and the countries along the River share waters and mountains.

To comprehensively exploit and utilize the navigation on the River is a shared wish of people of riparian countries.

China will make concerted efforts with riverine countries in protecting and promoting the navigation on the River, thus benefiting people of the countries along the River.

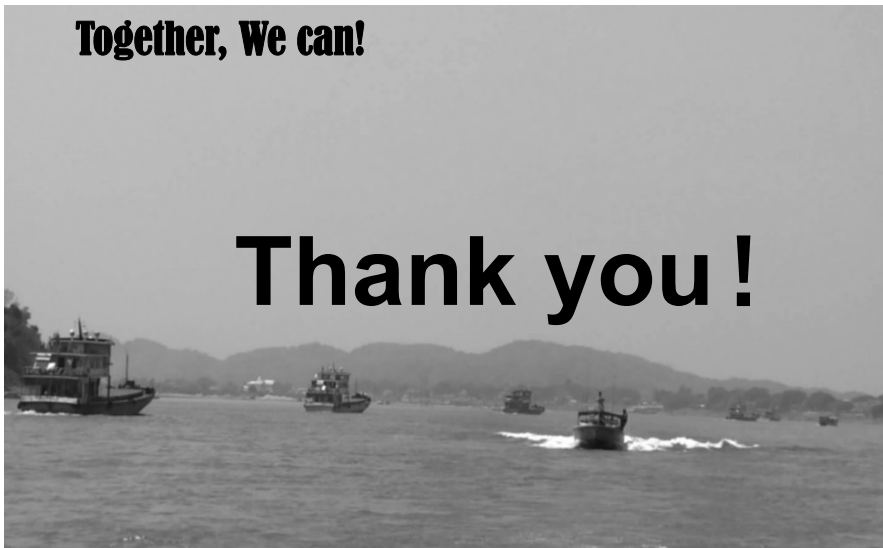


16th Dialogue Meeting



Together, We can!

Thank you !



16th Dialogue Meeting

ATTACHMENT 12

ENHANCED COOPERATION ON NAVIGATION

NOTE FOR INFORMATION

NAVIGATION PROGRAMME

I. Progress since the 15th Dialogue Meeting

1. NAP has been conducting a project on the 'Risk Analysis of the Storage, Handling and Carriage of Dangerous Goods' to estimate the efforts and tools for managing, preventing, controlling and combating pollution from navigation, and to reduce the risks of disasters that may derive from mishandling dangerous goods on board of ships, and in terminals and ports. As part of the project implementation a Regional Risk Assessment Workshop was conducted on 21-22 February 2011 in Vientiane, Lao PDR to which navigation specialists of P.R. China and Myanmar attended. Specific objectives of the workshop were to:

- Have a common understanding of the justification of the project, the project deliverables, and learn about the risk assessment process and dangerous goods;
- Share significant outcomes of the Questionnaire for Ports and Terminals, Vessels and the Environment;
- Reach an Agreement on the hazard groups and subdivisions in the Risk Register;
- Provide national experts with the know-how to complete the Risk Register that is required to complete the risk analysis of ports, terminals and vessels;
- Provide national experts with the know-how to use the Risk Register to determine risk ratings and identify possible prevention and mitigation measures for possible scenarios, and
- Determine the next steps of implementation plans for the Risk Analysis.

2. The cooperation between MRCS and the Joint Committee on Coordination of Commercial Navigation (JCCCN) has been progressing well. As with the previous Navigation Advisory Body meeting, representatives from JCCCN of Myanmar and P.R China attended the 9th Navigation Advisory Body (NAB) Meeting organized on 29 March 2011 in Siem Reap, Cambodia.

3. MRCS and the Government of Flanders have jointly organized a Regional Workshop on Development of the Professional Training on Syllabi for Inland Navigation Training on 17 May 2011 in Vientiane, Lao PDR. Navigation specialists from P.R. China and Myanmar also attended this meeting.

4. Participants at the Workshop noted the importance of training and education for the sustainable development of inland waterway transport (IWT) in the Greater Mekong river system. Some countries already have a well developed IWT education and certification system, while other countries have started to develop such a system. This means that there is a need for harmonisation by setting up minimum standards for education and training schemes and programmes and for crew certification and vessel registration and licensing. Cooperation between the authorities, institutes and training centres can be very helpful in this harmonisation process.

II. Planned Activities

5. NAP will continue to join JCCCN meetings as well as to invite representatives of the JCCCN to its future Navigation Advisory Body meetings.
6. NAP will also involve both P.R. China and Myanmar in the 'Risk Analysis of the Storage, Handling and Carriage of Dangerous Goods' project.

ATTACHMENT 13

PROGRESS ON JOINT TRAINING ACTIVITIES

NOTE FOR INFORMATION

PROGRESS ON JOINT TRAINING ACTIVITIES

**Progress in cooperation
in the relevant fields since the 15th
dialogue meeting**

Department of International Cooperation,
Science and Technology, Ministry of Water
Resources, P. R. China
August 29, 2011

The Main Contents

Since the 15th dialogue meeting, the Ministry of Water Resources, P.R. China has made pragmatic, effective cooperation and exchanges with the Mekong River Commission and the lower basin countries.

The Main Contents

- ❖ Successfully completing hydrological information provision in 2010 flood season
- ❖ Attending to the MRC's international conference on watershed management
- ❖ Selecting an excellent young expert for a short term exchange at the MRC
- ❖ Receiving the CEO of the MRC
- ❖ Receiving an expert delegation on technical maintenance of flood data reporting system from the MRC
- ❖ MWR's introduction to the 2011 international training program on flood forecasting technologies

❖ Successfully completing hydrological information provision in 2010 flood season



Yunjinghong Hydrological Station



Manan Hydrological Station

➤ MWR organized the Yunnan Hydrological Bureau to successfully complete hydrological information provision in 2010 flood season according to the agreement and implementation plan signed between the two sides.

➤ From July 15 to Oct. 15, 2010, totally 2460 groups of real time hydrological data for 246 time intervals were sent to the MRC Secretariat.

➤ Before the 2011 flood season, the Yunnan Hydrological Bureau already completed all the preparatory tasks at the two hydrological stations for hydrological information provision in 2011 flood season, in order to ensure the success of the work.

⚙️ Attending to the MRC's international conference on watershed management

➤ MWR designated two experts to attend the MRC's international conference on watershed management during March 9-11, 2011, i.e., Wu Daoxi, Director of Office for Flood Control and Drought Relief Headquarters of the Yangtze Water Resources Commission, and Hu Wenjun, Deputy Division Chief of the International Economic & Technical Exchange Center, MWR.

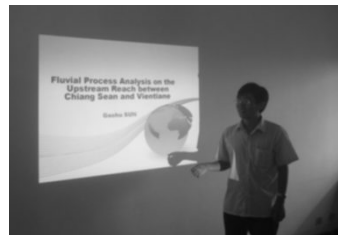


- Mr. WU Daoxi made a special speech on flood control management in the Yangtze River Basin, presenting pragmatic experiences and new concepts and policies on flood control management in the river basin, and the important role of large-sized reservoirs in river basin's flood control with the example of the Three Gorges Dam.



⚙️ Selecting a young expert for study at the MRC

- During April 2010, MWR sent the first young expert, Sun Gaohu, to the JRP project of the MRC. Mr. SUN actively participates in the detail programs of MRC, shows professionalism and good understanding in his own research fields, and also earns good appraisalment from the MRC.
- The exchange of young experts has deepened the friendship between the young experts of the two countries, and provided a good basis for expanding the exchange and cooperation between the two sides.



✿ **Receiving the CEO of the MRC**

- In November 2010, Chen Mingzhong, Deputy Director of the Dept. of International Cooperation, Science and Technology, MWR met with Jeremy Bird, CEO of the MRC at Beijing.
- The two sides exchanged ideas on hydrological information provision by the Chinese side to the MRC during flood seasons and the matters on the visit and study of young MWR experts at the MRC, thus laying a basis for strengthening the future cooperation.

✿ **Receiving the MRC delegation on the technical maintenance of flood data reporting system**

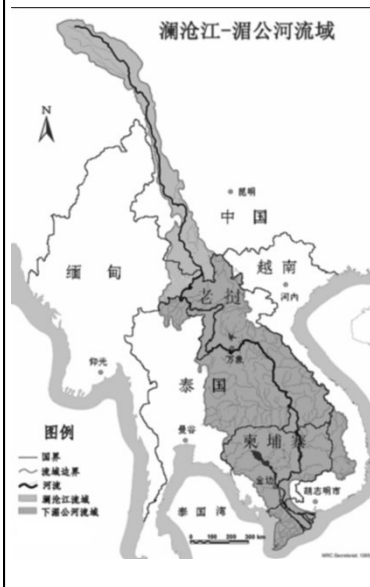


- During July 20-25, 2011, MWR received Dr. Khem Sothea and Mr. Khenghoi from the MRC and arranged their visit to Yunnan for the technical maintenance of flood data reporting system.

➤ The experts of both sides visited the data center at Kunming and the Yunjinghong and Manan hydrological stations, and made on-site check and technical maintenance of the equipment.



☀ MWR's introduction to the 2011 international training project on flood forecasting technologies



- Like the Yangtze River Basin in China, the Mekong River Basin is of great significance for the livelihood of local residents and the economic and social development in the river basin. Similarly, the two river basins also have many similar problems and challenges in flood forecasting, flood control and disaster reduction.

☀ MWR's introduction to the 2011 international training program on flood forecasting technologies

- MWR will invite experts of the Mekong River Basin countries to attend the international training project on flood forecasting technologies at Wuhan, China during Nov. 14-27, 2011. This program is aimed at sharing the successful Chinese experiences on flood forecast in the Yangtze River Basin and further intensifying the exchange and cooperation with the Mekong River Basin countries in this field.

⚙️ MWR's introduction to the 2011 international training project on flood forecasting technologies

➤ The main training topics

- ◆ Theories on the analysis of precipitation and runoff process.
- ◆ Practices of flood forecast in the Yangtze River basin
- ◆ Introduction to advanced flood forecasting technologies and methods
- ◆ Introduction to flood control planning in the Yangtze River Basin.
- ◆ Visit to the flood control projects of the Yangtze River, the Three Gorges Project, etc.



⚙️ MWR's introduction to the 2011 international training project on flood forecasting technologies

➤ Trainees and requirements

- ◆ The trainees will come from the MRC and member countries of the MRC (Cambodia, Laos, Thailand and Vietnam) and Burma.
- ◆ They should be experts in the fields of flood forecasting and management.
- ◆ Two experts will come from each of the MRC member countries, Burma and the MRC.

ATTACHMENT 14

UPDATE ON FLOOD FORECASTING ACTIVITIES

NOTE FOR INFORMATION

UPDATE ON FLOOD FORECASTING ACTIVITIES As of 25 July 2011

1. The Flood Management and Mitigation Programme (FMMP) has played a significant role for MRC / MRC Member Countries in the field of flood management and mitigation in the Mekong River Basin, and is committed to continuing this role. It has over the first six years of FMMP 2004-2010 engaged in close cooperation with the MRC Member Countries, but it has also gradually entered into cooperation with Dialogue Partners through an Exchange Study Visit to China in 2009 and Capacity Building and Training Courses in 2009/2010 and 2011.
2. The FMMP has entered the MRC Strategic Plan period 2011-2015 with support of the Netherlands-funded Bridging Period (01.11.2010-31.12.2011). Under the Bridging Period nine outputs are being accomplished, of which two outputs relate to flood forecasting. One covers daily flood forecasting operations during the flood season and one is to build and transfer knowledge and skills regarding the Mekong mainstream Flood Forecasting System (M-FFS) and the MRC Flash Flood Guidance System (MRC-FFGS) to staffs of the National Centers in the MRC Member Countries.
3. The Bridging Period is governed by the FMMP 2011-2015 Programme Document, which was recently approved during the 33rd MRC Joint Committee meeting, held in March 2011. During the period 2011-2015 the FMMP is the support programme to the Regional Flood Management and Mitigation Center (RFMMC), Phnom Penh. The RFMMC is structured into an Operations Unit providing the present core functions, and a Development and Support Unit to deepen and broaden the RFMMC's capabilities in support of the MRC Member Countries.
4. The RFMMC is carrying out MRC core functions in providing flood forecasting and warning information services on a daily basis to the MRC Member Countries. Furthermore flash flood guidance information is provided to the MRC Member Countries during weather situations, which may cause flash floods.
5. The staffs of the Operations Unit of the RFMMC regularly updates and uses the Action Plan (at least monthly) to monitor progress of data collection and data transfer, system operations, and steps for improvement of the M-FFS. Besides that it monitors the provision of scheduled support in transfer of knowhow and skills for National application of the M-FFS in identified pilot basins by the National Centers of the MRC Member Countries.
6. The MRC-FFGS is in operation and flash flood guidance information is directly made available to the National Centers of the MRC Member Countries in case of specific weather situations (of a.o. heavy rainfall, depressions, tropical depressions, tropical storms) with three hourly updates, and through the MRC website.
7. The MRC-FFGS is in operation, however the RFMMC need to build-up experience regarding the effectiveness of the system, which allows further fine-tuning of the system. To assess the level of effectiveness, information is required on the occurrence and non-occurrence of flash floods in certain rural, mountainous areas. The National Centers and the RFMMC have agreed to carry out FFGS testing in pilot areas. It is anticipated that the finding in these pilot areas will lead to further fine-tuning and more effectiveness of the FFGS.
8. The RFMMC together with the National Centers is building-up a database to identify the level of effectiveness through media information (information from the National Centers

and articles from newspapers, bulletins etc.). The RFMMC is anticipating continued back-up support from USAID for the MRC-FFGS.

9. The recent Mekong mainstream flood forecasting information in the flood season 2011 was recently faced by major forecasting challenges¹, leading to inaccurate forecasting information on the MRC website. As the soil moisture content was pretty saturated due to earlier heavy rain caused by TS Haima in the week before, the heavy rainfall which occurred on 1st July 2011 in the central part of Lao PDR caused flash floods, especially in the sub-catchments of Nam Gum, Nam Man, Nam Nhiep and Sebangfai. The 5-day forecast made for stations Paksane to Pakse showed substantial inaccuracies, far over the set benchmark levels.

10. The internal RFMMC's analysis showed that the 5-day flood forecast was showing far too low water levels for the hydrologic network stations between Paksane and Pakse. The accuracy of the forecast of those stations was influenced by:

- a. the high variability of the SRE (Satellite Rainfall Estimate from NOAA) and the NWP (National Weather Prediction from NOAA) influenced by critical weather conditions (underestimation of run-off values);
- b. internal model functionality (rating curve, model parameters);
- c. the adjustment made by the forecaster (judgment based knowledge, experience and on available information).

11. The forecasting complexity remains challenging. Based on this experience the RFMMC's action plan has provided even higher priority to investigation and assessment of the satellite data, the flash flood guidance information, rating curves, model parameters in order to represent satisfactory tributary inflows into the Mekong mainstream between Paksane and Pakse.

12. The RFMMC's 2011 Work Plan depends to a large extent on the available funding. At present the funding by the Netherlands for the Bridging Period ends by 31st December 2011. However funding by the German Environment Ministry through GIZ has become available in July for Systematizing of Climate Change into the Short, Medium and Long term Flood Forecasting of the RFMMC (USD 2.5 M²). It is anticipated that the funding from JAIF (USD 1.32 M) and EU (USD 1.8 M) will become available before 31st December 2011. Through strong support from ICCS interest of Swedish SIDA into the FMMP 2011-2015 programme document has been raised.

13. The RFMMC's Operations Unit providing the core functions for the MRC is considered a high priority; its financial sustainability needs the attention of the MRC Joint Committee. Regarding the organizational sustainability reference is made to the FMMP 2011-2015 Programme Document, in which is highlighted that continuity of the expertise and staffs required in the RFMMC is of utmost importance. Innovative ways need to be explored to prevent high mobility of staffs, which will negatively impact the status, the capabilities and in the end the sustainability of the RFMMC.

14. Regarding the cooperation with the Dialogue Partners, FMMP invited in 2010 the Dialogue Partners to participate in three Training Workshops in 2010/2011 under the Capacity Building Programme Phase 2 regarding "*Enhancing Cooperation in Addressing Transboundary Flood Issues, Differences and Disputes*" supported by a uniquely designed, model supported Pilot Studies event. The latter was implemented during three days in May 2011 in HCMC, Viet Nam, and turned out to be an effective capacity building tool.

15. The RFMMC, being the main user of real-time and near real time data for flood forecasting and early warning, and flash flood guidance and alerts, remains highly committed

¹ A set of new performance indicators for all forecasting locations along the Mekong River, which was developed by the RFMMC in March 2010, is officially applied for the flood season 2011 onwards.

² The total fund made available is composed of USD 1.18.M in direct funding and USD 1.36 in services.

to maximizing the benefits and use the existing hydro-meteorological networks of the MRC Member Countries and Dialogue Partners for real-time and near real-time data.

16. There are still numerous sub-areas/sub-basins in the Mekong River Basin with sparse or no coverage of rainfall stations, especially where the rainfall run-off of these areas/basins strongly affects the inflow of tributaries into the Mekong River mainstream. The RFMMC emphasizes that the more real-time and near real-time hydrometeorological data and information is made available, the more accurate the flood forecast and the longer the lead time, both important factors in reducing flood risks, thereby saving lives and people's livelihoods.

17. The RFMMC envisages under FMMP 2011-2015 engaging the MRC Member Countries and Dialogue Partners through Working Groups and Exchange Knowledge Workshops to share practical experiences, exchange data and information, and to build and enhance knowledge and skills of staffs of the National Centers responsible for flood forecasting and early warning in the MRC Member Countries, China and Myanmar.

ATTACHMENT 15

EXISTING AND OTHER AREAS OF POTENTIAL COOPERATION

EXISTING AND OTHER AREAS OF POTENTIAL COOPERATION

Existing cooperation:

1. In general, cooperation and coordination between the MRC and the Dialogue Partners through the MRC programmes are increasing. The modalities for enhancing this cooperation are being built on concrete technical cooperation, also using expertise available in China and Myanmar. Recognising the importance of the sustained cooperation and communication between the upper and lower riparian countries, the MRC is regularly sharing with Dialogue Partners the MRC's key documentations such as Minutes and Records of the governance meetings, Annual Work Programmes, Annual Reports, other technical series and information on key issues and events such as the prior consultation process of the proposed Xayaburi hydropower project under the Procedure for Notification, Prior Consultation and Agreement.

2. As a result of a discussion with China and Myanmar on the MRC Junior Riparian Professional (JRP) Project, the first JRP from China, Mr. Sun Gaohu who works for the Department of International Cooperation - Ministry of Water Resources (MWR) joined MRCS in early March 2011 and successfully completed on-the-job (OJT) training in June 2011 at the Information and Knowledge Management Programme (IKMP). As a result of the 3 month OJT, MWR and Mr. Gaohu expressed the need to learn and share further on issues e.g. Strategic Environment Assessment (SEA), the Rapid Sustainability Assessment Tools (RSAT), the concept of Benefit Sharing Mechanism, etc. Mr. Gaohu is therefore extending his contract with the Initiative on Sustainable Hydropower (ISH/MRC) for two more months from July to August 2011. The first JRP from Myanmar, Mr. Toe Aung Lin, was nominated by the Ministry of Transport in April 2011 and will join the JRP Project Phase III from September 2011. He will join the Mekong IWRM Project from December 2011. A pool of 8 more JRPs from the upper riparian countries will be identified to join the coming 4 Batches of the JRP project Phase III.

Further areas of potential cooperation:

- ***Staff Exchange and secondment***

3. To enhance expert exchanges and knowledge sharing in terms of flood forecasting, hydrodynamic, and other areas, reciprocal visits in relevant areas of interests could be developed in the near future. Other exchange visits to consider in the future could also include climate change modeling and adaptation, sediment monitoring and management, and water quality monitoring.

4. In addition, the MRC Integrated Capacity Building Programme (ICBP) is seeking to build up regional networks of Water Resources Training and Education Institutes to ensure sustainable and long term capacity building institutions for the region in terms of human resources development for the Mekong region, and at the same time to further institutionalize the knowledge accumulated by MRCS in the field of Integrated Water Resources Management (IWRM). With these networks the MRC could also further enhance the cooperation with China and Myanmar under the framework of water resources training, i.e., with academic institutions or research institutions.

5. The secondment of Chinese staff to the MRC Secretariat and reciprocal visits of experts could also be an opportunity to enhance increased expertise exchanges and enhance knowledge sharing in some areas such as flood forecasting, hydrodynamic, and other areas related to water resources management. Other exchange visits to consider in

the future could also include climate change modeling and adaptation, sediment monitoring and management, and water quality monitoring.

- **Climate Change**

6. Climate change with its transboundary impacts and increasing disasters such as storms, flood and drought can impose a serious threat to all countries of the whole Mekong River Basin. Climate change adaptation and mitigation (lower carbon development) can be an entry point for collaboration between China and Myanmar and the Lower Mekong countries through mechanisms of the MRC Climate Change and Adaptation Initiative (CCAI). The CCAI document 2011-2015 to be submitted for approval at the Thirty-fourth Meeting of the Joint Committee on 31 August 2011 has clearly highlighted the importance of collaboration with upper Mekong partners. The overall scope of the CCAI is climate change impact assessment and adaptation planning and implementation at all levels and in priority locations throughout the Mekong River Basin. It will provide direct and indirect benefits to all countries of the Greater Mekong Sub-region (GMS) by helping the authorities, riparian people and communities and strengthening their capacity in adapting to new challenges of climate change.

7. The MRC cooperation with China and Myanmar under CCAI's framework would aim at sharing lessons learnt, expertise and good practices in assessing climate change impacts and vulnerability, hydrological modeling and climate projections, research and early forecast on flood and drought, innovative approaches and methods for adaptation and lower carbon development in the whole Mekong River Basin. Engagement of China and Myanmar's experts in the potential establishment and functioning of the Mekong Panel on Climate Change would also significantly strengthen its role in the region and be of mutual benefit to all parties. Besides, the experts on climate change related fields (including disaster management) from China, Myanmar and Lower Mekong countries could invite each other to engage in technical events in both sides such as scientific conferences, seminars, workshops and training courses.

8. Collaboration on climate change knowledge and information in Mekong River Basin can also be strengthened through the extensive network of international and regional partners and platforms such as Adaptation Knowledge Platform for Asia (AKP), Asia Pacific Adaptation Network (APAN), GMS Academic Research Network (GMSARN), Network of River Basin Organisations (NARBO) and many other networks and initiatives in which the MRC is actively involved in and contributing as a partner or member.

- **Other areas**

9. The MRC looks forward to discuss other suggested areas of potential cooperation with China and Myanmar.

ATTACHMENT 16

DATE AND VENUE OF THE SEVENTEENTH DIALOGUE MEETING

MATTERS FOR INFORMATION

DATE AND VENUE OF THE SEVENTEENTH DIALOGUE MEETING

1. Following MRC practice, the annual Dialogue Meeting is held back-to-back with the Working Session of the MRC Joint Committee which takes place at the Headquarters of the Mekong River Commission.
2. Per rule 6 of the Rules of Procedures of the MRC Joint Committee, the annual working session of the Joint Committee should normally be held during the month of July or August.
3. To facilitate travel plan arrangements of the Delegations from the Dialogue Partners and the Member Countries to attend the Seventeenth Dialogue Meeting and to assist the Secretariat in its preparations, the Secretariat would like to propose for your consideration that the Seventeenth Dialogue Meeting be held either in the end of July or early August 2012. The Secretariat will further consult with Member Countries and Dialogue Partners on the date in due course.

ATTACHMENT 17

CLOSING STATEMENT BY THE CHAIRPERSON OF THE MRC JOINT COMMITTEE FOR 2011-2012

CLOSING STATEMENT

By

Dr. Le Duc Trung

Director General

Viet Nam National Mekong Committee

Member of the MRC Joint Committee for Viet Nam

Chairperson of the MRC Joint Committee for 2011-2012

H.E. Mr. Te Navuth

Secretary General

Cambodia National Mekong Committee

Member of the MRC Joint Committee for Cambodia

Head of Delegation

Mr. Phonechaleun Nothaxay

Secretary General

Lao National Mekong Committee

Alternate Member of the MRC JC for Lao PDR

Head of Delegation

Mr. Pakawan Chufamane

Director, Bureau of Mekong Management

Department of Water Resources

Ministry of Natural Resources and Environment

Head of Delegation

Dr. Truong Hong Tien

Deputy Director General

Viet Nam National Mekong Committee

Head of Delegation

Mr. Pang Sen

Deputy Director General,

Department of International Organizations and Conferences

Ministry of Foreign Affairs

Head of Delegation of China

Mr. Sein Tun

Deputy Director, Department of Water Resources and Rivers Development

Ministry of Transport of the Union of Myanmar

Head of Delegation of Myanmar

**Excellencies,
Distinguished Delegates,
Ladies and gentlemen,**

As we arrive at the end of the Sixteenth Dialogue Meeting, I am pleased to conclude that we have had a very productive day.

Today we have intensively discussed and shared ideas on areas of further cooperation with Dialogue Partners and we have reviewed the progresses made since our last meeting in a

constructive and friendly manner. This has successfully demonstrated the MRC's commitment to productive and open dialogue.

It is my firm confidence that this has also demonstrated the high-spirited cooperation between the MRC Member Countries, which was widely known as one of the main strengths of the organization. We were also encouraged by the cooperation that we have witnessed from our Dialogue Partners, i.e. China and Myanmar, here today.

I look forward to the future cooperation on sustainable planning and management of rapid water resources development on the Lancang/Mekong. Other areas we have cooperated on such as navigation and flood management have also demonstrated very promising results. These will not only impact cooperation at regional level, but could have significant impacts on the lives of everyday people living in the Basin.

Many of you attending in this room will continue to attend the 34th Meeting of the MRC Joint Committee the day after tomorrow. Today's discussions, especially excellent suggestions from our Dialogue Partners, have definitely provided us with a valuable and fresh perspective on many issues that will be discussed at the Joint Committee Meeting.

Before closing, let me extend my sincere thanks to all Delegates here, particularly our friends from the People's Republic of China and the Union of Myanmar for their time sharing with us their views, concerns and experiences toward a Mekong River Basin of sustainable development. Many thanks also go to the MRC Secretariat and its staff for their efforts in arranging logistical support for this meeting today, without those the success of this meeting would not be possible.

I look forward to welcoming you at the dinner tonight.

I now wish to declare the Meeting close.

Thank you for your attention.