22 May 2008

3rd NARBO General Meeting, Solo, Indonesia, 20-22 February 2008

Highlights

1. 93 water professionals from 19 countries and 52 organizations, including river basin organizations (RBO), government agencies, academic institutions, regional knowledge partners, and multilateral financing institutions participated in NARBO's 3rd General Meeting which was held in Solo, Indonesia last 20-22 February. The event was hosted by the RBO of the Bengawan Solo river basin.

Study Visits at the Bengawan Solo River Basin (Day 1, 20 February)

2. On the first day, participants familiarized themselves with the implementation of IWRM issues in the host Bengawan Solo River Basin[1] for which two study visits in the basin were organized to study two specific issues, one on sedimentation, and the other on institutional aspects of integrating IWRM into planning and implementation.

3. **Managing Water Sedimentation.** The first group visited the Wonogiri Multipurpose Dam, whose reservoir waters are used for irrigation, hydropower generation and flood control; but whose effective reservoir capacity has decreased to nearly 60% of the original due to severe sedimentation problem caused by poor land use zoning, intensive farming, poor farming practices, and highly erosive and steep-sloped uplands. To cope with the sedimentation problem, the government has: (i) constructed two check dams on the Keduwang River close to the dam to mitigate sediment inflow into the reservoir, (ii) dredged sediments of about 250,000 m^3 in front of the intake structure to allow stable and continuous water supply, and (iii) provided a permanent dredging system to allow sustained maintenance dredging of sediment deposited in front of the intake. Fundamental permanent countermeasures are however needed in order to recover the reservoir's storage capacity; and the government has proposed the following: (i) structural measures to cope with the sediment and garbage inflow from the Keduang River and other tributaries, as well as with the sediment deposits at and around the intake structure; and (ii) watershed conservation projects.

4. **Facilitating IWRM in Planning and Implementation.** The second group visited a rural area (Gemawang Village) and discussed community and public participation in river basin planning and management with stakeholders, including an NGO -- the Association for Social and Economic Studies and Development. The study visit demonstrated the importance of stakeholder participation and bottom-up approaches; and the critical role of local community initiatives for resolving IWRM challenges in local areas in the river basin. An extensive background document helped to inform participants about the RBO's work on stakeholder participation in the basin under the Comprehensive Development and Management Plan (CDMP) Study of the Bengawan Solo River Basin.

[1] Located in central and eastern Java, the basin has a total catchment area of 20,125 km^2. The Bengawan Solo River, the largest in Java, has a length of about 600 km.

IWRM Workshops (Day 2, 21 February)

5. On the second day, participants exchanged experiences and learned from three workshops on IWRM: (i) Measuring the Performance of RBOs and River Basins[2], (ii) Managing Assets and Risks, and (iii) Exploring New Challenges in IWRM.

6. **Workshop 1: Measuring the Performance of RBOs and River Basins**. NARBO's performance benchmarking and peer review service for RBOs is a key part of NARBO's work to introduce IWRM in river basins and to develop capacity of RBOs. It starts with clarifying the RBO's vision and mission, then looks at key performance dimensions and targets for each. Positive results provide good encouragement for RBO leaders and staff, as well as valuable lessons learned. Results below expectation can trigger good guidance from comparison by peers, identify areas where performance improvement is needed, and provide justification for additional resources. The workshop explored the results of piloting the service in several river basins in the region, and explored how the service could be rolled out and further fine-tuned. The workshop also explored a new methodology for measuring the status of IWRM in river basins, based on two initial pilots.

Towards a New Paradigm for Doing Better. In the opening remarks, the participants were reminded that while each RBO is different across the region, they face many common issues, challenges, and can share solution strategies. Performance benchmarking and peer review is replacing the earlier paradigm for performance assessments by external experts. Often, these proved to be expensive exercises, and in many cases the reports would end up on the shelf due to lack of ownership by the organization being reviewed. The new paradigm for performance improvement involves self-assessment followed by peer review, with the RBO taking the driver's seat during the review and in subsequent work to improve performance.

Lessons from the Pilots. The four pilot cases of RBO self-assessment and peer review provided valuable unanimously positive feedback on the benefits of the exercise. The assessment tool was found to be useful across RBO types and stages of development. The importance of a clear and shared vision of the RBO's purpose, and a commitment to performance management, came out strongly. A clear understanding of the RBO's IWRM functions is also needed to set relevant and meaningful targets; and this should be supported with commitment of the RBO's top executive and management team. The self-assessment and peer review teams should of course be technically-qualified and dedicated, and the experience from the pilots showed that the exercise can be professionally rewarding to the teams. The balanced-scorecard framework proved to be a satisfactory performance assessment tool, and the peer review process provided credibility and improved evaluation and performance targets. The performance benchmarking indicators were helpful and will be further adjusted as NARBO members gain further experience in using the service.

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[2] This workshop was a follow-up to the NARBO Performance Benchmarking of RBOs with Peer Review Process held from 2005 to 2007. NARBO launched its performance benchmarking service in August 2005, whereby 4 RBOs piloted the service from the 11 RBOs who initially signified interest. For reference, the 11 RBOs that announced their interest in 2005 included the Jasa Tirta 1 and 2 RBOs in Indonesia, as well as the Balai PSDA for the Jragung-Tuntang and the Jeneberang RBO. In Korea, K-Water for the Geum river basin. In the Philippines, the Laguna Lake Development Authority. In Sri Lanka, the Mahaweli Authority. In Thailand, the Bang Pakong and Ping river RBOs, and in Viet Nam, the Red and Dong Nai river RBOs.

Basin Performance Benchmarking. The presentation on a new and complementary methodology for basin performance indicators was well-received. The methodology has been developed in collaboration with the University of Tokyo and ADB, and saw initial piloting in the Citarum river basin in Indonesia and Laguna Lake in the Philippines. The participants welcomed the discussion of the first pilots which focused on the use of three basin status indicators: (i) water utilization (recreational water quality and raw water quantity); (ii) disaster vulnerability (flood vulnerability and chemical spills); and (iii) environmental management (environmental water quality and biodiversity). Further work will be undertaken, and discussion explored a possible expansion to include indicators for health and livelihoods.

Workshop Recommendations. The workshop participants endorsed the results of the pilots and recommended to expand the RBO performance benchmarking and peer review service to more basins, taking into account feedback from the pilot phase. They also recommended to expand the pilot testing of the new basin performance benchmarking methodology. Several knowledge partners joined the workshop, and opportunities for collaboration with partner organizations will also be explored in the further piloting and implementation of NARBO's benchmarking work.

7. **Workshop 2: Managing Assets and Risks**. The second workshop discussed the development and sustainable management of water resources infrastructures. Two collaborating agencies were also introduced: International Research and Training Center on Erosion and Sedimentation (IRTCES); and International Centre for Water Hazard and Risk Management (ICHARM).

Report on Thematic Workshop on Sustainable Management for Water Resources Infrastructure, various cities, June 2007-February 2008. A series of workshops were held in Hanoi, Dhaka, Kandy and Bangkok from June 2007-February 2008 which demonstrated the importance (i) to deepen the understanding of water, land and other natural resources; (ii) to strengthen cooperation with related organizations; and (iii) to minimize friction among stakeholders caused by increased diversified water demand and social needs. The workshops also identified perceived roles of government and RBOs towards sustainable management of water resources infrastructure.

Community-based (flood hazard) early warning systems are considered 'people-centered' when they empower individuals and communities to act in sufficient time and in an appropriate manner so as to reduce the possibility of personal injury, loss of life, damage to property and environment, and loss of livelihood. They can provide the community and disaster mitigation committee with advance information on the flood risks that can be readily translated to disaster prevention and preparedness response actions against loss of lives, injuries, and economic losses.

Dam Asset Management Project: Sustainable Reservoir Sediment Management. For sustainable reservoir management, it is important to have sound analysis of facilities and proper maintenance planning. A key factor for long term use of reservoirs is to address sedimentation problems; and solutions should include technical, economical and environmental countermeasures within the context of integrated river basin management.

8. **Workshop 3: Exploring New Challenges in IWRM.** The third workshop comprised four sessions: (i) addressing issues and challenges in water rights and water allocation, (ii) facilitating IWRM with civil society and private sector participation, (iii) restoring the health of rivers, and (iv) sharing IWRM experience from other regions. The last two included presentations

to introduce the Asian River Restoration Network (ARRN) and the International Network of Basin Organizations (INBO), and their respective mandate and activities.

Addressing Issues and Challenges in Water Rights and Water Allocation. Water-use rights help to introduce IWRM in river basins. However, the process of introduction and country-wide implementation of a licensing system for water use rights may well take as long as 20 years to complete. Making clear arrangements for practical solutions in the transition phase is therefore an important and urgent task, and these arrangements need to be flexible enough to respond to changing needs in water management. These are some of the lessons learned from NARBO's workshop series of water rights.

This workshop session provided a better understanding of the principles and application of water use rights and water allocation, and stimulated in-depth discussion on the challenges, practical solutions and lessons in the implementation of water rights. To introduce the topic, ADB presented a technical paper on 'Water Rights and Water Allocation – Issues and Challenges for the Region', which informed the discussion. The paper also drew on the results of the five earlier NARBO workshops on the topic.

The growing importance of the topic to governments, water users and stakeholders in the region is clear. Panelists and participants discussed that since water shortages are expected to increase further, demand management was important, supported by better public awareness and a change in mindset among water users to conserve water and to accept explicit allocation systems introduced by government. Enforcement of provisions of relevant laws on allocation will need to be taken more seriously, including penalties where needed. Updated and reliable data will also help improve compliance in implementation. The process of introducing explicit water allocation systems to support water-use rights needs to be transparent and equitable. Much can be gained from sharing information and experience among RBOs and countries, while keeping in mind that solutions always need to be adapted to suit local conditions.

Facilitating IWRM with civil society and private sector participation. Workshop participants learned from recent experience in Indonesia, where important institutional changes in water resources management at the national and provincial levels are driven by decentralization, which pose new challenges for coordination, consultation and legislative reform. To implement its water resources law, Indonesian organizations are putting more emphasis on public consultations and a "bottom-up" planning approach involving civil society and private sector participation.

Restoring river fronts and international cooperation. The workshop participants benefited from the presentations by ARRN and INBO, and NARBO will explore collaboration with these networks as part of its work program. The impressive examples of restoring river fronts in cities in Japan, South Korea and the People's Republic of China served to inspire NARBO members to pursue similar activities in their river basins.

NARBO General Meeting (Day 3, 22 February)

9. **Report on Accomplishments 2006-2007.** A comprehensive report of NARBO activities for the period 2006-2007 was presented, and accepted by the members. A feedback survey among NARBO members showed a high-level of satisfaction with NARBO activities. Suggestions to improve NARBO work focused on information-sharing and revamping NARBO's IWRM training program, amongst others.

10. **Work Plan 2008-2009.** The work plan for 2008-2009 was proposed by the Secretariat and approved by the General Meeting after a good discussion. NARBO will continue the following activities: (i) information sharing and exchange via the internet, (ii) IWRM training program, (iii) thematic workshop, (iv) performance benchmarking of RBOs with peer review process, and (v) staff exchange programs. Some new programs will be launched as guided by the recommendations made at the 1st Asia-Pacific Water Summit in December 2007 in Japan. These include a project on charting progress and facilitating investment for IWRM (supported by ADB), the preparation of IWRM guidelines at river basin level (supported by JWA), and collaborative activities among regional water knowledge hubs under the auspices of the Asia-Pacific Water Forum and facilitated by ADB. It was also agreed that the Secretariat will convene a NARBO Technical Advisory Committee to help in revamping the IWRM training program.

11. **New Members.** Nine organizations from six countries (Pakistan, Thailand, Japan, Malaysia, Australia, and PRC) were welcomed as new NARBO members, as follows: (i) Indus River System Authority of Pakistan; (ii) Bang Pakong Prachinburi and Tonlesab River Basin Committee of Thailand; (iii) Japan Water Resources Association; (iv) Graduate School of Management, Kyoto University of Japan; (v) Japan River Restoration Network; (vi) National Hydraulic Research Institute of Malaysia; (vii) International Water Centre of Australia; (viii) International Centre for Water Hazard and Risk Management of Japan; and (ix) International Research and Training Center on Erosion and Sedimentation of People's Republic of China. The total number of NARBO member organizations is now 65.

12. **NARBO Charter Revision.** The General Meeting also approved minor revisions to the charter to enable NARBO to appoint a patron to promote its work, as well as senior advisers, who could include former NARBO chairpersons.

13. **Constitutional Body 2008-2009.** The General Meeting approved the following constitutional body for NARBO for 2008-2009:

NARBO Position	Name
Chairperson (New)	Mr. M. Amron, Ministry of Public Works, Indonesia
Vice Chairperson (Continued)	Mr. Ivan De Silva, Mahaweli Authority of Sri Lanka
Secretary General (Continued)	Mr. Yasutaka Hamada, Japan Water Agency
Vice Secretary Generals (Continued)	Mr. Michio Oota, Japan Water Agency Mr. Wouter Lincklaen Arriens, Asian Development Bank Mr. Toru Tatara, Asian Development Bank Institute
Senior Advisor (New)	Mr. Basuki Hadimoeljono, Ministry of Public Works, Indonesia