

# **New Network of IWRM for Asia Network of Asian River Basin Organizations <sup>1</sup>**

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## **[How IWRM Ought to Be]**

Water plays various roles. Water is an indispensable resource for people to live and develop, and at the same time it is an important element that constitutes the environment of the area. At present, serious and complex problems concerning water have occurred worldwide, and in order to solve them, it is required that integrated water resources management be established that considers all the factors on water resources at the integrated and comprehensive point of view.

Integrated water resources management is not to devise one plan, but is a process in which an effort is made from an integrated perspective aiming at better water resources management. Each country or region has its own geographical and meteorological features; a history of water use, regional cultures and customs, and various value judgments exists that is based on these. Also, each country or region has a different situation of economic development. If the real situation and value judgment of each country or region are not respected, it is difficult to establish effective and appropriate integrated water resources management. Hence, appropriate integrated water resources management is not to be determined by only one rule & standard, let alone by forcing the systems of other countries upon the country. Integrated water resources management should be established based on the characteristic of the country or region.

To realize integrated water resources management, appropriate legal, administrative and implementation systems and organizations are required. However, these do not necessarily entail the realization of one legal system, one administrative system, or one organization that has been integrated. This may be an extremely unrealistic approach in

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some cases. What is important is to establish a system in which impartial adjustments are sought among the laws, systems and organizations. When proceeding with integrated water resources management, the establishment of cooperative systems among the countries and organizations is very beneficial. In this regard, it is very important to establish mutual cooperation through regional networks maintained by countries and organizations that have similar situations and experiences in terms of geographical and meteorological conditions and water utilization.

### **[Problems of water in Asian monsoon regions]**

In this regards, Asia Monsoon Region consists of Japan, the Korean peninsula, China (except the western interior, the Yellow river basin and surrounding areas), all of South East Asia, Nepal, Buthan Bangladesh, Sri Lanka, and areas east of the Deccan Plateau plus southwestern coastal regions of India. The Asian Monsoon Region is characterized by high precipitation compared with the global annual average of 1,000 mm, day-by-day fluctuation of precipitation, and under the influence of seasonal winds, distinct wet and dry seasons in a year and leads to utilize for rice paddy farming and high irrigation rate.

Monsoon Asian regions in which NARBO engages in activities are densely populated regions where around 3.3 billion people live, accounting for more than 60% of the world population. Also, the amount of water use in Asian monsoon regions accounts for about 50% of that all over the world, and the solution of problems of water in these regions makes a great contribution to the stability of the world. The population in Asian monsoon regions is increasing further, and in urban areas problems have occurred such as shortage of water resulting from the concentration of population, an increase in flood damage, and water pollution.

Asian monsoon regions, in general, are regions with much precipitation, and more than 70% of annual rainfall tends to concentrate in a wet season of the region. Hence, rivers in these regions have an increase and a decrease in flow rate, i.e. fluctuation that are repeated rapidly throughout the year. Meanwhile in many of the monsoon Asian regions, cities are formed in alluvial plains which are flood plains. Therefore, these cities have water problems of both flood and drought with an increase or decrease in the flow rate of a river.

In Asian monsoon regions, water use has been focused on agriculture of rice growing in rice paddies since olden times, and at present a large amount of water is still used for agriculture of rice growing in rice paddies. Meanwhile, with an increase in population and economic development, the demand for tap water and industrial water is increasing rapidly mainly in urban areas, and it has caused friction against the traditional use of a large amount

of water for irrigation.

### **[Important points in IWRM in Asian monsoon regions]**

The core of integrated water resources management in Asian monsoon regions, where problems of flood and water shortage coexist, is to implement the suitable river management at the comprehensive and sustainable manner. In order to solve these problems, together with nonstructural measures, structural measures such as the development and improvement of facilities on water resources are required. The implementation of these measures may have impacts on the environment. Environment conservation must sufficiently be considered in implementing the measures.

In Asian monsoon regions, traditional order or rule of water use for irrigation has been formed and it has also become a constituent factor in the regional culture in many cases such as “Subak” in Bali-Indonesia and “Cascade System” in Sri Lanka. When establishing integrated water resources management, traditional order or rule on water must sufficiently be considered.

Water is fundamental resource that are indispensable for people's lives, and a necessary amount of water needs to be supplied for all people. Water uses include those for the river environment, for irrigation, for domestic water, for industrial water, for power generation, and others, and such water is used in the upstream and downstream of the basin. Therefore, it is required that conflicts among the sectors and regions need to be solved to establish an impartial water use system.

### **[Necessity of the establishment of RBO]**

Integrated water resources management is to be established for each basin as a lowest appropriate unit level, but in order to do so, it is required to establish an River Basin Organization (RBO) that engages the water resources development and management in the basin. In order for the RBO to play his roles, governmental support is indispensable and public participation is required.

The role of an RBO is to realize the stability and development of regions through appropriate management of water resources, and efforts are required that can acquire confidence of people and regional residents. The RBO should be the main component of institutional framework in performing integrated water resources management. The RBO should be a professional institution having sufficient capacities and supported with adequate budget to implement water resources management and facilities management in the basin. Capacity development for this purpose is of utmost importance.

## **[Establishment of NARBO]**

In order to solve problems for establishing integrated water resources management in Asian regions, exchange of information and experiences, and joint efforts for capacity development among RBOs, relevant governmental organizations, knowledge partners and organization for international cooperation are indispensable. However, in Asian regions, no networks existed that play such roles.

For this purpose, on 24 February 2004 in Batu - Indonesia. NARBO was established jointly by water resources related organizations in Asian monsoon regions. The aim of NARBO is to provide support to RBOs in order to establish appropriate integrated water resources management in each country or region. The objectives are to strengthen the capacity and effectiveness of RBOs in promoting IWRM and improving water governance.

NARBO shall engage in activities of which emphasis is placed on the following activities.

1. Advocacy and raising awareness for IWRM among RBOs, water sector apex bodies, and leading water sector agencies in the region.
2. Sharing of information, good practices, and lessons learned for IWRM among the participating organizations.

Major methods to do so include the management of databases and web sites for information exchange on integrated water resources management in, sending of newsletters via e-mail and their placing on websites, and the holding of workshops.

3. Supporting NARBO members to improve water governance, including the enabling policy, institutional, and legal framework for IWRM, and the formulation of action plans.
4. Building capacity of RBOs in implementing IWRM, mainly through staff exchange and training among participating organizations.
5. Supporting RBOs with technical advice in regard to the planning, conservation, development, and the proper and efficient operation and maintenance of water resource facilities, to improve IWRM.
6. Fostering of regional cooperation for improved management of water resources management in transboundary river basins.

## **[Completed Activities of NARBO]**

Some NARBO activities that already completed are:

1. Development of NARBO Website (Japan, June 2004)
2. NARBO Electronic Newsletter (Japan, June 2004)
3. 1<sup>st</sup> Training Program on IWRM (Thailand, July 2004)
4. Workshop on NARBO Website (Thailand, August 2004)

5. Member Consultation Workshop on Benchmarking (Indonesia, November 2004)
6. Twinning Program (November 2004)

NARBO is intended not for giving assistance to a specific organization by another specific organization, but for improving capacities of NARBO member themselves by accumulating information independently while presenting their own experiences mutually. Therefore, NARBO members need to participate in NARBO activities positively with the spirit of ownership by understanding the significance of networks.

NARBO hope to contribute toward the resolution of water issues in Asia for the stability and fruitful future of the World. We have to consider the role of an RBO is to realize the stability and development of regions through appropriate management of water resources, and efforts are required that can acquire confidence of people and regional residents. In order to realize the hope, the cooperation from all over the world will be anticipated & most welcome for Asia.

### **[Establishment of Indonesian NARBO Secretariat]**

The expectation of Indonesian RBOs to join NARBO is to due to some opportunities to enabling international co-operation, having improvement of water resources management and development of its excellence, conducting interaction between RBOs.

Since Indonesia has the biggest number of NARBO Members, Indonesian NARBO Secretariat was established in April 2004. The establishment of the secretariat is purposed as a coordinating institution to facilitate communication and coordination of NARBO Members of Indonesia in implementing NARBO Action Plan 2004-2005 in accordance with Government policy.