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From Secretariat

1. Report of the event

The 2nd NARBO training course

The training course on "River Basin Management and Organizations" was held from April 25 to 29 at Beach Hotel on Negombo in Sri Lanka. Twenty-seven participants from Afghanistan, Bangladesh, India, Nepal Pakistan and Sri Lanka took part in the training. From NARBO Secretariat, Dr. Tennakoon, who is acting vice-chairperson, Mr. Dennis, Mr. Imam, Mr. Ishimura and Mr. Takagi also attended and made presentations.

The training course was organized under the auspices of six organizations. Six organizations were IWMI, ADB, ADBI, JWA, GWP-South Asia and Lanka Jalani respectively. The core training team from IWMI HQ guided the course and they emphasized on the first day that it was very important for participants to learn each other by exchanging their experiences and knowledge, discussing problems they had.

The program was consisted of four modules titled "General overview of reasons for River Basin Management (RBM)", "New insights from recent studies", "Problems and constraints, at local and national levels" and "Designing an appropriate institutional system". On module 3, participants were divided into three groups and visited the upper reach, middle reach and lower reach of Maha Oya River Basin. After coming back from the field trip, they were working until late at night to meet the deadline of group assignments on what they learnt from the field trip. Also on module 4, each group tackled with the assignment given by the core training team and presented the assignment on the final day.

At closing ceremony, every participant was given the citation and the training course ended very successful and fruitful.

It was quite impressive for me to see all participants make friends, chat and take photos here and there at the closing ceremony.

Finally, I'd like to offer my sincere thanks to all participants, the core training team, staff members of secretariat and all concerned organizations for their hard works and efforts.

Prepared by Katsunori TAKAGI, JWA NARBO Secretariat

Photo1 : Presentation

Photo 2 : Group work

Photo 3 : At the field trip

Photo 4 : At the closing ceremony

2. General information

(1) The 3rd preparatory meeting for Southeast Asia Water Forum

Toward the 2nd Southeast Asia Water Forum in Bali from August 29 to September 2, the 3rd preparatory meeting is going to be held on May 17 in Indonesia.

(2) JICA training course on IWRM

The 2nd training course is going to be held from October 11 to November 8. Ten participants will be nominated from Indonesia, Lao PDR, China, India, Philippines, Vietnam, Bangladesh and Pakistan. If interested, please inquire to JICA Office in your country to get GI (General Information).

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Members' contribution

SAVE BURIGANGA MOVEMENT

Mir Sajjad Hossain*

Dhaka is the capital of Bangladesh with an Metropolitan area of about 380 Km^2. It stands beside the Buriganga Turag river system. The length of the Buriganga river is about 17km. Owing to its historical perspective and cultural heritage, the Buriganga is termed as the "lifeline" of Dhaka city. This capital city was first established during the Mughal period about 400 years back. The river Buriganga gave the old metropolis its water connection and was easily navigable so that the great Mughal fleet could often anchor near the town. Once the water of this river was largely used as dirking water by the city dwellers. In 1874 a water treatment plant was set up by the then government at a place named Chadnighat in the city for supplying pure water to the city dwellers. In fact the total ecosystem of Dhaka evolved based on the river Buriganga. Presently Dhaka city has a population of about 11 million and would be about 16 million by 2025.

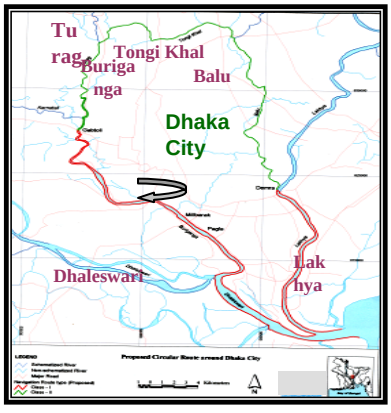

Figure: 1 Dhaka City and adjoining river system

The Turag, upper reach of the Buriganga, originates from the Bangshi at Kaliakoir that receives significant runoff contributions from the inland Gar areas. The river is connected to the Balu river through the Tongi Khal before joining the Buriganga at Mirpur. The river Balu originates from the Gar areas and joins the Lakhya near Demra. Usually, Tongi khal flows from Turag towards Balu during monsoon when there is practically no tidal effect. But during the dry season, the flows of the Tongi khal changes direction from Balu towards Turag due to lower water level in the Turag and higher water level in the Balu caused by higher tidal influence in the Balu. The main source of water of the Buriganga had been the spills of the Brahmaputra river.

Problem

The river Buriganga is getting polluted over the years causing serious environmental degradation in the capital. The pollution problems are the outcome of both natural as well as human activities and interventions and also due to lack of adequate pollution control measures.

Photo 1 Contaminated water of the Buriganga

Photo 2 Encroachment near the Buriganga

The natural reasons behind the problems include hydraulic and morphological changes in the rivers around Dhaka. Due to gradual sedimentation in the Buriganga-Turag-Balu-Lakhya river systems, the conveyance capacities of the channels have decreased, causing no flow condition during the dry season and consequently the navigation drafts have been reduced. Moreover, the Feeder Rivers from the source of the Brahmaputra do not receive flows due to drying up of the off takes during the dry

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season. Heavy sedimentation at the off take and river reaches is the major problem impeding sustainable development.

Human activities and interventions include encroachment on the river bed, floodplains and low lying areas, sewage and solid waste disposal, insufficient water supply and sanitation, industrial waste disposal and high rate of migration of the poor people in the slum areas of Dhaka.

The dumping of untreated liquid tannery wastes from tannery industries at Hazaribag, Dhaka is the major source of pollution of Buriganga. The chromium released from the Hazaribag tannery industries has been contaminating the water of the river Buriganga for the last forty-five years. This highly polluted water is spreading various diseases including cancer. A statistics available from the Department of Environment reveal that 95 per cent of the tannery industries have been built in unplanned way at the congested places of Hazaribag during the last fifty years. At present during the pick monsoon about 21 thousand and 600 cubic meters of liquid toxic wastes are dumped daily into the river Buriganga from the 185 tannery industries of Hazaribag. There is no alternative way to dump this liquid toxic waste at the time of continuous production of tannery industries. Besides contaminated water dumped everyday from the 500 kilometre long sewerage line of Dhaka city Buriganga is another important reason for water pollution in the river. An estimated 35,000 cubic meter of untreated highly toxic industrial wastes are also dumped into the river every day. Other reasons responsible for water pollution in the river Buriganga include dumping of oil from vessels playing in the river, human wastes thrown from the unsanitary latrine set up on or near the river. Illegal settlements on both sides of the river are also responsible for both water pollution and obstacles to the course of the river. An estimated 25 lakh cubic meter of toxic liquid wastes have been dumped into the river Buriganga in 2003 causing severe pollution of its water. Besides, about 12 thousand cubic meters of untreated wastes are dumped from the Tejgaon industrial area at Dhaka. About 40% of total sewerage wastes of the total one crore people of Dhaka city are dumped in the river in untreated condition.

The contamination of water of the river Buriganga is creating adverse effect on our environment. The Department of Environment (DOE) in a survey in 1997 found that oxygen in the river is close to zero level for which its marine life is depleted. In the meantime the river has reached in a stagnant position with black, slimy, stinking water due to continuous dumping of untreated industrial wastes. The flow of current is now almost non existent in the river. The condition of water of the river has now reached in such a situation that at Sadarghat, when big passenger launches start their engines and whirl the water with propellers, the foul odor become so unbearable that every one around have to press handkerchiefs on their noses. The tidal range from the sea is badly obstructed by the encroachments, massive sedimentation and dumping of all sort of wastes. As a result the rivers and channels around the city are extremely contaminated due to the dead slow tides. Thousands of people traveling everyday and residents of its banks are exposed to serious health hazards. Many residents complained of irritation in eyes and skins.

Values of some water quality parameters of the Buriganga river are as follows:

PH	EC	Chloride	Ts	DO	BOD
6.7-8.0	141-859	1.5-26.0	45-525	2-8.5	0.7-240

Initiatives to overcome the problem

Initiatives have been taken at both governmental and non-government level to save Buriganga from continuing environmental degradation.

- The department of Environment, Govt. of Bangladesh formed a committee in 1997 to implement the “Save Buriganga” Program.
- ‘Bangladesh Paribesh Andolon’ in active participation of its members and other Voluntary organizations formed the “Buriganga Bachao Andolon” in other words “Save Buriganga Movement” in order to protect it from encroachment and pollution. This committee first organized a meeting with the representatives of civil society in July 2000. It also organized a boat race in August 2000. The activities of the committee were publicized in TV and news media which helped building public opinion.

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In August 2000 a sit in program was staged by the committee against the encroachment by the "Sena Kallayan Sangstha". The committee later on met the Ministers, Ministry of Water Resources and Ministry of Environment. This committee had been carrying out regular programs to "Save the Buriganga".

The Government in October, 2002 formed a 11 member Task Force comprising four Ministers, Environmentalists, Elites, Journalists with Minister of Shipping as the Chairman of the Taskforce. The Taskforce formulated its recommendations which were subsequently approved at the cabinet meeting. The recommendations fall in the following categories:

- Steps be taken to stop encroachment on the river and gradients
- Demolish illegal structures on the river bank

Maintenance of water quality

- Carryout dredging to increase the river
- navigability and establishing a circular waterway around Dhaka city.

An implementation committee under the chairmanship of Minister of Shipping was formed at the cabinet meeting to implement the recommendations of the Taskforce. In October, 2003, at a meeting chaired by the Shipping Minister, the Buriganga protection Taskforce decided to undertake an integrated action plan to demarcate the river bank. They decided to initiate an integrated project to protect the riverbanks coordination with nongovernmental organizations. The government has entrusted its two organizations BWDB and BIWTA to restore normal flow of the river and maintaining the required navigation draft respectively. BIWTA has identified 648 illegal structures along the Buriganga of which it has already demolished 576 since March, 2004. BWDB has constructed flood control embankment and revetment works alongside the riverbank. It has also conducted a study for augmenting the flow of the Buriganga with a view to maintain water quality, and navigation draft. The government has also undertaken steps to relocate the tannery industry outside the city with all precautionary measures to abate further pollution. Other activities are also being taken up by the government to mitigate further degradation of environment and ecosystem of Dhaka city and its water courses around it.

Photo 4 :

Photo 5 :

Photo 6 :

Ongoing Protection work

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Members' contribution

Mekong River Commission celebrates 10 years of cooperation

On 5 April 2005 The Mekong River Commission celebrated the 10th Anniversary of the Signing of the Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin.

This historic agreement was made between the four countries that share the Lower Mekong Basin: Cambodia, Lao PDR, Thailand and Viet Nam in Chiang Rai. Thailand on April 5 1995.

The countries agreed to co-ordinate and promote co-operation in all fields of sustainable development, utilization, management and conservation of the water and related resources of the Mekong Basin. At the same time they agreed to work together on formulating several procedures that would allow the water resources of the basin to be shared on an equitable basis.

These procedures cover such important areas as notification of proposed use of water in any of the member countries, prior consultation on developments, the basin development plan, protection of the environment and freedom of navigation.

But the story did not begin there. Cooperation regarding the Mekong begins in the middle of the 20th century with the formal signing of the Geneva Accords, when the newly independent nations of Cambodia, Laos and Viet Nam took their places on the world stage.

Studies of the Mekong by the United Nations' Economic Commission for Asia and the Far East (ECAFE) and the US Bureau for Reclamation sparked interest in the Lower Mekong countries and at the newly established ECAFE for a grand scheme to develop what was thought of as one of the world's great "untamed rivers".

No international river body had ever attempted to take on such encompassing responsibilities for financing, construction, management and maintenance of projects on an international river.

The "Mekong Project' was the largest single development project the fledgling United Nations organization had ever undertaken.

Photo 1 : The MRC symbol in balloons

When the new Mekong Committee began its work, there were no models to follow. In its early days, the Committee was guided and supported by ECAFE and the United Nations Development Agency.

Lack of stability in the region resulted in the interruption of Mekong Committee sessions in the late 1970s. In response to Cambodia's absence, in 1977 Lao PDR, Thailand and Viet Nam adopted a new statute forming the basis of the Interim Mekong Committee.

When Cambodia finally requested readmission in 1991, lengthy discussions began which led to the eventual transformation of the Mekong Committee through the 1995 Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin.

The 1995 Agreement was a coming-of-age for the Mekong Committee, which now became the Mekong River Commission. Its Articles give full management responsibility of the Commission to a Council of Ministers of member countries.

Following the '95 Agreement the MRC shifted its focus from the development of large-scale projects to sustainable development and management of natural resources.

It consolidated all the knowledge gleaned from 30 years of surveys and studies into a "knowledge base".

The MRC member countries agreed to work together in all fields of sustainable development, utilization, management and conservation of the

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water and related resources of the Mekong River Basin, such as navigation, flood control, fisheries, agriculture, hydropower and environmental protection.

Over the past 10 years the organization has achieved significant progress toward its stated goals through a variety of agreements on water use, quality and quantity. Member countries have concurred on the need for data and information sharing and exchange, a flood management and mitigation strategy, a hydropower strategy and have made a formal agreement with China on the exchange of hydrological and other data.

In the future the MRC is keen to encourage investment in water resources in the basin in all areas in order to reduce poverty and improve the livelihoods of the basin's residents. The people of the basin are predominately rural and are some of the poorest in the world.

The MRC's new Regional Cooperation Program for Integrated Water Resources Management and Development of the Mekong River Basin is intended to help member countries make the best use of their water resources. Through this strategy, the MRC plans to act as a promoter and facilitator of the development and investment process in the water sector, encouraging and coordinating sustainable use and management of water and related resources for navigation, food production, energy production and domestic use.

It will support the countries at the level of strategic planning and program implementation. It is now working to identify, plan and prioritize a broader range of development projects in cooperation with the donor community and at the same time finding the right mechanism to deliver the right strategy and priorities for funding.

The MRC works closely with many organizations either directly as partners or indirectly through information exchange, including UN agencies such as UNDP and UNESCAP, the World Wildlife Fund, the World Conservation Union (IUCN) and many government aid agencies.

The World Bank is a partner in programs such as the Basin Development Plan and the Water Utilization Program and the ADB is funding a component of the new Flood Management and Mitigation Program. The MRC is keen to play a role within the ADB financed Greater Mekong Sub-Region initiative. We have many other organizations with whom

Today the member countries gain from the close cooperation with their neighbors in many ways. There is a regular exchange of information about new developments, support with technical expertise and knowledge to be gained in such areas as environmental testing of water quality, fishery management and sound hydropower development. There are many trans-boundary issues such as the provision of safe navigation, protection of the watersheds and flood management and

mitigation, which MRC programs are working to institute in all the countries. It would not be possible to deal with some of these big issues alone.

The MRC is currently seeking funding for a tourism program.The Mekong River is almost totally undeveloped as a tourist attraction, in nearly all the countries of the basin. There is huge untapped potential for making this river an exciting and economically advantageous addition to the tourism industry. However, in order not to damage the river, tourism needs to be developed in an ecologically and culturally sensitive way so local communities can benefit directly and tourists (both foreign and domestic) can enjoy the natural beauty of the countryside.

The MRC is looking forward to another decade of challenges and successful cooperation. The Mekong River Basin is facing a time of huge growth, both in population and the economy, and it is vital to take a united approach to its development needs if the valuable natural water resources are to be protected for the benefit of future generations.

http://www.mrcmekong.or

Editor's postscript

On this issue, we could introduce only two events as general information. Not to mention the forthcoming events, to enrich the contents of NARBO newsletter, your contributions are very important. Please contact us if you have news, comments, opinions whatever. (Katsunori TAKAGI)