

LESSONS LEARNT FROM THE 2ND NARBO WORKSHOP ON EFFECTIVE RIVER BASIN AND ORGANIZATION

By
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BACKGROUND

Training workshop in River Basin Management and organization was held on 25th -29th April 2005 in Sri Lanka. This workshop was participated mostly by Mid career water professionals from South Asian Countries. During the 6 days of workshop general overview of reasons for River Basin Management was presented very nicely. To facilitate better understanding groups of participants were formulated. New insights from recent studies was given by some leading irrigation managers. To visualize the problems and constraints at local and national level a field visit was arranged at the head, middle and tail reaches of Mahaoya River Basin which is the 3rd largest basin in Sri Lanka with a total length of 132 km. the field visit was made for better understanding of river basin management at all its reaches. Participants of the field visit were assigned the task to review the management of basin keeping in view the organization and coordination, community participation and Environment and water quality. Opportunities of interaction with government departments, lined agencies, industries, communities were arranged to all the participant in very excellent manner. What I learnt from this workshop is really above my expectations. I learnt the various aspects of River Basin Management (RBM) from multidimensional approaches.

LESSONS LEARNT

Management and conservation of the key natural resources i.e. water, soil and crop has today become all the more essential to ensure the satisfaction of human needs for present and future generation. Management of the natural resources involves complex interactions. Among these resources water has become comparatively most manageable commodity.

Pakistan has the largest single contiguous flow irrigation system in the world. Today the Pakistan Irrigation System (PIS) consists of 2 major dams, 21 principal canals, 11 inter-river links and 17 barrages or head works with an annual flow of 103 MAF.

No doubt this system has brought a great prosperity to the country but from last year (1998-todate) system is under the grip of severe water crisis which further highlight the need for water management and RBM activities the 5 river basins in Pakistan. At this critical juncture training is not only helpful for my country as well as for enhancing my own practical capabilities. From this training workshop I have learnt that:

1. What are the key steps for the management of river basin.
2. I learnt that we should study coordination and organization aspects first, than secondly we should watch community participation and at 3rd stage environment and water quality should be emphasized.
3. To start work on RBM existing data base is needed which prove a bench mark to take further initiative in management.
4. Than issues at river basin are identified. Accordingly solutions for these issues are planned after the discussion with the concerned stakeholder's and parallel to this some constraints and limitation are always there which should be addressed under the circumstances.

5. In river basin management most important thing which I learnt is the active participation of community. A project without the involvement of local peoples results into the failure.
6. It was felt that users/farmers organizations formation makes the system more sustainable and reliable.
7. During this training I had a chance to view the management activities of Maha-oya river basin. From stakeholder's meetings at this river lot of new things came in front of me i.e. safe disposal of effluent, supply of drinking water and river flow problem.
8. Upper reaches part of river and its impact on down stream users. I observed that there are following 6 issues need to be addressed at the Maha-oya river basin:
 - i. Sand and clay mining
 - ii. Soil erosion
 - iii. Biodiversity
 - iv. Drainage of urban wastes
 - v. Industrial Effluent disposal
 - vi. Installation of hydropower projects
9. Sand mining especially in the lower stream of river is being done illegally by the people inspite of the decision of Supreme Court of Sri Lanka. I learnt that to stop this government should levy reasonable penalties and frame laws and policies to mangle this problem.
10. Soil erosion is mostly prevailing in the middle and down stream reaches of river due to the deforestation. Forest department is not planting further trees. This is causing erosion and degradation of soil. The government should provide plant saplings to the local people and joint farmer management should be streamlined accordingly to enhance forests.
11. Similarly to tackle the biodiversity problem I observed during the workshop that a conservation policy should be enforced and monitoring of line species should be performed along river basin.
12. During my visit to the Mahooya river basin different information and gathering were arranged by the organizers of the workshop. From this discussion I found that unplanned urbanization along the bank of river should be strictly stopped and proper planning must be done before urbanization. Industrial effluent should be treated before it goes finally into the river because uncontrolled wastes cause epidemic hazards.
13. The most important thing I learnt in that was the formulation of short term and long term strategies/ solution for the issues related to RBM.
14. During river basin management groundwater should also be given due attention because it is very important for irrigation as well as drinking purpse also.
15. From this workshop I observed that an integrated approach must be adopted keeping in view the all related factors like agriculture, irrigation, environment, local government, and forestry etc.

NEW IDEAS

Following were the new ideas I obtained from this training:

1. Integrated approach for river basin management at all the reaches (head, middle and tail).
2. Integration of social, legal, economic demand and political administrative aspects. This approach strengthens my concept for river basin management.
3. Enforcement of environmental quality standards for the safe disposal of standards is very much necessary.

4. This training visualized me that during the basin management the entire stretch of river should be taken into consideration.
5. Idea of environmental impact assessment (EIA) for keeping the river water clean is very important which I learnt through the visit of industries.
6. Regular environmental monitoring of river on sustainable basis is necessary for effective management.
7. it was observed that triangular cooperation of Environment department, local community and local administration played very important role to maintain the health of the river.

USE OF IDEAS IN PERSONAL SITUATION

From the workshop I have learnt management techniques for river in a new and integrated fashion. I understood the method of interaction among the various stakeholders. By this training workshop I have got confidence in presenting any problem before the concerned department without any hesitation. To me this training proved very important as I obtained knowledge of irrigation practices and management technique from all other participants of India Nepal, Sri Lanka, Pakistan, Bangladesh and Afghanistan.

APPLICATION OF LESSON LEARNT FOR ORGANIZATION

1. As I am working in Ministry of Water and Power in Pakistan, this training will prove very helpful for me to strengthen the matters of following projects:
 - i. Framework to control urban and industrial effluent
 - ii. Environmental monitoring of Industries as well as management of river basins
 - iii. Groundwater regulatory programme
 - iv. Development of key inputs for National Water Policy
 - v. Organization of stakeholder's consultation workshops on environmental and River Basin Management.
 - vi. Environmental Impact Assessment of Industries
 - vii. Coordination, Monitoring and Evaluation activities in Water Sector Management of Pakistan.
 - viii. Development of wetland management plan around the delta of rivers.

WAY FORWARD

- ❖ The whole region of South Asia has almost similar type of problems for the management of River Basin Management. Rivers share the boundaries of more than one country. There is a need to manage the water resources at country as well as transboundary level. NARBO Secretariat should take some major initiatives for whole of this region.
- ❖ Workshops like this under the NARBO should be held in all other countries also like Pakistan, India, Nepal, Bangladesh and Afghanistan.

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MINISTRY OF WATER AND POWER PAKISTAN