

HOW CAN IWRM BE INSTITUTIONALIZED AND IMPLEMENTED THROUGH NATIONAL, BASIN, AND LOCAL PLANNING AND DECISION- MAKING?

1. Introduction

- 1.1 IWRM is a process which ensures the sustainable development and management of water and other related resources. It emphasizes on operationalizing a system which puts importance on collaboration and coordinated mechanisms among stakeholders to balance development and water resources sustainability.
- 1.2 Hence, the efficient, equitable and sustainable management of water and other related resources following an IWRM necessitates a major institutional change. These changes vary from country to country and according to prevailing socio-economic, political and cultural conditions.
- 1.3 As a process, the goal of IWRM can only be achieved if the approach is institutionalized, that is, if it becomes a part of regular work procedures and the daily routine of everyone in general. As such, IWRM should permeate into every concern affecting water resources -- from policies, structures, processes, strategies, etc.

2. Institutionalizing IWRM

Institutionalizing IWRM must be considered in the context of the three basic elements of effective water resources management as follows:

2.1. Enabling environment

- 2.1.1 In institutionalizing IWRM, the enabling environment which basically refers to policies, laws and regulations governing water resources management will have to be supportive, consistent and attuned to the principles espoused by the IWRM approach. This can be achieved through the following:

- a. Enactment of national policies, laws and regulations (such as executive orders, administrative orders) covering among others, the following:
 - adoption of IWRM as a national approach to water resources management and allocating funds thereof
 - defining roles of concerned agencies in effecting an integrated development and management of water resources (i.e., coordinative, advisory, regulatory, etc.)
 - creation or establishment of basin bodies (sub-rbos: committees, councils)

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- b. Enactment of a national law (i.e. National Water Code for the Philippines and comprehensive Law on Water Resources for Vietnam) governing the utilization, appropriation, conservation, development and management of water resources. A national water law provides a good basis for integrated water resources planning at various levels. It also provides basis for matters such as water resource regulation, including such things as project approvals, registration and licensing of water use and wastewater discharge, inspection and enforcement.
- c. Revisit / review of existing policies, laws and legislations on water resources management to ensure that the provisions are consistent with present or prevailing conditions.

For instance, in Vietnam, policy and secondary legislation under the Law on Water Resources (LWR) is not complete. Important issues which should be addressed include such things as water allocation and rights, financial sustainability of hydraulic works, flood management, and others. There are some gaps in the LWR. It does not cover the regulation of water bodies nor does it clearly mention water requirements for ecosystem protection. The capacity to develop strong policy and secondary legislation under the LWR is limited. This will require better coordination between ministries, agencies and provinces as well as training on strategic approaches to integrated water resources management. Awareness of the LWR, secondary legislation and how these will be implemented is still at a low level.

- d. Declaration of national parks, protected areas. Areas which need to be protected for purposes of preserving biodiversity should be covered by national declarations to ensure that human activities do not result to environmental degradation.
- e. Awareness raising on the importance of IWRM among policy makers and the general public. This is essential in gaining support to IWRM. This can be achieved through the implementation of programs and projects by concerned agencies.

2.2. Institutional Roles

- 2.2.1 The success of IWRM is further determined by the extent of coordination by all the various stakeholders to ensure complimentary efforts in water resources management. It is therefore equally important to put in place a mechanism by which government agencies, non-government organizations, the local government units and the community are able to put their acts together and take the same direction towards effective water resources development and management. Hence the need for the following:

- a. Development / creation / establishment of a broad-based participatory institutional cooperation / coordination. This can be attained through the organization of inter-agency committees, technical working groups, task forces consisting of representatives from major stakeholder groups within the Basin to serve as forum for stakeholder participation and cooperation. This will further provide the forum for building consensus among various stakeholders, including Government officials, companies, enterprises, private sector, the NGOs and other water-related agencies. (In Vietnam, this is very important especially so that the Ministry of Natural Resources and Environment (MONRE) was only recently established, hence the need for linkages)
- b. Adoption of a Memorandum of Agreement / Understanding (MOA / MOU) on the roles / tasks and commitments of agencies to effect a coordinated effort in water resources management. The MOA/MOU to be signed by agencies, the local government units, the communities shall serve to bind commitments and shall be the basis for enjoining involvement to integrated water resources management.
- c. Establishment / creation of an "apex body" at the national level to serve as the national coordinating body for water resources management. This body will be given the mandate of developing policies and strategies as well as preparing national plans for water resources development and management from which local level plans will be anchored on.
- d. Institutional capacity building. Capacity building among those involved in implementing IWRM are standard activities to strengthen the RBCs/ RBOs in effective resource management. International agencies can be tapped to extend technical assistance to further enhance capacities of technical staff of agencies involved in water resources management.

For instance in Vietnam, the capacity of the National Water Resources Committee should be improved. Members need awareness-raising. The Office of the NWRC should be strengthened in terms of organization, staff, inter-ministry working arrangements.

Institutional strengthening and capacity building is needed for different staff levels on management, planning, and other issues. This is particularly true at the provincial level.

The private sector is relatively weak and participation of water users in management, operation and maintenance of water infrastructure is still limited. Private sector participation could and should involve investment opportunities, provision of specialized services.

Aid management has tended to focus on allocation and channeling of funds, rather than deeper partnerships based on real sectoral priorities.

- e. Strengthening / enhancing institutional arrangements. To maximize the use of resources and avoid duplication of tasks among agencies thereby ensuring the efficient adoption of IWRM, agency roles and functions related to ensuring effective water resource management must be clearly defined and delineated.

In the case of Vietnam, water resources management functions are mainly assigned to the Ministry of Agriculture and Rural Development (MARD) based on the Law on Water Resources. A public administration reform (PAR) process is however currently being undertaken to address a number of important issues including restructuring of government agencies, assessment of duplication of agency mandates and improvement of staff recruitment, salaries and benefits.

Also, the National Water Resources Council (NWRC) and River Basin Management Organizations (RBOs) which have been established under the LWR and are being strengthened or activated. This gives the potential for further coordination and decision making at both the national and river basin level.

Concerning RBOs in Vietnam, their roles are still unclear. The degree to which they will be involved in decision-making (eg. project or budget approval), the control of RBOs by MARD and representation of multiple ministries / sectors as well as provinces are matters which should be resolved, based on both international models and local experience.

2.3 Management instruments

2.3.1 In ensuring that IWRM is fully operationalized, the following strategies should be adopted:

- a. Legislation of local laws and policies on sustainable utilization, appropriation, conservation, development and management of water resources as a basic tool to govern water related activities at the local level.

At the grassroots level, the Local Government which is basically responsible for issuing legislations should pay special attention to the water sector particularly to sustainable water resource use and equality in water allocation. National policies / laws should be brought down and translated into specific legislations considering varied local conditions and situations.

- b. Establishment of a Management Information System. Information/data is very important in water resources management. It is therefore imperative that a management information system be put in place and made functional by agencies concerned with water resource management as aid to decision-making, planning and evaluation.
- c. Preparation of Integrated Water Resources Management Plans (National, Basin and sub-basin Level) with maximum community participation

- Preparation and adoption of a national strategy for water resource management. Planning must be carried out in a strategic manner or at a professional level. Advanced tools and resources for planning should be able to facilitate planning at all levels.
 - Preparation and adoption of a comprehensive / integrated master plan for each river basin to serve as the blue print by which development in the area should be directed. The plan preparation should involve all stakeholder groups in the area.
 - Preparation and adoption of local / sub-basin plans. These plans should address locally specific issues and concerns which otherwise could not be addressed by national or river basin aide plans.
- d. Preparation of Investment Programs (Basin and sub-basin). Investment Plans for each basin should be prepared and which later on should be translated into local investment plans. This should be supported by a financing strategy identifying fund sources -- from government funds, international assistance, private sector investment and user fee collection. It must be noted that the ability of Government to directly finance water sector investment is very low or poor. Government subsidy plus user fees are not adequate to meet operation and maintenance requirements thus the need to tap other fund sources.
- e. Allocation of budget for the implementation of IWRM. Each agency should be able to allocate certain amount for programs and projects involving IWRM. (Again, this could be made a part of the law to be enacted to ensure its strict implementation)
- f. Collection of taxes / water fees for water resource management. Taxes / water fees collected for the use of water and other related resources (i.e. sand and gravel extraction, water usage, etc) should be farmed back and used for water resource development and management projects. This should be covered either by the national law or by local legislations to ensure its strict implementation and adherence.
- g. Provision of equal opportunities for sectoral representation to election or membership to river basin organizations / committees. Membership to river basin organizations, committees, councils should ensure the representation of all sectors to ensure integrated water resource management. Criteria for the selection of member agencies to river basin organizations/committees should be clearly defined and widely disseminated to provide everyone equal opportunity.
- h. Integration of IWRM in school curriculum. IWRM should find its way into the educational system as a means of instilling among school children concern for the environment particularly water resources. As such, IWRM should be made a part of the curriculum. This concern could be achieved by including it as one of the provisions in the law to be issued on the adoption of IWRM as an approach to water resources management.

3.7 Resources Regulation and Conflict Resolution

Strengths

The LWR provides a good basis for water resource regulation, including such things as project approvals, registration and licensing of water use and wastewater discharge, inspection and enforcement. Some secondary legislation has been approved.

MARD is focusing its action to the preparation and issuance of regulations and licensing on water abstraction and waste water discharge.

Some conflict resolution activities are carried out from the central and provincial levels. Conflict resolution is also taking place, to a certain extent, at the international level through multilateral and bilateral efforts.

Weakness or Gaps

Further secondary legislation is required to put the necessary resource regulation activities into effect. Considerable work will be required to prepare and test the necessary details, define institutional roles, train staff, build awareness, etc.

Inspection and enforcement and conflict resolution activities need to be strengthened and coordinated.

3.8 Training and Human Resources

Strengths

A system of schools, universities, colleges and institutes has been established to provide training and education services for the water sector.

Self-learning has become common among young professional in the sector.

Weakness or Gaps

The level of awareness, skills and technology for integrated water resources management and new functions for its implementation is fairly low at both the national and provincial level. Clearer understanding and commitment regarding IWRM at senior levels in Government is also needed.

Training is needed in integrated river basin planning and management. New techniques, methods and models are needed, as well as public consultation, negotiation and conflict resolution skills.

Training and technical assistance should be provided to encourage the application of integrated water resources management to areas such as flood management and mitigation.

Public administration reform needs to be carried forward to address both institutional issues and staff issues such as recruitment, salary and benefits, and improved management staff management.

Professional training is based on traditional approaches. New advanced concepts and techniques should be added to the curriculum. Training at the local level (provincial, district and commune) is poor. Retraining and training of trainers also need to be improved.

Training should address the need at both the university and post-graduate level and at the technical level.

3.9 Education, Awareness, Consultation

Strengths

The school, college, university have been established in different parts of Vietnam, that provide wide education services.

MARD pays attention to enhance the quality and expand the scope of educational activities regarding water use, management of small hydraulic work, etc.

Water users participation in water resources development and management is encouraged by the Government. Consultation is good with local participants.

Weakness or Gaps

Consultation and coordination between ministries and agencies and between the central and local level needs to be improved. MARD should take a strong role in building up this consultation and coordination.

Awareness raising on water resources has been limited. Most awareness activities have been in project areas and under project funding. People's participatory activities should be build up as a public movement.

Prepared by Delia L. Abalos, Bui Nam Sach, Sogiarto, Chansouk Phimvongsa