Capacity Building Activities in the STRIVER Case Basins

Although capacity building is officially stated and part of many water policies and strategies in the Sesan, Tungabhadra and Taqus case study basins, it is evident these official statements are seldom operationalised to a significant degree. Capacity building was a major discussion theme at the STRIVER stakeholder workshops, where it was identified that a major constraint to the development of capacity was funding. Subsequently stakeholders strongly recommended allocation of resources specially earmarked for capacity building.

The STRIVER Brief series translate the results from the EC FP6-funded STRIVER project into practical and useful information for policy makers and water managers.
Capacity Building Activities in the STRIVER Case Basins

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Abstract
In order for instruments of policy, the legal framework, financing systems and organisational frameworks to function effectively, the different parties involved need to possess sufficient information and expertise, as well as incentives to function effectively. To achieve this, capacity building may be needed at many levels: for water professionals in all areas - both public and private water organisations, local and central government, water management organisations and in regulatory organisations, as well as capacity building and empowerment activities in civil society.

According to the Global Water Partnership, capacity building is the process of development and strengthening of the abilities of people, institutions and societies to perform functions, solve problems, and set and achieve objectives. In this way, a community equips itself to undertake the necessary functions of governance and service provision in a sustainable fashion. With changes leading to decentralization in the water management sector, it is necessary for water managers and local communities to get used to their new roles and develop capacity as per the needs. Effective IWRM requires an enabling environment and conscious and competent actors. Capacity building can take place at different levels: at central and regional and local governmental levels and through NGOs and community organizations small businesses. Capacity building can be initiated through formal and informal programs. The latter could be more effective in settings like Tungabhadra and Sesan, where farmers often share experiences and learn from each other. This brief looks at the current capacity building activities and institutions in the STRIVER case basins.

References
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State Water Policy, Government of Karnataka, 2002

Fact box
Capacity building can take place at different levels: at central and regional and local governmental levels and through NGOs and community organizations small businesses. Capacity building can be initiated through formal and informal programs. The latter could be more effective in settings like Tungabhadra and Sesan, where farmers often share experiences and learn from each other.
Current Capacity-Building Activities in the STRIVER Case Basins

The Sesan River
In Vietnam, the Ministry of Natural Resources and Environment (MONRE) is responsible for water management, together with the Department of Water Resources Management (DWRM). They are the competent authorities for capacity building of institutions and departments at the central, regional and local levels. A training needs assessment was carried out by a joint Task Force that led to a training plan and approved by MONRE (http://www.isgmard.org.vn/). It was seen as a positive initiative by many donor agencies.

The government, however, does not have adequate funds to support the training needs, and it is mostly the donors who provide funding support for various training programs in the country. The joint task force report identified many training options, such as “twinning programs” with one or more parallel water resource management agencies in neighbouring countries. National Water Policy documents and MONRE in Vietnam do emphasize capacity building specifically for IWRM, seen as an essential component for the transition of water management functions from MARD to MONRE (2003).

Various donor projects have contributed to high level workshops in IWRM approaches, study visits, and training modules for key decision-makers in national ministries and agencies, at provincial level and MONRE also allocates budget each year for capacity building in water management within national and provincial level institutions.

In Cambodia, the National Strategy for Agriculture and Water (2007) has specified the budget need for five programmes, one of which is the Agricultural and Water Resources research, education and extension program (50 million USD over five years), although this is a national target and not specifically only for the Sesan.

The 2007, National Strategy for Agriculture and Water, focuses on the need for training, especially officials responsible for implementing water management, farmers and fishermen through Farmer Water User Communities, Commune Councils and others. It also emphasizes participatory management and empowering people to implement IWRM practices. Overall, the Ministry of Water Resources and Meteorology (MOWRAM) in Cambodia, has the responsibility for Knowledge, Information and Technology (KIT) transfer to stakeholders. MOWRAM does not have adequate resources to implement recommendations for to enhance capacity.

There is no specific agency in Vietnam or Cambodia for IWRM capacity building and state-funded capacity building activities are somewhat limited. However, local NGOs supported by international donors, play a great role in capacity building by conducting training programmes. The NGO 3SPN has created a network of community leaders to give voice to the concerns and needs of Sesan communities. 3SPN meets regularly and conducts community trainings to teach communities about their rights, how to document impacts, and advocacy strategies.

NGOs such as Welt Hunger Hilfe (with financing from the EU) help provide capacity building in the Sesan on issues like drinking water purification and sanitation and river-bank gardening projects for improved livelihood and sustainable development for indigenous people and ethnic minorities in Cambodia. Most of the training programs are not co-ordinated and sometimes there is an overlap in their target areas and stakeholders chosen for training.
The Tungabhadra River Basin

In India, most states have a state level training institutes to train officials from various state departments, in addition to the national training institutes. The State Water Policy in both states of Karnataka and Andhra Pradesh, that share Tungabhadra emphasize on training and capacity building of stakeholders. The Karnataka State Water Policy, 2002, does mention that efforts should be made to develop integrated management of water. The new Participatory Irrigation Management (PIM) in Karnataka State, also mentions that training of farmers and managers is essential in for implementing PIM.

In most water projects, capacity building is included as a part of the project activity, though, it is not specifically mentioned as a capacity building exercise for improving the IWRM capacity. Although budget is allocated for training, it is inadequate to meet all the training needs in the basin.

The Water and Land Management Training Institutes (WALMI) have a role in educating and training water managers, farmers and policy makers in their new roles for decentralized water management. Under the new Participatory Irrigation Management (PIM) in the state of Karnataka, the government has made training of farmers engaged in the Water User Co-operative Societies (WUCs) as a part of the new PIM program.

Each year, policy makers, water managers and farmers undergo vertical training programs designed to improve the skills in water management. Farmer’s survey in Tungabhadra has shown that, nearly half of the farmers in the basin have been exposed some kind of training programs at WALMI or other agencies, attended workshops or farmers meetings related to water management.

In addition, the WUCs have regular meetings where farmers participate and discuss about water management problems. Officials from the Water Resources Department also participate in the meetings that are organized at different levels. In addition, there are also public hearings organized by NGOs, like Jalaspandana that educates farmers and managers on water related issues.

The Glomma River Basin

In general, the citizens and water managers in Norway are well educated in water and environmental issues. Extensive public hearings before granting a license for using water (e.g. to hydropower regulations or to fish farming) is instituted in Norway. Transparency and public involvement dominate the Norwegian licensing system. This is also included in the three major laws related directly or indirectly to integrated water resources management:

- The Planning and Building Act
- The Pollution Control Act
- The Water Resources Act

In Norway it is the Ministry of the Environment and its subordinate agency, the Norwegian Pollution Control Authority and the Norwegian Water Resources and Energy Directorate (NVE), subordinated to the Ministry of Petroleum and Energy, are responsible for the management of legislation and issues related to water and energy resources. These ministries and agencies organize various meetings, public hearings, seminars related to IWRM and various legal aspects such as the Water Resources Act. NVE also play a central role in developing regulations, handbooks and organizing courses and seminars on various water management topics like contingency measures against floods and other emergencies related to watercourses, and is in charge of maintaining power supplies under emergency conditions nationwide. A course in IWRM has been given by NVE three times since 2000 in cooperation with the Directorate for Nature Management (DN) and the Norwegian Pollution Control Authority (SFT). Employers at NVE also give regular lectures at universities. NVE’s regional offices give advice to municipalities and county governors on water management issues. NVE provides hydrological data and flood risk maps to the public.

The Glomma and Laagen Water Management Association (GLB) is an important institution in the integrated operation of the Glomma basin with respect to hydropower production, flood dampening and environmental mitigation procedures. The GLB play an important role in coordinating the complex system of reservoirs on behalf of their members (i.e. the hydropower companies). As a communication partner for other interests co-operating on
ecological issues and mitigation improvements it can be regarded as a capacity building institution in the Glomma.

The Ministry of Foreign Affairs recently proposed in a white paper that capacities for water monitoring should be given increased resources (about 9-11 M EUR annually). In addition, 1.5 M EUR should be spent on research and development projects in addition to existing resources. The government also highlighted the need for resources for citizen involvement and local participation in planning processes should be strengthened by increased support of the existing map and web-based information tool Vann-Nett. Although laws and policy documents hardly ever mention capacity building directly, but as noted in the examples above, there are strong capacity building initiatives in Norwegian water administration and governance structures.

Tagus
Water management in the Tagus basin is generally characterized as highly centralized, with minimal public involvement, although the situation is currently changing with the implementation of the Water Framework Directive. Water management in the Tagus in Spain is highly centralized in river based water confederations, which focus mainly on managing the water allocation between various users and supervising the hydrological plans of the basin. In the Basin Management Plan, which defines the guidelines of the activity of the Tagus Water Confederation (Confederación Hidrográfica del Tajo- CHT) and is amended periodically, there is no express mention to capacity building activities. In recent years there has been an effort to promote transparency and public participation, see the CHT website: http://www.chtajo.es/).

Apart from what is mentioned in the basin management plan, there are a number of initiatives leaded by the TWC, the public administration and other organizations (including NGOs, farming organizations, etc) devoted to capacity building. These campaigns focus mostly on good water use practices aimed at user groups. Some examples are campaigns promoting water conservation such as those by the foundation agua-dulce.org, or the campaign for a responsible consumption (including water) by the CHT.

Brochure of the Tagus Water Confederation ‘Towards responsible consumption’

In Portugal, the public administration institutions with competency in all issues related with water are the Water Institute (INAG), at the national level, and the Administrations of the Hydrographic Regions (ARH) at the hydrographic region level. The representation of the sectors and water users is ensured by the following two consulting or advisory entities: The National Water Council (Conselho Nacional da Água), CNA, and the Councils of the Hydrographic Regions (Conselhos de Região Hidrográfica), CRH.

Those who work in the water sector have professional competencies, which ensures the required capacity building. There are also other organizations and groups that contribute to capacity building, such as farmers or fishermen organizations and NGOs, such as the Liga de Proteção da Natureza, LPN (Nature Protection Association), Quercus - Associação Nacional de Conservação da Natureza (Quercus – National Association for the Nature Conservation). Whenever special situations occur, as during the drought of 2005, warnings are spread to the public through the media on water conservation. The Water Institute conducts public campaigns regarding droughts, floods, pollution incidents and water conservation.
Brochure produced by the Water Institute in Portugal to increase awareness (available on the INAG website).

Equivalent information though more focused in the environmental questions is also provided in the webpage of the Portuguese Environment Agency (Agência Portuguesa do Ambiente) (http://www.apambiente.pt).

A joint programme – between the Education Ministry and the Environment, Spatial Planning and Regional Development Ministry the Eco-School Program (Programa Eco-Escolas) provides education in schools on environmental and water issues. Eco-Centers (Eco-Centros) aiming at dissemination of information about the environment and environmental education are being created, either by the Portuguese Environment Agency or by local Municipalities.

Policy implication

Although capacity building is officially stated and part of many water policies and strategies in the Sesan, Tungabhadra and Tagus case study basins, it is evident these official statements are seldom operationalised to a significant degree. Capacity building was a major discussion theme at the STRIVER stakeholder workshops, where it was identified that a major constraint to the development of capacity was funding. Subsequently stakeholders strongly recommended allocation of resources specially earmarked for capacity building.
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The Briefs are also available online: [www.striver.no](http://www.striver.no)

About STRIVER
STRIVER- Strategy and methodology for improved IWRM - An integrated interdisciplinary assessment in four twinning river basins is a three year EC funded project 2006-2009 under the 6th framework programme (FP6) coordinated jointly by Bioforsk and NIVA. The point of departure for STRIVER is the lack of clear methodologies and problems in operationalisation of Integrated Water Resource Management (IWRM) as pointed out by both the scientific and management communities. 13 partners from 9 countries participate as contractual partners in addition to an external advisory board.

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