

Linking Participation to results in Water Resources Management



A Case study of Ethiopia IWRM Implementation Pilot Project

is also providing an opportunity to lay a framework for integrating/coordinating activities in the catchment.

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- **Demonstration of institutional arrangements for IWRM:** - establishment of the partnerships in Berki gave ample lessons and an alternative option for addressing institutional arrangements for IWRM. Additionally, the Berki IWRM process is providing knowledge and information that can be used in implementing IWRM at bigger river basin levels.

3. The Lessons

The following are the key lessons that can be learnt from the Berki catchment case:

- **Ownership of the change:** The IWRM change process primarily needs to support people's livelihoods. Water resources management should therefore focus on sustaining the livelihoods of the watershed communities. It is only when people understand that their well-being depend on sustainable management of the water and land resources of the catchment that they own and meaningfully participate in the change process. The challenge faced in Berki was a long planning process in which the local communities could not easily understand the linkage between their livelihoods and integrated management of water resources. There was in fact a high level of expectation for provision of a physical infrastructure to address their practical problems.
- **Communication among stakeholders:** appropriate communication facilitates participation and ownership of the IWRM process by all stakeholders. People down the communication chain often do not get enough information in the right way or do not have direct lines of communication available to them. Devising appropriate communication mechanisms among stakeholders at all levels taking into consideration the local situation and knowledge is therefore crucial to establish a sustainable multistakeholders' partnership. The approach in Berki was building on existing system of water resources management, not introducing radical change. Decentralized participatory multi-stakeholder platforms supported by effective communication mechanisms and lines were the key for the successful IWRM planning and implementation process to address practical water management issue at the grassroots level.
- **Capacity building and awareness raising as integral parts of the process:** IWRM is a participatory process and it requires capacity building of stakeholders' to ensure their active and continued participation. The approach of taking awareness raising and capacity building as part of the program adopted in Berki has facilitated the participation of the stakeholders. Moreover, as capacity building on IWRM cannot be handled by an organization or an individual alone, mobilizing expertise from the various stakeholders to assist the process is an important mechanism.
- **Multistakeholder partnership building is time consuming:** Institution/process building and internalization of change is not an immediate and straight forward undertaking. It is rather long and demanding process. Participation, ownership and trust building among the stakeholders were challenges that were achieved through relentless investment of resources, energy and time on establishing the water partnerships.

Church took part in the various consultations. These NGOs are playing important roles in developing and communicating integrated water resource management in relation to their domain activities.

Training of Water Professionals and Communication with Stakeholders: - IWRM implementation requires intensive and continuous training to build the capacity of water professionals at all levels. Cognizant of this fact, the Ethiopian Country Water Partnership (ECWP) organized various workshops and Training of Trainers events on IWRM and conflict management for professionals involved in water resource management at the national, regional and watershed levels. The role of academic institutions in IWRM capacity building was also very high. They participated in implementing various training programs and carrying out technical studies.

Water Resources Assessment: - Lack of adequate data, information and knowledge regarding the resources of the Berki watershed was clearly identified by the various stakeholders as one of the strategic issues that need to be addressed immediately. Thus, water and other natural resources of the Berki watershed were assessed by a multidisciplinary team of experts drawn from regional and Woreda organizations. The study was very



long and participatory in nature where communities in the Kebeles were also involved in analyzing the problem and suggesting solutions. Several consultation and review sessions were also carried out at various levels. The results of the assessment provided the basis for developing the IWRM Plan for the Berki watershed. The preparation of the plan itself was also consultative and participatory.

2.3 The Outcomes

The following are some of the main outcomes or positive changes observed in the management of the Berki catchment:

- **Change in the behavior of the stakeholders at various levels:** - this was due to enhancement of the awareness level of the stakeholders about water related issues and the role of participatory and integrated approach for water resources management. All the stakeholders of the catchment have developed common vision of considering Berki catchment as a planning/management unit despite the Weredas' boundaries. Moreover, they appreciate the importance of joint planning for the catchment with the Berki catchment IWRM Plan already prepared.
- **A Mechanism for consultation and information exchange** among all the stakeholders has been established. The establishment of multi-stakeholder forums at various levels (regional, Berki watershed, and Woreda) has created the opportunity for interaction among the various stakeholders. This

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1. Water Resources Management in Ethiopia

Ethiopia has adopted the principles of Integrated Water Resources Management (IWRM) in its Water Resources Management policy and has already put in place water legislations, strategy, and program for their implementation. Moreover, the country's five year (2005/2006 – 2009/2010) Plan for Accelerated Sustainable Development to End Poverty (PASDEP) attaches high priority to the water sector development. The Plan underlines the overall objective of the National Water Resources Management Policy, which is aimed at enhancing and promoting efforts towards an efficient, equitable, and optimal utilization of water resource that would contribute to the country's socioeconomic development on a sustainable basis (MOWR, 1999).

Although the policy environment is highly supportive of the IWRM, there are considerable constraints in its implementation. The constraints include institutional and financial capacity limitations, lack of coordination among various stakeholders and limited participatory approach in planning and implementation of water development and management activities. Hence, the

Ethiopian Country Water Partnership (ECWP) has been implementing a pilot IWRM project in two watersheds, viz. Berki in Tigray region (Northern Ethiopia) and Messena in Amhara region (North-east Ethiopia). The project aimed at promoting IWRM in Ethiopia; establishing the framework for broader stakeholder participation and networking; enhancing IWRM implementation at grassroots level; and contributing towards implementation of the Water Resources Management Policy, Strategy and the Water Sector Development Program of the country.

2. Multi-stakeholder Participatory Approaches in Berki Catchment, Tigray State

2.1 Overview of the Berki Catchment Situation

Berki River originates in the highlands of Tigray (north Ethiopia) and flows to join Giba River, a tributary of the river Tekeze, which ultimately joins the Nile. Berki watershed is shared by three Woredas or districts (Atsbi at the upstream and Wukro and Enderta at the downstream). Atsbi Woreda contributes much of the water resources while the downstream Wukro Woreda has little contribution. Enderta Woreda shares only a very small part in the watershed. The size of the catchment is about 410 sq km. but deforestation due to agricultural activities, fuel wood collection and free animal grazing have had severe impacts on the ecosystem and the hydrological conditions of the area.

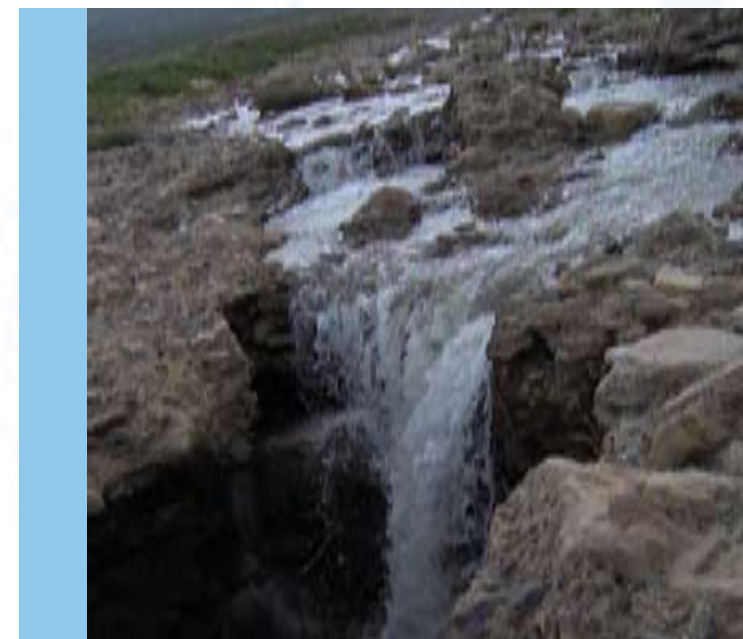
Farmers in the upper Berki catchment use pumps to take water from the river and there was a plan to



introduce about 100 more pumps in the Atsbi Woreda with possible negative impact on the irrigation projects in the lower catchment sites. There was already one diversion in the Woreda at a location called Chuhet, which irrigates an area of around 43 ha. World Vision, an international NGO was undertaking conservation activities in the same Woreda. In Wukro Woreda, there were two diversions constructed on the river for irrigation purposes which irrigates an area of 100ha and 70ha respectively. Communities in the lower catchment area have also been practicing traditional irrigation for more than a century. Local small businesses too extract sand from the river and use the water to make bricks and concrete pipes. Moreover, there is a spring near Berki diversion that is used by the Church for spiritual purposes (holy water). In fact, the church fully controlled the spring anticipating that the government would develop it to supply water to the Agula town. The action taken by the church caused conflict with the Bureau of Water Resources of the Tigray Regional State. There was also conflict between the downstream traditional irrigation water users and upstream Laelay Agula diversion water users, which resulted in the destruction of the diversion weir by the downstream users.

The different water use activities have exerted heavy pressure on water availability for different purposes, especially for the downstream users leading conflicts among upstream and

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downstream communities and between administrative authorities due to the diverse interests. The absence of a land use plan and water regulations have also led to the uncontrolled introduction of private pumps, and changes in cropping pattern and land use. Moreover, the water and other natural resources of the catchment were not assessed and decisions were taken without adequate information. Poor communication among various users and stakeholders and low level of awareness also aggravated the problem.

2.2 The Intervention Process

Realizing the problems outlined above and the potential solutions provided by an IWRM approach, the intervention of the pilot project involved multi-stakeholder participatory planning at the catchment level. The process employed consultations and discussions; building multi-stakeholder water partnerships; IWRM awareness raising, assessment of the resources and formulation and implementation of integrated water resources development and management plan for the Berki catchment.

Consultations and Awareness Raising: - The relevant stakeholders at the Tigray regional state level were identified, contacted and sensitized about the need to pursue an IWRM approach and to establish multi-stakeholder forums at various levels to facilitate this process. This exercise was found to be very useful to win the political support of the authorities and to mobilizing the key stakeholders. The same activity

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was done at the riparian districts of Atsbi, Wukro and Enderta.

Similar IWRM awareness raising workshops were also organized at the regional level for stakeholders from the regional bureaus, NGOs, Woreda offices, and communities from the Berki watershed.

Establishing Water Partnerships: - Water Partnerships at the regional, Catchment, Woreda and Tabia/Station levels were established by the stakeholders. Moreover, a regional technical team was established with membership of 9 experts (from government line bureaus, NGOs, and from the University and the Agricultural Research Institute) to technically support the process, specifically to carry out resource assessment and socioeconomic studies of the Berki Catchment. Woreda level water partnerships lead by the Woreda Watershed Committees, were also established with membership of the concerned government line offices, NGOs, and communities. A joint Atsbi-Wukro Woreda Watershed Committee, which is leading the Berki Catchment Water Partnership was established with membership of representatives from the two Woredas. Much effort was made to ensure balanced representation of all the stakeholders in the water partnerships at all levels. The forums have laid the foundations for joint planning and implementation of sustainable water resources management, including management of water related conflicts.

The Woreda Watershed Committees are members of the Regional Water Partnership while local communities are represented at Woreda Watershed Committees to ensure strong linkage between the different levels of water partnerships and smooth flow of

information. The link between the Woredas and Tabias/stations is maintained by the Agricultural Development Agents who directly work with the community and give feedback to the Woredas.

Involving Local Authorities and Civil Society Organizations:-

Local authorities in the watershed, mainly the Woreda and Kebele administrations, actively participated in formation of partnerships at watershed, Woreda and village levels. As any activity in the Woreda has to be approved by the Woreda administration, the role of Woredas in the process was significant. Practically nothing could have been done without their commitment and support. They played a key role in mobilizing the stakeholders in their respective authority, establishing Woreda watershed committees, and contributing experts for the IWRM process. On the other hand, since the NGOs that operate in the catchment and in the region as a whole have better capacity, strong grassroots base and social mobilization experience, three of them, namely; Relief Society of Tigray, World Vision and Catholic

