

Implementing IWRM in a catchment: Lessons from Ethiopia

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Implementing integrated water resources management (IWRM) can often seem overwhelming given the scale and complexity of the changes needed. This article describes how IWRM is a long and participatory process based on an on-going learning process in Ethiopia. The IWRM pilot project in the Berki watershed (Ethiopia) has shown that IWRM involves changes to the existing system through a step-by-step approach that creates a sense of ownership amongst all stakeholders. The case/project demonstrated that gaining political support at various levels and multi-stakeholder platforms are crucial for the success of the IWRM process. Building stakeholders' capacities (tailored training, awareness workshops and experience sharing activities) also played a significant role in facilitating the process.

Keywords: multi-stakeholder platform, water conflict, upstream users.

ETHIOPIA IS ENDOWED WITH HUGE water resource potential (about 122 billion cubic metres annual surface runoff and 2.9 billion cubic metres groundwater) though it is characterized by uneven spatial and temporal distributions. Most of the rivers in Ethiopia are seasonal and about 70% of the runoff is obtained between June and August. Irrespective of the huge potential, the country's water resources have contributed very little to socio-economic development; on average, access to clean and safe water supply is about 50%; irrigation stands at only 6% of the potential and that of hydropower is at only 2% despite the big potential (second in Africa). Most of the rivers that originate within the country flow across borders to neighbouring countries, known as transboundary rivers.

Problems related to water resources management in Ethiopia include, among others, drought, flood, pollution, deforestation and land degradation. These issues, along with a rapidly increasing human population, rising rates of per capita water requirements, and the impact of

Ethiopia's potential
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has barely been
exploited

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climate change, which is reducing rainfall and increasing evaporation in some areas, is creating heavy pressure on the water resources of the country (UNESCO, 2006).

The policy environment is highly supportive of IWRM approaches. Ethiopia's five-year Plan for Accelerated Sustainable Development to End Poverty (PASDEP) places water (particularly water supply and sanitation) as a high priority. The Plan references the overall objective of the National Water Resources Management Policy, which is to enhance and promote efforts towards an efficient, equitable and optimally utilized water resource that would contribute to the country's socioeconomic development on a sustainable basis (MOWR, 1999).

Ethiopia has adopted the principles of IWRM and has already put in place an appropriate water policy, legislation, strategy and development programme (including master plans) that embrace IWRM principles and approaches. Therefore, it could be said that the country has a national IWRM plan and is at a stage of implementation. However, there are constraints in implementation that include capacity limitations, lack of proper coordination/collaboration among various stakeholders (as sectoral interests dominate), and lack of integrated and participatory approaches in planning and implementation of water resources.

To complement the government's efforts to address the above-mentioned constraints, since 2005 the United States Department of State has supported a project that promotes IWRM in Ethiopia through the Ethiopia Country Water Partnership (ECWP). The main objective of the project is to pilot the principles of IWRM in two selected watersheds, to conduct national-level advocacy and awareness raising on IWRM, and to share lessons from the pilots for scaling up at various levels.

This paper briefly describes the challenges of water resources management in Berki, one of the IWRM pilot watersheds, to highlight the approaches used by ECWP and the achievements made so far. It concludes by sharing key learning from the IWRM pilot exercise in Ethiopia.

Challenges of water resources management in Berki catchment

The Berki River originates in the highlands of Tigray (one of the regional states in north Ethiopia) and joins the Giba River, a tributary of the River Tekeze, which ultimately joins the Nile. Berki watershed is shared by three *weredas* (districts): Atsbi upstream, Wukro and Endereta downstream. The size of the catchment is about 410 km². The upstream Atsbi *wereda* contributes much of the water resources while the downstream Wukro *wereda* has less of a contribution. Endereta *wereda*

There are constraints in implementing Ethiopia's national IWRM plan

The main objective is to pilot the principles of IWRM in two selected watersheds

Deforestation has had severe impacts on the ecosystem and hydrological conditions of the area

shares a very small part in the watershed. In the past, the Berki river catchment was covered by primary forest. Deforestation due to agricultural activities, fuelwood collection and free animal grazing has had severe impacts on the ecosystem and hydrological conditions of the area. Almost all inhabitants of the catchment depend on the natural resources for their living.

The upper Berki catchment is characterized by mountainous terrain with gorges formed by the river. Farmers in this area use pumps to take water from the river and shallow wells, and there was even a plan to introduce around 100 more pumps in the upper catchment areas, with possible impact on irrigation schemes downstream. There is one diversion in the Atsbi *wereda* at a location called Chuhet, which irrigates an area of around 43 ha. In the same *wereda* World Vision, an international NGO, is undertaking conservation activities in the upper catchment area.

In Wukro *wereda*, there are two diversions constructed on the Berki River for irrigation purposes. One is the Berki diversion, which irrigates an area of 100 ha, and further downstream is the Laelay Agula diversion with a command area of 70 ha. Moreover, there are private operators that extract sand for construction, and use water for producing concrete pipes and building blocks.

There is a spring near the Berki diversion that is used by the church for spiritual purposes (holy water). However, the church capped the spring anticipating that the government would develop it to supply water to Agula town. People living in Agula town, who do not have access to safe and adequate water, are forced to depend on river water. The action taken by the church created a conflict between the church and the Bureau of Water Resources. Downstream communities have been practising traditional irrigation for more than 100 years. There is also conflict between downstream traditional irrigation water users and upstream irrigation water users of the Laelay Agula diversion, which resulted in the destruction of the diversion weir structure by downstream traditional irrigation water users.

There are different government institutions with various mandates and interests in the water and related resource management of the Berki catchment. The Bureau of Water Resources has an interest in using the water for water supply and irrigation purposes, while the Tigray Bureau of Agriculture wants to protect the catchment and develop irrigated agriculture. On the other hand, the Tigray Environmental Protection Authority is interested in preventing environmental degradation. The different sectors were not effectively collaborating to deal with the water resource management problems in Berki. There was no official communication or plan to use the Berki water resource for multiple and integrated uses. Similarly, NGOs operating in the Berki catchment area, including World Vision, the Catholic Church

The action taken by the church created a conflict between the church and the Bureau of Water Resources

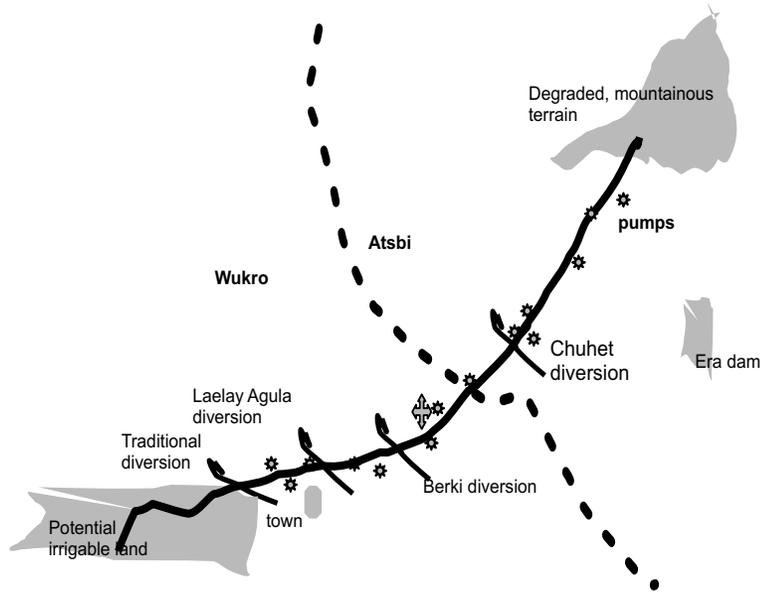


Figure 1. Site of water conflicts in the Berki catchment
 Source: ECWP

and the Relief Society of Tigray, work independently and their stakes in the catchment were not very well considered.

Water is scarce in Berki catchment, and there are various water resource management problems, including conflicts among upstream and downstream communities and administrative authorities. The various water use activities have put heavy pressure on water availability for different purposes, especially for far downstream users. Inefficient use of water, including the use of wasteful technological solutions, were also common practice. Communities downstream of Agula town (outside of the Berki catchment) suffer from a lack of water because of the upstream pumps and diversions. They need to travel long distances to access water especially during the dry seasons. People living upstream use water for washing clothes and for cattle, polluting water that is used by downstream users.

Water resources were being excessively exploited both beyond the natural limits of the system and beyond the regulatory offices' ability to control it. Poor communication among various users and stakeholders, and a low level of awareness, also contributed to this problem. Officers recognized the severity of the problem but lack the legislative back-up to exercise their power. There were no land use plans or water regulations, which led to the uncontrolled introduction of private pumps, changes in the cropping pattern, and changes in land use, including farming practices on steep slopes. In addition, water and

The various water use activities have put heavy pressure on availability for downstream users



Conflict over the the use of water resources has led to this weir being damaged by downstream water users

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At every step of the process, all stakeholders were to participate

other natural resources of the catchment were not known and decisions were made without adequate knowledge and information.

The biggest challenge was the sustainable use and management of the Berki's water resources for all interest groups, in an equitable and sustainable manner through an IWRM approach.

Approaches followed

Realizing these problems and the potential solutions provided by an IWRM approach, ECWP decided to conduct a pilot activity in the Berki watershed. The intention was to use the practical experiences of piloting IWRM in the Berki watershed for scaling up to other watersheds in the region and other parts of the country. The process involved multi-stakeholder participatory planning at the watershed level with facilitation from ECWP. That means that at every step of the process, all stakeholders participated and felt a sense of ownership.

Specifically the following approach was followed by the project:

- identify policy gaps and constraints in implementing IWRM;
- identify stakeholders in water resources management of the Tigray regional state;
- sensitize stakeholders in Tigray on IWRM principles and approaches;
- launch the Tigray Regional Water Partnership (TRWP);
- establish a Tigray Regional Technical Team from various disciplines and sectors;
- train a technical team;
- assess the water and other natural resources of the Berki watershed;
- study the socio-economic dynamics of the Berki watershed;
- establish *Wereda* Watershed Committees;
- establish an Inter-*Wereda* Watershed Committee;
- document and share experiences on approaches, processes and findings at various levels by sharing information and partnership meetings.

Wereda Watershed
Committees were
established

Note that there were continuous training, awareness raising, and consultation programmes among all stakeholders at various levels.

Achievements so far

Identification of IWRM policy gaps and implementation constraints in Ethiopia

A study carried out by ECWP reviewed the existing policies, laws, strategies and programmes with the aim of identifying policy gaps and constraints for implementing IWRM. The process was highly consultative and a range of stakeholders at various levels participated. The study analysed whether or not an enabling environment existed for implementing IWRM in the country. It also identified gaps in policy and implementation.

The gaps identified included a lack of integration of water and land resource management; decentralization without building local-level capacity; the lack of a holistic approach that integrated different sectors and programmes; low level of awareness on sustainable water management practices; a lack of regulation for managing demands and conflicts; and limited private sector involvement.

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The findings of the study led to the identification of key IWRM change areas for Ethiopia. Main focus areas include: managing demands for water resources among competing users; managing conflicts over the use of water resources; and identifying the best regulatory and institutional arrangements for sustainable water resources management that would satisfy the different stakeholders' demands and uses.

IWRM is now widely appreciated among stakeholders in Ethiopia

As IWRM was new to the country and to the watershed, creating the necessary awareness and organizing training on IWRM at various levels was an important component of the programme. In this respect, the project is playing roles in promoting and demonstrating benefits of IWRM to the wider stakeholders.

Organizing training, awareness sessions, consultation meetings, public meetings and partnership meetings were some of the mechanisms for raising awareness of stakeholders on IWRM. World Water Days were specifically targeted to promote IWRM to the general public with the aim of creating an IWRM-conscious society in Ethiopia. Use of materials such as documentary films, CDs and published materials assisted the promotional activities. The media and civil society have been encouraged to appreciate IWRM.

Raising stakeholder awareness on IWRM facilitated the participatory process as it improved the capacity to actively participate in the process.

Establishing forums for facilitating the participatory process

Having achieved some understanding and awareness of IWRM, water partnerships at the Tigray regional, Berki watershed and *wereda* levels were established by stakeholders.

Like ECWP, the Tigray Regional Water Partnership (TRWP) has members representing various government bureaus, NGOs, academic and research institutions, riparian *weredas* and community representatives from the watershed. It also has a regional steering committee chaired by the deputy president of the regional government/bureau of finance and economic development. In order to support the steering committee on technical matters, and to deal with studies and assessments in the Berki catchment, a regional technical team was also established comprising nine experts from government bureaus, NGOs, a university, and a research institute.

The *wereda*-level watershed committees were established encompassing the relevant government line offices, NGOs and communities. A

World Water Days were specifically targeted to promote IWRM to the general public

Box 1. About ECWP

Ethiopia Country Water Partnership (ECWP), under the auspices of the Global Water Partnership (GWP), was launched in December 2003 with the goal of promoting and implementing integrated water resources management (IWRM). Its members, among others, include institutions from federal and regional government offices, local and international NGOs, donors, research and academic institutions, women and the private sector.

ECWP has a General Assembly of members that meets every year. It represents all members of the partnership and is the highest decision making organ. Currently more than 100 members exist representing a balance of government, NGO, international organizations, academic and research, private sector and bilateral aid agencies.

The Partnership has a Steering Committee of 11 members, elected by their constituencies. Steering Committee members are elected for two year terms at the Annual Partners Meetings. The Ministry of Water Resources is chairing the ECWP Steering Committee. ECWP has a small secretariat office (hosted by WaterAid Ethiopia) with two staff.

ECWP is serving as a useful national forum/network for consultation and information sharing.

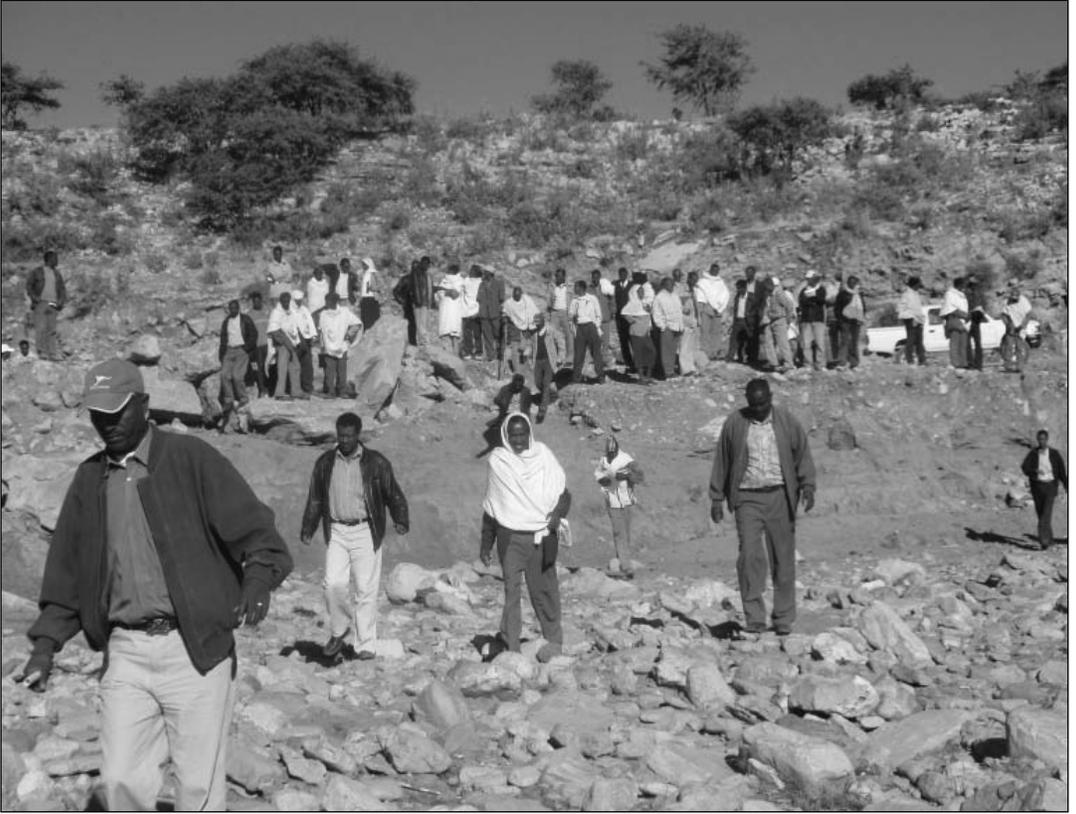
Identification of stakeholders, their interests and roles was an important activity

joint watershed committee was also established in Atsbi-Wukro, which includes members from the two *wereda* watershed committees.

Much effort has been made to ensure balanced representation of all stakeholders in different water partnerships. ECWP facilitated the establishment of the partnerships, and supported them through training and technical advice. Identification of stakeholders, their interests and roles was an important activity that facilitated the participatory process of IWRM in the Berki watershed. The process also included awareness creation, empowerment and confidence/consensus building.

Serving as forums, these water partnerships brought together different sectors and stakeholders for participation, networking and coordination. The forums also laid the foundations for all stakeholders to jointly plan and implement sustainable water resources management.

IWRM, being a participatory process, requires the establishment of a multi-stakeholder platform – a platform that brings together all stakeholders – at various levels for consultation, experience sharing, promotion and coordination. The establishment of water partnerships at regional, watershed, and *wereda* levels serves as a vehicle for the formation of an institutional framework with a mandate to promote and facilitate the implementation of IWRM in the watershed. Moreover, this framework also assists in the management of water-related conflicts.



Stakeholders visit the catchment to appreciate the challenges of water resources management

Generation of a wide scope of knowledge and preparation of the Berki IWRM plan

Lack of information on the potential of water and other resources as well as on socio-economic activities was one of the problems faced at the Berki watershed. Water resources assessment is key for the application of IWRM, and in most cases it is one of the biggest challenges. Water resources assessment (geology/hydrology, water resources potential, environment, water uses) and socio-economic studies were carried out for the Berki watershed. The studies were conducted with multidisciplinary professionals from key stakeholders: relevant government line bureaus at the regional and district levels as well as experts from academic institutions and NGOs. The process involved all stakeholders, including local communities. Several consultation and review sessions were also carried out at various levels to enrich the study. The study helped to create an understanding of the issues, such

Water resources assessment is one of the biggest challenges

as conflicts among users of natural resources, and also helped in the prioritization of problems and the identification of possible solutions as well as gaining the further commitment of stakeholders.

These studies were the basis of the preparation of the Berki catchment IWRM Plan. The plan was widely accepted and owned by all stakeholders, and awaits implementation.

The pilot also demonstrates knowledge-based sustainable development planning, showing development to be based on the available water and other natural resources, and also planning to include management of the natural resources in addition to development. That means the pilot project has successfully highlighted two key elements in managing water balance at the catchment level: determining the appropriate balance between use and conservation of water and related natural resources, and also social and political considerations, which often have much greater impact on the success of IWRM planning.

Outcomes

Before the intervention, local people used to think that any water that flowed in their fields was their own property

Water-efficient technologies such as drip systems are being introduced

Communities now have better awareness of water resource ownership and understand its implications on others. People speak about equitable water allocation, conflict resolution between up- and downstream users, and integration of water-related interventions. For example, before the intervention of the IWRM in Berki catchment, local communities used to think that any water that flowed in their fields, was their own property. Now that thinking has changed and they see water as a shared resource by all in the watershed. One clear indication of the increased awareness is the interest shown by the downstream *wereda* to contribute to the conservation programme in the upstream *wereda*. Atsbi *wereda's* plan to introduce about 100 water pumps was revisited because of the raised awareness by the local authorities. Moreover, water efficient technologies such as drip systems are being introduced and a plan is being prepared for artificial groundwater recharging.

The existence of the partnerships also challenges long-held ideas and practices entrenched in linear planning and single agency responsibility in the region and at the watershed level. The establishment of multi-stakeholder forums at the regional, Berki and *wereda* levels has given the opportunity for interaction among various stakeholders. This is also providing an opportunity to lay a framework for integrating/coordinating activities by various sectors/stakeholders.

As a result of the establishment of the multi-stakeholder platforms and the various stakeholders' consultations, water-related disputes and conflicts have been minimized. There is now recognition of the importance of the multi-stakeholder partnerships at the local level and working together is viewed as a way to resolve water issues at

Two key conflicts in the catchment were resolved without any legal intervention

the local level. For example, two key conflicts in the catchment were resolved without any legal or administrative intervention.

Although most stakeholders at federal and regional levels do recognize the difficulty in harmonizing administrative and hydrological boundaries, in Berki the catchment is considered a management unit despite the administrative boundaries. An integrated watershed development and management plan has already been prepared for Berki, and NGOs and government bodies have committed to implement the plan as part of their regular development programme within the partnership framework.

Key lessons

Ownership of the change

The IWRM change process needs to support people's livelihoods. Water resources management should not be done for its own sake, rather for sustaining the livelihoods of communities. It is only when people understand that their livelihoods depend on sustainable management of water and land resources that they can own and meaningfully participate in the change process. The challenge faced by ECWP in piloting IWRM was a long planning process, which made it difficult for the local communities to understand its linkages to their livelihoods. There was a high level of expectation around a quick fix physical infrastructure that would address their practical problems.

Political commitment

Government commitment to the IWRM process is crucial. IWRM requires an enabling environment (policy, legal and institutional framework) at the national level. Existence of an enabling environment facilitated the IWRM piloting process in Ethiopia as the process was owned by government and other stakeholders.

A high-level consultation meeting with government officials of Tigray Region raised the level of awareness about IWRM and the challenges of water resources management in Tigray and Berki watershed. The meeting also increased the interest of key institutions which further strengthened the regional partnership. The Tigray Regional Government reconfirmed its commitment to support the IWRM approach by delegating the deputy chief administrator of the regional government as the chair of the Tigray Regional Water Partnership (TRWP) steering committee. Stakeholders in TRWP have designated focal persons and also contributed free expertise by designating their technical staff to the technical team.

The *weredas* played a key role in mobilizing all stakeholders for participation

Ethiopia operates under a decentralized government and local authorities have decision-making power and authority over resources. They have the power to manage water and other natural resources within their constituencies. The *wereda* authorities are responsible for the preparation of development plans and coordination of development activity in the *wereda*. They are also given a budget to execute their plans. Thus, any activity in the *wereda* must be approved by the *wereda* government and the role of *weredas* in the Berki pilot IWRM watershed was significant. Practically nothing could have been done without their interest, willingness and mobilizing role. The *weredas* played a key role in mobilizing all stakeholders for participation in the process, in establishing *wereda* watershed committees, in contributing experts for the IWRM process and in owning the whole process.

Communication among stakeholders

People often do not get enough information or do not get it in the right ways

IWRM requires participation and ownership by all stakeholders at all levels, and communication facilitates participation. People down the chain often do not get enough information, do not get it in the right ways or do not have direct lines of communication available to them. Relationship building takes time and this was one of the challenges that ECWP had to overcome. Even though it is not an easy task, facilitating communication among all stakeholders at all levels by adapting to local situations is crucial, as is the adaptation of traditional knowledge systems to spread information about IWRM.

Multi-stakeholder partnership building is time consuming

There is a critical need to move away from the large, top-down infrastructure building mentality. It must be recognized that strong institution/process building is not immediate, but rather a long and tiring process. Participation, ownership and trust building was a challenge but it was achieved through investing efforts and energy in establishing the partnership described above.

Capacity building and awareness raising as an integral part of the IWRM change process

IWRM is a participatory process and it requires capacity building of stakeholders for proper participation. ECWP's approach of combining awareness raising/capacity building with piloting was a helpful approach. It was mostly done through a training of trainers (TOT) programme, where experts from federal and regional levels were trained outside of the country to train other experts at country level, particularly regional experts. This was followed by training of regional and

Capacity building for IWRM cannot be handled by a single organization or individual

wereda experts by the trained national/regional experts. The *wereda* and regional experts, in turn, trained the communities.

Capacity building for IWRM cannot be handled by an organization or an individual. The approach followed by ECWP was to mobilize individual stakeholders by training them to assist with the capacity building process in the country. Academics and the regional water resource bureau professionals played a key role. They participated in various training programmes and also in carrying out technical studies (both water and other natural resources assessment and socio-economic studies). They have also contributed a great deal in replicating the training down the line for different decentralized partnerships. Most of all, the training has been instrumental in the introduction of knowledge-based decision making.

Promoting IWRM principles, approaches and experiences to various stakeholders, including non-water sectors, needs to be done on a continuous basis until changes in the ways actors think and behave occur. To this end, the project has promoted and demonstrated the benefits of IWRM through organizing training courses, awareness workshops and the provision of knowledge and advice. Local adaptations to suit local conditions, including the use of local languages, were important contributions.

Piloting and scaling-up approach

ECWP's experience so far is being fed into other national programmes as a way of promoting IWRM

ECWP is now in a phase where it will be moving from institution building to implementation on a larger scale. The experiences so far from ECWP's activities are being fed into other national programmes as a way of promoting IWRM, especially at a river basin scale. For example, owing to increasing environmental degradation and investment opportunities at the same time, the Central Rift Valley is seen as a basin of national importance and at the top of the government agenda. The Ministry of Water Resources has appreciated the inputs from other stakeholder groups in river basin master plan development (to broaden the focus from water resources development to more integrated development and management of water resources), and in establishing a Rift Valley Lakes Basin Organization. ECWP was also involved and shared its experience during the establishment of the River Basin Organization for the Blue Nile.

Build on existing systems and link with key management issues

ECWP takes advantage of having many stakeholders together to present different issues and initiate dialogue around key issues of national concern such as on the challenges of water resources management in the Ethiopian Central Rift Valley sub-basin, and the Akaki catchment.

As a result of such discussions, a multi-stakeholder working group (the Central Rift Valley sub-basin working group) was formed which, with ECWP support, plays a key advocacy role within the Ministry of Water Resources towards establishing a river basin organization for the Rift valley Lakes basin, highlighting the importance of multi-stakeholder involvement in water resource management. Similarly another task force was recently formed to address the water resources management of the Akaki catchment in the Awash River basin which is being compromised by urban and industrial pollution from the City of Addis Ababa and its surroundings.

IWRM as an approach for managing water conflicts

In Berki, water resources are scarce and there are actual and potential water conflicts. A clear case was the destruction of an irrigation diversion weir on the Berki river by downstream traditional irrigation water users. The partnerships played a facilitating role in conflict resolution by organizing a joint visit programme for both downstream and upstream users/stakeholders. This visit helped all concerned stakeholders to understand the problems from both sides, and also contributed to the management of conflicts. Awareness raising and training also contributed to the development of a shared vision for the watershed and the building of trust among stakeholders. In this regard, the establishment of the partnerships played a key role in the management of conflicts through shared vision planning and consensus building.

A joint visit helped downstream and upstream users to understand each other's problems

Conclusion: Implications for the future

The following conclusions are drawn from the lessons learnt in an on-going IWRM planning and implementation process and pinpoint aspects for future consideration:

- **Define the scope of IWRM intervention based on the existing water resources management frameworks in the country:** Attempt to combine (as appropriate) issues of both policy and practice. The balance of policy and practice influencing Ethiopia's case was based on the existing system.
- **Identify entry points:** Identify key water resources management issues in a country. This will help to attract the attention of stakeholders, especially government and will also provide the opportunity to see IWRM addressing the issues. ECWP chose key issues for Ethiopia and tabled time for discussion about them at its general partners' assembly. For example the challenges of water resources management in the Central Rift valley lakes sub-basin and in the Akaki catchment were very useful in raising

Identifying key water resources management issues helps attract the attention of stakeholders

ECWP's visibility, and to promote an IWRM approach. Both cases brought different sets of stakeholders with high levels of commitment that were easy to integrate into the government's national programmes.

Participation of ECWP in various national programs also helped ECWP to raise its profile, which has facilitated the IWRM process, especially in terms of confidence and partnership building. This will also create an opportunity to practically link the IWRM process to other national programmes for better impact.

- **Broaden the width and breadth of water partnerships:** Multi-stakeholder forums or water partnerships must be evaluated in terms of composition (representation) and level of participation of members. This again requires continuous trust and partnership building.
- **Balance policy level influencing to community expectations (of addressing issues):** The IWRM process must be linked to solving practical problems or assisting the socio-economic development of the people. IWRM should not be practised for its own sake of managing water resources. It is a process that combines both development and management, which means that the IWRM exercise should be linked to addressing community issues. Otherwise it will be very challenging to undertake a long process of IWRM planning without any change on the ground. Consultations with the communities of the Berki watershed in Ethiopia helped to sensitize communities about sustainable water resources management, sharing of water resources and managing conflicts. It also gave the stakeholders a chance to understand the communities' attitudes, knowledge and practices related to water resources management. The communities showed a lot of interest but also a high level of expectations for immediate solutions.
- **Gain political commitment:** IWRM is a process of change to the existing system of water resources management. This means that, unless the political will is obtained right from the very start, it will be very difficult to move. Government must own the process.
- **Combine capacity building and awareness raising as part of the programme:** IWRM is about change both in policy and practice. Change must come from individuals, from institutions and from the government. This change can only come if all parties are aware of IWRM and their capacities are built to allow them to meaningfully participate. Unless an IWRM intervention has a capacity building component, the likelihood of its success is low.

The communities
expected immediate
solutions

Success depends
on including
capacity-building
components

IWRM is a long
and participatory
process

To summarize, this case from Ethiopia demonstrates that IWRM is a long and participatory process. It requires many changes by building on the existing system in a step-by-step approach which creates a sense of ownership among all stakeholders. It also showed that decentralized, participatory, multi-stakeholder platforms are the key for a successful IWRM planning and implementation process because they are mechanisms that address practical water management issues at the grassroots level. In an IWRM process, gaining political support and active government involvement at various levels is crucial. Tailored trainings, awareness-raising workshops and experience-sharing activities at different levels play a significant role in facilitating the IWRM process. Even though it may vary from country to country, this Ethiopian case showed that piloting IWRM in a smaller watershed for scaling-up could be a better approach than promoting radical changes to a large system. Finally, to ensure the system's sustainability, formalized and institutional multi-stakeholder forums are necessary.

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