



Water Security for Development:

Insights from African Partnerships in Action



About GWP

The Global Water Partnership (GWP) vision is for a water secure world. Our mission is to support the sustainable development and management of water resources at all levels.

The GWP is an international network created in 1996 to foster the implementation of integrated water resources management (IWRM): the coordinated development and management of water, land and related resources in order to maximise economic and social welfare without compromising the sustainability of ecosystems and the environment.

GWP was founded by the World Bank, the United Nations Development Programme (UNDP) and the Swedish International Development Cooperation Agency (Sida).

The Network is open to all organisations that recognise the principles of integrated water resources management endorsed by the Network. These include states, government institutions (national, regional and local), intergovernmental organisations, international and national non-governmental organisations, academic and research institutions, companies and service providers in the public sector.

The Network currently comprises 13 Regional Water Partnerships and 74 Country Water Partnerships, and includes more than 2000 Partners located in 153 countries.

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The report can be downloaded from the GWP website (www.gwp.org) or requested on a CD-ROM by sending an email to: gwp@gwpforum.org.

Acronyms and abbreviations

AfDB	African Development Bank
AICD	Africa Infrastructure Country Diagnostic
AMCOW	African Ministers' Council on Water
ANEW	African Civil Society Network on Water and Sanitation
COP 15	Conference of the Parties (to the United Nations Conference on Climate Change 2009)
CWRAS	Country Water Resources Assistance Strategy
Danida	Danish International Development Agency
DGIS	Netherlands Government Ministry of Foreign Affairs
EAC	East African Community
ECCAS	Economic Community of Central African States
ECOWAS	Economic Community of West African States
FAO	Food and Agriculture Organization (of the United Nations)
GTZ	Gesellschaft für Technische Zusammenarbeit (Germany)
GWA	Gender and Water Alliance
IDRC	International Development Research Centre
IWRMP	Integrated Water Resources Master Plan
IWRM	Integrated Water Resources Management
MDG	Millennium Development Goals
MOU	Memorandum of Understanding
NDP	National Development Plan
NEPAD	New Partnership for Africa's Development
NGO	Non-governmental organisation
NWRMS	National water resources management strategy (Mozambique)
OECD	Organization for Economic Cooperation and Development
PAWD	Partnership for Africa's Water Development
PNIR	National Rural Infrastructure Project (World Bank)
PPEA	Multi-Year Support Programme to Water and Sanitation (Benin)
PROTOS	Belgian-based NGO
PRSPs	Poverty Reduction Strategy Papers
RWP	Regional Water Partnership
SADC	Southern African Development Community
SAG	Water Sector Advisory Group (Zambia)
Sida	Swedish International Development Cooperation Agency
SONEB	La Société Nationale des Eaux du Bénin
UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
UNSGAB	United Nations Advisory Board on Water and Sanitation
WHO	World Health Organisation
WRAP	Water Resources Action Programme (Zambia)
WRMA	Water Resources Management Authority (Kenya)
WSSD	World Summit on Sustainable Development



“We should haul out the past commitments made here in Johannesburg at the World Summit on Sustainable Development (WSSD). We should bring back into play the commitment to partnership and interdependence that defined the Monterrey Consensus of March 2002. Let us remind ourselves and the world that we took the principles of partnership and interdependence forward with our collective commitment to New Partnership for Africa’s Development (NEPAD), where the ‘P’ is the same as the partnership agreed to at Monterrey. And then let the world’s leaders together proclaim that behavioural change is necessary and will be costly”.

Trevor Manuel

From an address by the Minister in The Presidency:
National Planning Commission and former
Minister of Finance (1996–2009), Trevor Manuel, on behalf of the
President of the Republic of South Africa, Jacob Zuma,
at the 2nd Africa Water Week in Johannesburg, November 2009

Foreword



Africa offers immense opportunities for development. The continent's economic potential is increasingly being recognized as central to future global economic development. Africa's natural resources, while abundant and key to development, will face increased pressure as economies rise and populations grow and climate change takes its toll. Resource constraints will limit development.

Many African countries are already facing severe constraints to their water resources. As pressure mounts, water will have to be managed better and equitably. Water security is essential to ensure availability of water resources for development and other societal needs. Water needs to be harnessed to support national development priorities and provide water for agriculture, energy, tourism, health, industry, environment and other uses. Water security is critical to ensure returns on investments and resources deployment to various economic sectors.

African political leaders recognize the importance of water to development.

The 2025 Africa Water Vision calls for the equitable and sustainable use and management of water resources for poverty alleviation, socioeconomic development, regional cooperation and the environment. The Vision recognises the centrality of water to development and also to achievement of the Millennium Development Goals (MDGs). The year 2008 saw a number of significant water-related commitments and declarations. These include the eThekwin Ministerial Conference on Sanitation, the Sirte Ministerial Declaration on Water for Agriculture and Energy, the Tunis Ministerial Declaration of 2008 and the June 2008 Sharm El Sheikh Declaration on water and sanitation by the African Heads of State and Government. In 2009, the African Ministers Council on Water (AMCOW) was transformed into a Specialized Technical Committee (STC) of the African Union. This is an important milestone towards Africa's water security. AMCOW provides leadership, policy direction and advocacy for sustainable social and economic development of water resources.

Africa's commitment to water security is unequivocal. Declarations and commitments must be realized to ensure progress. For the first time, a continental framework programme on water and sanitation has been developed by AMCOW with support from partners. The Pan-African framework programme aims to contribute to Africa's water security and realize the commitments and declarations made by Heads of State and Governments in Africa. The framework programme is underpinned by principles of the African Water Vision. Mobilizing partnerships is essential to advance Africa's water security. Since its establishment in 2002, AMCOW's evolution has benefited from the work and contribution of partners. The Global Water Partnership has played a key role in supporting AMCOW's work on Integrated Water Resources Management in Africa. The work described in this report is testimony to the potential role that stakeholder partnerships can play in advancing national development.

As the world draws close to 2015, calls are mounting to accelerate progress towards the MDGs. Stakeholder partnerships must be explored. The lessons and experiences described in this report offers considerable perspectives on how progress can be accelerated.

Foreword

AMCOW remains committed to partnerships and calls upon development partners and other stakeholders to reflect on the lessons and experiences presented in this report. AMCOW believes that these lessons are critical to advancing water security for development. In an environment of climate change and variability, mobilising stakeholder partnerships for development is even more urgent.



Buyelwa Patience Sonjica, Ms

President of the African Ministers Council on Water (AMCOW)

Minister of Water and Environmental Affairs

Republic of South Africa

Message from the GWP Chair



In 2012, the international community, including Heads of State, will gather in Rio de Janeiro for the 'Rio+20' Earth Summit. Rio+20 will focus on reviewing progress in implementing the outcomes of the major summits on sustainable development, 'green' economies in the context of sustainable development, and global emerging issues.

At the Johannesburg 2002 World Summit on Sustainable Development, the international community called for countries to develop national Integrated Water Resources Management (IWRM) Plans. GWP launched the Programme for Africa's Water Development (PAWD) to support countries in the preparation of IWRM plans as a follow up to the Johannesburg summit. The plans aim to support national development including progress towards the Millennium Development Goals (MDGs) and achieving water security.

The global food crisis made international headlines in 2008. The impacts of climate change are being felt. For the first time in history, more than half of the world's population now resides in urban areas. And the demand for energy and power is ever with us as the population increases. These and other emerging global issues are increasingly challenging current development paradigms. How we manage our water resources is going to be key to developing adequate responses to them.

This report has been written with this in mind. The report discusses progress made in the preparation of IWRM plans, as recommended by the 2002 WSSD. It also offers experiences and insights into the potential of stakeholder partnerships to advance sustainable water management for development.

Sharing knowledge is at the core of the GWP vision for a water secure world. As we move towards the 'Rio+20' Earth Summit in 2012, GWP hopes that stakeholders across Africa, and indeed the international community, will reflect on the wealth of experience and lessons presented in this report.

I am sure that the recommendations, if followed, will greatly contribute to advancing action on water management for sustainable social and economic development.

A handwritten signature in black ink that reads "Letitia A. Obeng". The signature is written in a cursive, flowing style.

Dr Letitia A. Obeng

Chair, Global Water Partnership

Preface



Building water security is key to Africa's continued economic and social development. However, this is no easy task given the extreme climatic variability that is common to many countries across the continent, low levels of existing water storage infrastructure, and gaps in hydrological information. The lack of strong water management systems and inadequate human and institutional capacities exacerbate the difficulties. Low GDP per capita limits the financial resources governments can deploy and there is a need to balance competing needs for economic growth, environment and social equity.

On the other hand, the economic rewards associated with better water management are potentially enormous, realised by unlocking hydropower potential, irrigating fertile land for agriculture, sustaining industrial expansion and, most importantly, through the provision of better water supplies to Africa's growing population.

In the light of climate change, pressure is mounting to secure water to support people's livelihoods and socio-economic development. Accelerated progress is urgently needed not only to put Africa back on track towards the 2015 Millennium Development Goals, but also to increase African economies' resilience to the shocks of climate change. Urgent action is needed for climate change adaptation and water security is key.

This report offers insights on the potential of stakeholder partnerships to advance water security for development. The evidence presented shows how stakeholder partnerships have supported several countries in making great strides towards water security, through the development of national Integrated Water Resources Management (IWRM) plans.

Significant progress towards water security can be achieved through the concerted efforts of many partners. Innovative financing mechanisms need to be found to support the national planning and implementation processes. Synergies between climate change adaptation processes and sustainable water resources management must be sought. Looking forward, this linkage is the essential next step in Africa's resources development.

We hope that the evidence shared in this report will contribute to better implementation of IWRM processes in other countries and enhance progress towards water security for development.

A handwritten signature in black ink that reads "Ania Grobicki". The signature is written in a cursive, flowing style.

Dr Ania Grobicki
Executive Secretary, Global Water Partnership

Executive summary

The world is changing. Globalisation brings new pressures and creates new opportunities. Population increase and economic growth are both making heavier demands on our natural resources. Climate change threatens to exacerbate existing stresses, with some regions facing severe and increasing resource scarcity. As resource pressures mount, countries will have to alter the course of national development towards more sustainable paths. Water, which is central to development and food security, must be managed better.

This report draws on the experience of the Global Water Partnership (GWP) in Africa to demonstrate the potential of partnerships in rising to new development challenges. This experience was gained through five years of facilitating planning processes for integrated water resources management (IWRM) in 13 countries spread over four regions of sub-Saharan Africa. The IWRM Programme facilitated the preparation of national IWRM plans while supporting the development of new, emerging and pre-existing partnerships. It also sought to integrate water fully into poverty reduction strategies, and increase access to financing instruments to support water management.

The IWRM Programme offers considerable insights into the factors that helped the planning processes succeed. These insights drawn from the water sector are equally applicable to development processes in other sectors – the lessons learned are development lessons. Perhaps the most important is that development processes which are owned and driven by the people themselves often take longer than planned, but produce more meaningful results.



Ariadne Van Zandbergen/Getty Images

As an initial step in the IWRM planning process, country water partnerships were established in each participating country. These water partnerships provided a neutral platform and a voice for a multitude of stakeholders. They catalysed the planning process nationally, whilst recognising that the government needed to take ownership and responsibility for leading the planning process.

Through the experiences of the country water partnerships, nine elements were identified as essential in the facilitation of development processes, either within or beyond the water sector. The elements were grouped into four clusters related to: (1) the development context, (2) defining a strategic road map, (3) ensuring sustainability and (4) strengthening the process. The elements, which are explored in detail in the main report, provide a comprehensive set of guidance for other development practitioners:

1. Development context

- Entry point: a suitable entry point within the existing national development context enhances added value, and minimises duplication.
- Champions: a committed and respected individual can drive the process forward and speed up bureaucracy.

2. Strategic road map

- Integration with development priorities: all interventions should address national priorities and align with government frameworks.
- Institutional arrangements for coordination and financing: management processes should build on existing institutional arrangements.
- Roles and responsibilities: key players' roles and responsibilities should be agreed at the outset.

3. Ensuring sustainability

- Institutional memory: specific steps are needed to avoid the loss of institutional memory over time as key people move on.
- Stakeholder platforms: dialogue on contentious issues is facilitated by ensuring there is an inclusive and neutral stakeholder platform.

4. Strengthening functions

- Capacity development and knowledge management: developing the capacity of all stakeholders, especially government institutions, helps strengthen the intervention and enhances sustainability.
- Communication and advocacy: the goals, progress, challenges and achievements of the process need to be continually communicated to stakeholders.

In addition to these elements, gaining a clear understanding of the current water resources situation is a key step in defining actions to improve water security. In each country involved in the IWRM Programme, a comprehensive situation analysis was compiled, describing the status of water resources in the country. Based on the situation analysis, a national IWRM plan was produced. This defined, prioritised and costed the actions needed for integrated water resources management at a national level. Implementation arrangements were described, roles and responsibilities outlined, and strategies for mobilising financial resources identified. The national IWRM plans were finalised and adopted by governments in seven countries, and a further two are in the process of approval at the time of writing. In three other countries, advanced drafts are in preparation. In addition, one Basin (local level) IWRM plan was finalised and adopted by government.

The experience from the IWRM Programme shows that IWRM plans are more likely to be implemented when they have been developed through a participatory approach, include well prioritised actions, address immediate development priorities, and take into account the realities of the financial and capacity context. Existing institutions and local stakeholders should be empowered to find solutions to their water security challenges: outsiders should not do the work of local experts but complement it through peer review support.

Facilitating development processes takes time and the impacts on people's livelihoods and the economy can only be seen in a longer time frame. However the IWRM Programme has achieved some immediate results that have great value in advancing water security in the target countries.



Progress has been made in enhancing the enabling environment for IWRM to move towards water security. IWRM has been integrated into National Development Plans and PRSPs in Benin, Malawi, Mali and Zambia. Water policies have been drafted and updated in Benin, Eritrea, Swaziland and Zambia. Improved legislation has been drafted in Benin and a new legal framework for the administration of water resources developed in Cape Verde. Institutional roles and better coordination arrangements have been defined in most of the countries. In addition, water quality guidelines and regulations for the issue of permits for water use and construction of water infrastructure have been developed in Eritrea.

In all countries, the IWRM Programme has also helped strengthen national management capacity for water security through an improved knowledge base on the water resource situation and a better understanding of integrated approaches to water management through capacity building programmes.

The evidence presented shows that the IWRM plans are being implemented in a number of countries. Financial resources continue to be mobilised from local and international sources.

The Zambian government is using the IWRM plan as a basis for informing decisions on annual budget allocations and disbursements for water programmes, the World Bank's Joint Assistance Strategy for water has been developed to provide support to the implementation of the programmes in the IWRM Plan. €1.6 million was mobilised from Denmark and the Netherlands to support the IWRM Programme in Benin; and nearly €20 million was pledged to finance implementation of the Mali IWRM Plan by financial partners (African Development Bank, Belgium, Denmark, Germany, the Netherlands, Sweden, United Nations Educational, Scientific and Cultural Organization, United Nations Environment Programme, and World Health Organization). National water sector funding was increased by an estimated 64 percent by Malawi's treasury in the 2005/06 financial year.

The programme also contributed to improvements in people's livelihoods by enhancing water security at a local level. Water was secured for 200,000 inhabitants of Benin's third largest city, who are dependent on water from the Okpara dam. In Swaziland's KaLanga community, 9,600 people gained access to clean water, and in Ethiopia's Berki River Basin, water related conflicts among users have been reduced and access to water enhanced.

While it is significant that so many national plans were developed and immediate impacts realised, the real achievement of the IWRM Programme lies in the way in which this happened. Local participants engaged deeply with the planning process, while external consultancy-driven pressures were minimised. Very different approaches were taken to drafting the plans in different countries because an attempt was made to integrate water management planning with other development activities. Hence, the approach in each country reflected its broader institutional environment, and had stronger national ownership than previous, externally-driven plans.

While remarkable progress has been made towards water security, the IWRM Programme applied to only 13 countries: there is considerable work still to do among the remaining 30 sub-Saharan African countries. The lessons learned from the IWRM Programme so far will help to support future efforts for better water resources management planning as well as broader development interventions.

This experience is also directly relevant in addressing the challenges posed by climate change. Moving forward, the GWP would like to use the experience gained in the IWRM Programme to further advance the agenda on water security by supporting national governments to incorporate adaptation to climate change into development processes through better water management; support institutional capacity development to help integrate water and climate change into development processes and strengthen economic resilience; and address the financing needs of water resources management.



In support of these ends, the policy recommendations drawn from the IWRM Programme suggest that integrated approaches to water management and other development interventions should:

- 1.** Be undertaken as part of the broader national development planning process. Cross-sectoral coordination and responsibility for integration should be anchored in a government institution with capacity to influence and mobilise other sectors. Higher-level government bodies such as ministries of finance and economic planning, the cabinet and the prime minister's or vice president's office are good locations for facilitating integration.
- 2.** Be aligned with high-priority national development processes with broad cross-sectoral and stakeholder support, even if these are outside the water sector.
- 3.** Be flexible, realistic and structured as a continuous process rather than individual projects.
- 4.** Take into account country differences and accommodate variations of scope and budget, based on the country's development context.
- 5.** Embed water-related climate change adaptation into water resources management plans and not treated as a separate issue, in order to avoid duplication and fragmentation. The capacity of local institutions must be built to address climate change adaptation as part of the water security agenda in development planning and decision-making processes, in line with national development priorities.
- 6.** Develop economic arguments for financing water resources management. Opportunities for accessing adaptation funds for financing water resources management must be explored.

1

OUR COMMON CHALLENGE



Water security for development in a changing climate

1.1 Development in a changing climate

The world is changing. Globalisation is fuelling economic growth, creating new income opportunities, accelerating the dissemination of knowledge and technology, and making possible new international partnerships (Organisation for Economic Co-operation and Development (OECD), 2001: p. 21). At the same time, the financial crisis of 2008 confirmed concerns about globalisation and just how interconnected the world has become. By the middle of this century, the global population is projected to reach 9.1 billion, 34 percent higher than today, with more than half of those people living in towns and cities. New global challenges, such as climate change, threaten development gains and immediately translate into local challenges that need local solutions.

In December 2009, the world's attention turned to the Bella Exhibition Centre in Copenhagen, as global leaders from both rich and poor countries gathered to negotiate a climate deal at COP 15. As temperatures, populations and GDPs continue to rise around the world, some regions will face severe and increasing resource scarcity. Countries will have to alter the course of national development towards more sustainable paths. Pressure to do so is mounting. Already, for instance, in some developing countries an increasing proportion of the development budget is being diverted to cope with weather-related emergencies (World Bank, 2010).

Water is central to national development and a changing world demands new ways of managing it. Climate change will be felt largely through its impact on water resources. As average temperatures rise worldwide, climate variability and climate change bring increased risks of both floods and droughts to many regions, thus threatening both water security and national development.

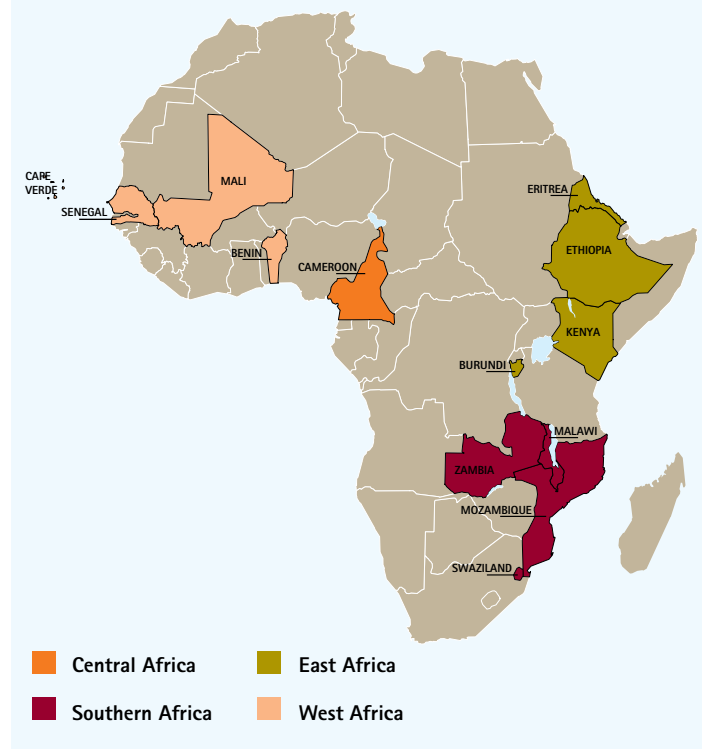
1.1.1 The Programme for Integrated Water Resources Management Plans

This report shows the potential of partnerships to find solutions to development challenges. It draws on the experience of a Programme of the Global Water Partnership (GWP) in Africa, which supported the development of national integrated water resources management (IWRM) plans. In this report we refer to this as the IWRM Programme.

The IWRM Programme involved 13 countries (see Figure 1) in four regions of Africa:

- Central Africa (Cameroon)
- East Africa (Burundi, Eritrea, Ethiopia and Kenya)
- Southern Africa (Malawi, Mozambique, Swaziland and Zambia)
- West Africa (Benin, Cape Verde, Mali and Senegal).

Figure 1: IWRM Programme countries



Its goal was to contribute to sustainable development and poverty reduction in the target countries by using an IWRM approach. The Programme comprised four components:

- Support for achieving the target set at the 2002 World Summit on Sustainable Development (WSSD) in Johannesburg for the preparation of national IWRM plans
- Support for the institutional development of existing, new and emerging partnerships
- Support for the integration of water into poverty reduction strategies
- Increasing the understanding of, and potential access to, a broader range of financing instruments.

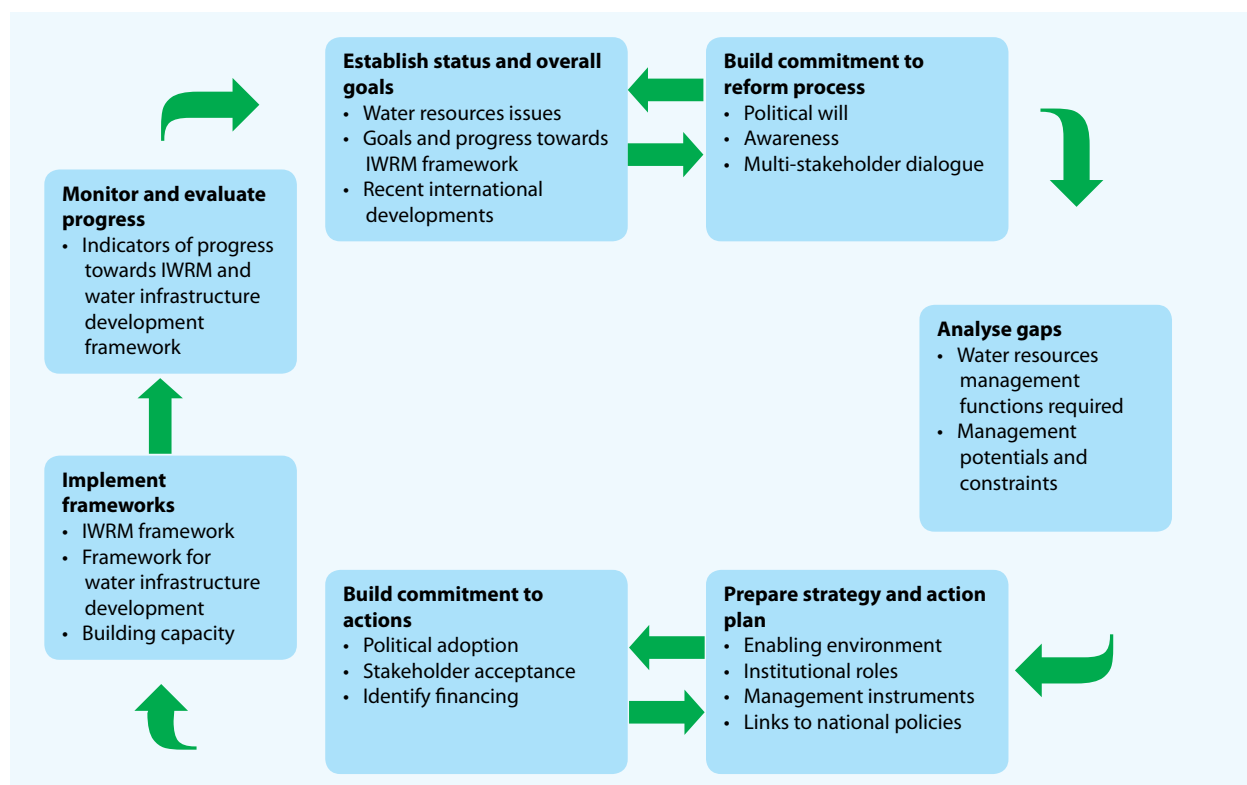
The IWRM Programme used the planning cycle (see Figure 2) developed by the GWP Technical Committee for the preparation of national IWRM plans to guide the process (GWP Technical Committee, 2004).

The Programme was a response to the target set at the 2002 WSSD, for all countries to prepare IWRM plans. Countries were included in the Programme at the request of their governments. The Programme was

funded by multiple donors: the GWP network provided a mechanism for coordinated action by the donors across a range of countries. Funds were provided by the Canadian government's Partnership for Africa's Water Development (PAWD), the Netherlands Directorate General of Development Cooperation (DGIS), the US State Department, the African Development Bank (AfDB) and through multi-donor funding to the GWP itself. The governments of the target countries provided additional funding or an in-kind contribution. The Programme was implemented over a five-year period from 2005 to 2010 with a total donor contribution of approximately €13.5 million.

Together with the governments of 13 African countries, GWP regional water partnerships have worked to improve water resources management and accelerate progress towards water security. This report sets out lessons and insights for effective approaches to better water management based on the experience of these partnerships. These lessons and insights have the potential to be decisive in addressing climate change adaptation and turning the tide towards a water secure world.

Figure 2: The IWRM Planning Cycle



1.1.2 Investing in water: an opportunity for development

Managing and investing in water is cost-effective: it delivers immediate benefits as well as long-term social, economic and environmental resilience (GWP, 2010, pp. 5–6). Today's investments in water should be seen as part of a bigger development strategy, contributing to poverty reduction and sustainable development in the short-term, whilst simultaneously building a climate resilient world.

Water security is the thread that links together the diverse challenges facing the world in food, energy, climate, economic growth and human security. To achieve a water-secure world, policies and plans for water need to be incorporated into national and international development processes. World leaders, governments and funding agencies must appreciate that, in the long term, investment in water is an opportunity and a solution to sustainable social and economic development.

We need to go beyond the areas that are normally considered 'water business'. This entails major changes in the way that other sectors – water supply and sanitation, agriculture, energy, industry and human settlements – are managed. Social, environmental and economic priorities must be balanced against each other, while at the same time a combination of 'hard' (infrastructural) and 'soft' (governance) solutions are developed for managing, protecting, using, storing and transporting water (Box 1). The right mix of options will depend on hydrological, economic, socio-political and environmental factors.

1.2 Water security and development

Water security is the availability of an acceptable quantity and quality of water for health, livelihoods, ecosystems and production, coupled with an acceptable level of water-related risks to people, the environment and economies (Grey and Sadoff, 2007). A water-secure world integrates concerns for the intrinsic value of water and its use for human survival and well-being, including water for agriculture, economic activity and environmental protection. Water security encompasses water quantity and quality aspects, as poor water quality has an impact on both its use value and the environment.

Water is central to development. Whether for food security, poverty reduction, economic growth, energy production or human health – water is the nexus (GWP, 2009: p. 1). It is a key factor in the achievement of each of the Millennium Development Goals (MDGs). The poorest countries and, within them, the most vulnerable people (usually women and children) will benefit most from good water management.

Population growth, surging demand for food and bio-fuels, global increases in living standards, rising demand for water, degradation of water resources, and changing weather patterns mean there is less water to share. The risk of serious conflicts over water is increasing and these conflicts will have the most negative impact on the poor and vulnerable. Ensuring the availability of water is becoming an ever more difficult task. And, although water-related problems manifest themselves locally, they

Box 1: Hard and soft options for water security

'Hard' options

These infrastructural options range from large-scale dams to household water harvesting structures, and include canals, tunnels and pipelines, wastewater treatment plants, storm water drainage systems, pipe works and other concrete and steel structures for storage, control and transportation of water.

'Soft' options

These options include institutional mechanisms to deal with water security such as water policies, legislation and regulations, demand management and allocation procedures, conservation measures, guidelines for water use efficiency, and procedures for land use planning.

Adapted from GWP Technical Committee (2009)
Background Paper 14: pp. 68–69



intersect with issues at other levels and cannot be solved independently. Water users, and those who share river basins and aquifers, must cooperate within a framework that protects vital ecosystems.

Globally, 70% of available fresh water is used in agriculture, with huge variations across and within countries (Comprehensive Assessment of Water Management in Agriculture, 2007). Increased water productivity in agriculture is a key element in achieving both water and food security. Institutional structures, cost recovery, subsidies, and operational and maintenance systems all affect water use efficiency and productivity. Making the world water-secure also means tackling the destructive effects of water – the damage caused by floods, droughts, landslides, erosion, pollution and water-borne diseases. The negative results of poor water management must be addressed.

Climate change is a major barrier to the transition from poverty to prosperity. However, adaptation to climate change may also create opportunities for fundamental changes in economic, institutional, technological, social and political spheres.



The steps necessary to achieve water security need to be embedded within national development plans, such as poverty reduction strategies and comprehensive development frameworks. Fragmented institutional responsibilities for water need to be coordinated. Ultimately, to achieve water security high-level decision-

makers must take the lead, make the tough decisions about competing and conflicting uses of water, and follow through their decisions with financing and implementation. In this context, integrated water resources management offers a glimmer of hope.

An IWRM approach helps to overcome fragmentation across sectors and levels of authority. It recognises the interconnectedness of issues surrounding water resources and leads toward the recognition that water policy is bound up with other government policies on security, economic development, food security and public health.

1.2.1 Water security in Africa

Africa's freshwater resources are distributed unevenly across the continent, with western and Central Africa receiving significantly greater precipitation than North Africa, the Horn of Africa and southern Africa. Both droughts and floods have increased in frequency and severity over the past 30 years. Water for people and animals is vital for health and livelihoods, yet only 60 percent of Africans have access to improved sources of drinking water (WHO/UNICEF, 2010).

Africa's hydrology is particularly complex: more than 60 transboundary rivers result in many countries sharing the same basin. Indeed, international river basins cover more than 60 percent of the continent. Such shared water resources present a major management challenge and require investment in transboundary water management capacity and institutions, even if they also offer opportunities for joint action and cooperation.

African economies depend on a reliable and adequate supply of water. However, exceptionally high variations in rainfall between years and across seasons lead to severe cycles of flood and drought that stifle economic growth. Large-scale storage is needed to buffer these shocks.

Climate change will exacerbate the already extreme climate variability in many African countries. Although the degree of change at the local level is still unknown, the consequences of climate change are likely to include higher sea levels, more variable rainfall, more frequent and intense floods and droughts, and rapid desertification (Boko et al., 2007)



Meyer Photography/Getty Images

While many countries in Africa face serious constraints in the availability of water, the specific national challenges vary. Countries in the interior of North and West Africa face absolute physical scarcity. In the eastern region, many countries experience extreme variability. Much of sub-Saharan Africa faces economic scarcity due to a lack of financial resources to manage the limited amount of water available. In Central Africa, countries such as Democratic Republic of Congo and Cameroon need to manage very large quantities of water, and harness its potential for economic development. Other countries such as South Africa have almost fully utilised available fresh water resources and face quality-based scarcity as water pollution and other activities, such as over-pumping of aquifers, have rendered available water unusable without extensive treatment.

At the national level these generalised observations need further qualification – even within the same country, different water users face different challenges. Flooding can occur in one part of the country while another part experiences drought.

Though water is vital for agriculture, only five percent of Africa's cultivated land is irrigated. Sixty percent of food production comes from non-irrigated, rain-fed agriculture and there is considerable scope for increasing production. Only in North Africa is a sizeable part of irrigation potential already used and by 2030, North Africa will have reached critical thresholds of water availability for agriculture (UNESCO, 2003).

Hydropower is largely undeveloped in Africa and less than ten percent of its potential has been tapped. The region includes more than 1,200 dams, over 60 percent of which are located in South Africa (539) and Zimbabwe (213). In fact, over half of these were constructed to facilitate irrigation, and only six percent are for electricity generation. The negative impacts of large dams have become increasingly apparent, including displacement of people, increased erosion and flooding, loss of land and loss of income from downstream fisheries. The development of micro-hydropower facilities is now seen by some as a more sustainable means of managing water resources for electricity generation.

Africa must invest heavily in transboundary river basin management, irrigation and major storage infrastructure to facilitate rational management and ensure that water is available when and where needed. Water for irrigation is a high priority for economic development and stability, yet few countries can afford adequate investment in efficient irrigation systems.

According to a report by the World Bank (2009a: p. 271) published under the Africa Infrastructure Country Diagnostic (AICD), in order to close the infrastructure gap with other parts of the world, meet the Millennium Development Goals, and achieve national development targets within the next 10 years, the estimated annual capital cost of water resource infrastructure is approximately \$10 billion. Of this, almost 80 percent is for the development of large multipurpose hydropower storage, and about 10 percent is for development of large storage capacity for urban water supply and small-scale infrastructure projects. As a complement to these physical investments, Africa will need an additional \$1 billion a year for the next 10 years to develop hydrological networks, address gaps in water information, and develop water management institutions.

1.2.2 Water is rising on the political agenda

Africa has made progress in establishing an enabling environment for water management at the pan-African level. Good results are beginning to show, but much remains to be achieved.

In recent years, African Heads of State have demonstrated increased political commitment and leadership. Ministers made a series of commitments during 2008, at meetings in eThekweni (Durban), Tunis and Sirte. The African Union dedicated part of its June 2008 Summit in Sharm El-Sheik to water and sanitation. At the summit, African Heads of State made important commitments to accelerating progress towards the MDG target on water and sanitation and the WSSD target on water resources management in Africa. These events have all increased awareness of regional water security and sanitation issues.

The African Ministers' Council on Water (AMCOW) was formed in 2002 to provide political leadership,

policy direction and advocacy in the provision, use and management of water resources. AMCOW is increasingly shaping Africa's water agenda through active engagement with the African Union, African Development Bank (AfDB) and other key entities such as the New Partnership for Africa's Development (NEPAD), UN-Water Africa, and regional economic commissions including the Southern African Development Community (SADC), the Economic Community of West African



States (ECOWAS), and the East African Community (EAC). In 2009 AMCOW was integrated into the African Union as a specialised technical committee for water and sanitation. AMCOW is also actively engaging with intergovernmental organisations such as the GWP, and civil society organisations such as the African Civil Society Network on Water and Sanitation (ANEWS), among others.

To accelerate progress towards water security in Africa, these efforts need to be supported. Experiences from many development interventions have highlighted the potential of stakeholder partnerships to address development challenges. In March 2002, the Monterrey Consensus on Financing for Development called for greater commitment to partnership and interdependence (United Nations (UN), 2003). To accelerate progress on aid effectiveness, the Paris and Accra declarations highlight the importance of building more effective and inclusive partnerships for development (OECD, 2008, pp. 16–1). The African Union through NEPAD also emphasises the central role of partnerships.

1.3 Progress through partnerships

Stakeholder partnerships have a key role to play in advancing water security and have been consistently promoted in political declarations for many years. In 1992, the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro adopted Agenda 21. This provided a clear mandate for the involvement of stakeholders, not only in the water sector, but also in the broader realm of sustainable development. At the Millennium Assembly in 2000 the MDGs were adopted by Heads of State and included a specific goal recognising the importance of partnerships.

In December 2003, at its 58th session, the United Nations General Assembly adopted a resolution, proclaiming 2005–2015 as the International Decade for Action – Water for Life. Ensuring the participation and involvement of women in water-related development efforts is one of the goals of this decade.

Despite such proclamations there are few concrete examples of partnerships in action. Clearly stakeholder participation and partnerships have major and well-recognised roles to play in addressing water security. This potential needs to be harnessed.

1.3.1 Insights from partnerships in action

The IWRM Programme offers various lessons on the importance of stakeholder partnerships in catalysing progress towards water security. This work was facilitated by the stakeholder processes that were central to the GWP's country and regional water partnerships in 13 countries and four sub-regions in Africa.

While the target of establishing IWRM plans for all developing countries by 2005 has only been partly achieved, the lessons learned from five years of work across 13 African countries offer insights on what is possible. These insights, though drawn from the water sector, are equally applicable to other development processes in other sectors. The lessons learned are development lessons. Perhaps the most important is that development processes which are driven and owned by the people themselves often take much longer than planned, but produce more meaningful results.

Part II of this report illustrates the ways in which stakeholder partnerships can accelerate progress towards water security. The evidence confirms the potential of partnerships to help address national development challenges. In these countries, stakeholders joined hands with their governments to prepare water management plans for sustainable national development.

Simply drafting a plan does not solve water problems. What counts is how realistic the plans are, what political buy-in they have, what funds are available to implement them, and how much they contribute to development priorities, poverty reduction and ecosystem health. Making the economic case for managing our water resources and investing in water is crucial if governments and decision-makers are to understand the irreplaceable contribution that water makes to the way we live.

2

CONFRONTING THE CHALLENGE



Insights from stakeholder partnerships in action

2.1 Introduction

Confronting critical development challenges such as water, food and energy security is complex. Governments and development agencies can harness the influence of stakeholder partnerships to catalyse action and address such challenges. But simply turning to stakeholder partnerships is not enough. The responsibility for development must remain with national governments, whose leadership and ownership are crucial.

Planning for water management and development is the responsibility of government. In the IWRM programme, national governments were responsible for providing leadership and overall guidance to the planning processes. The water partnerships were requested by their respective governments to facilitate the national IWRM planning process and ensure broad based stakeholder participation.

This section describes the experiences and lessons learned from stakeholder partnerships working with governments to address water security challenges in the 13 African countries. Analysis of their experience reveals a number of important common elements that emerged from these processes.

The elements are organised around four clusters:

- Understanding the national development context
- Defining a strategic road map
- Ensuring the sustainability of the interventions
- Strengthening the development interventions.

The importance of each element is explained in Box 2 and subsequent sections.

These elements are primarily based on experiences from facilitating water management planning processes. However, the lessons learned from this experience are not just lessons for the water sector, but are development

lessons, relevant for policy makers and development practitioners in other sectors.

2.2 Facilitating development processes

2.2.1 Development context

• Suitable entry points

Aim: To secure government ownership and commitment to drive the process forward, thereby maximising the effectiveness of development interventions.

Development planning processes at the national level are influenced by political, legal, economic, institutional, social and environmental factors. Countries follow different development paths and agencies involved in facilitating development processes need to take into account the existing context and on-going development processes at the national level.

In the IWRM Programme, a key early activity was the identification of the best entry point in order to have the greatest leverage to push forward the IWRM planning process. Selecting the right entry point helped secure buy in from national governments, which then committed to the process and provided leadership. This enabled the GWP interventions to add value to on-going development processes rather than duplicate them. The definition of an 'effective' entry point is, however, context specific and depends on time. What may be an excellent entry point in one country may not be helpful in another, or at a different time.

A scoping assessment to explore available options, including those outside the focal water sector,

Box 2: The essential elements

Development context

Suitable entry points: Scoping to identify suitable entry points within the existing national development context enhances value addition, minimises duplication and promotes government ownership. Suitable entry points enhance the potential for a conducive environment where government commits to the process and drives it forward.

Champions: Champions who are committed, connected, respected and knowledgeable about the national political and environmental context can enhance the potential for governments to commit to the process and speed up processes that would otherwise be bureaucratic and lengthy.

Strategic road map

Integration with development priorities: Interventions must be aligned with relevant government development and planning frameworks and should address national priorities.

Institutional arrangements for coordination and financing: Cross-sectoral arrangements and management of planning processes should build on existing government institutional arrangements including financing mechanisms.

Roles and responsibilities: The distribution of roles and responsibilities among the key players should be agreed from the outset and endorsed at the appropriate political level.

Ensuring sustainability

Institutional memory: The process should be institutionalised among relevant organisations and across government departments to avoid loss of institutional memory as key people with experience move on.

Stakeholder participation: An inclusive and neutral stakeholder platform with a professional and credible image is essential to help provide a platform for stakeholder dialogue on contentious issues and for addressing key issues where change is required.

Strengthening functions

Capacity development and knowledge management: Capacity development of existing relevant government institutions must be part of the process to strengthen the quality of interventions and enhance sustainability. Processing and dissemination of knowledge enhances understanding and strengthens institutional capacity for sustained development.

Communication and advocacy: The goal of the development intervention, progress, achievements and challenges encountered should be communicated to relevant stakeholders throughout the process.

is essential prior to the launch of a development intervention. The aim is to find an entry point at the highest appropriate level, bearing in mind that this might determine whether the development intervention will come to the attention of decision-makers.

Building on an on-going water reform process as an entry point can be useful in avoiding parallel processes and securing government support but it can also pose challenges. As shown in the case of Swaziland (Box 3), procurement procedures and project administrative arrangements had to adhere to bureaucratic government procedures, which led to delays, but nonetheless, the case highlights the importance of choosing the right entry point and capitalising on on-going initiatives.

In Mali and Senegal, the IWRM planning processes benefited from the knowledge and experience gathered through other significant on-going initiatives in the

water sector. In Mali, for instance, important synergies were developed with the World Bank's National Rural Infrastructure Project (PNIR). By demonstrating value addition to on-going water sector reforms, the national IWRM planning process generated interest among a large group of donors including Danida, GTZ, the Swedish International Development Cooperation Agency (Sida) and EU, which were able to pledge close to US\$20 million to support the implementation of the plan once it had been completed. In addition, recognising the value added by the Mali Water Partnership to on-going programmes, several NGOs such as Water Aid and PROTOS¹ developed joint programmes through the European Union Water Facility to support IWRM plan implementation.

¹ PROTOS is a Belgian-based non-governmental organisation: <http://www.protos.be/protosh2o/more-about-protos-1>

In the IWRM Programme, it was evident that the country water partnerships that were able to identify an entry point early on, and build on existing water sector reforms, were able to secure government ownership and commitment to drive the process forward and make quicker progress than in countries where this did not occur. Where possible a process owned by several stakeholders and sectors was found to be a good entry point and as important as an institutional one.

In practice, the entry point for the development of IWRM plans in most countries was an existing institution – the ministry or body responsible for water management. However, there is evidence that a higher level entry point, beyond a sectoral ministry, has a greater chance of attracting cross-sectoral and additional financial support.

Lesson: Entry points should build on and be harmonised with existing development processes that have broad cross-sectoral and stakeholder support, preferably involving a higher level ministry.

Recommendation: Understand the local development context and build on development processes with broad cross-sectoral support, even if they originate outside the sector.

- **Champions**

Aim: To enhance the potential for governments to commit to the process, open doors, remove barriers and provide guidance to speed up the process.

Box 3: Finding the right entry point in Swaziland

The Swaziland Water Partnership was requested by the Ministry of Natural Resources and Energy to help the country respond to the 2002 WSSD call to develop national IWRM plans. The water partnership's role was to facilitate this process, ensure broad stakeholder participation and provide a platform for on-going dialogue and consultation across sectors.

At the start of the planning process, the Swaziland Water Partnership reviewed the on-going initiatives in the country's water sector. The 2003 Swaziland Water Act required a National Water Master Plan to be developed and also established the National Water Authority as the body responsible for all water management in the country. Formally adopted in 2003, the Act was developed as part of an on-going water sector reform initiated before the WSSD called for the development of national IWRM plans.

Further analysis of the scope and objectives for development of the National Water Master Plan revealed that there were similarities with those of the proposed national IWRM plan called for by the 2002 WSSD. However, while the scope for the IWRM plan included all the elements specified within the scope of the Water Master Plan, it further emphasised the need to link water management with national development plans and Poverty Reduction Strategy Papers (PRSPs), as well as financing strategies for water management. Cross-sectoral and broader involvement of stakeholders was a key element.

Based on this overlap, the National Water Authority was considered the best entry point to facilitate the development of a national IWRM plan. Under the leadership of the Swaziland Ministry of Natural Resources and Energy, the Swaziland Water Partnership presented

the IWRM Programme to the National Water Authority. To avoid the danger of initiating parallel processes to develop two separate plans, and bearing in mind that the national Water Sector reform programme was behind schedule, the Swaziland Water Partnership and the National Water Authority agreed to work together to develop a single Integrated Water Resource Master Plan (IWRMP). The roles and responsibilities of each organisation were outlined in a memorandum of understanding between them. The Swaziland Water Partnership project office collaborated with the Department of Water Affairs Secretariat to provide technical support in developing the IWRMP.

This approach enabled the country water partnership to influence the development of the national water master plan so that it adopted a much broader cross-sectoral approach than had originally been intended. Alignment of the project with government priorities was demonstrated by the integration of the programme budget under a co-financing arrangement. The Swaziland Water Partnership helped ensure the inclusion of processes that might otherwise have been overlooked, such as stakeholder participation, capacity development, financing and alignment of the plan with national development priorities defined in the National Development Strategy (NDS) and PRSP.

The plan aimed to provide strategic guidance to decision-makers and water users on how best to develop and manage the country's water resources within the framework of existing legislation and policies. The inclusion of extra elements and involvement of the Swaziland Water Partnership added value and accelerated the water reform process.

Box 4: Three champions in Zambia

In Zambia, three different champions played complementary roles at various stages of the project. The Zambia Water Partnership Coordinator played a key part in mobilising stakeholders across the country and led the process of supporting government in integrating the IWRM plan into the country's Fifth National Development Plan.

Recognising the importance of this integration, the Zambia Water Partnership realised that it needed another champion who had influence on the National Development Plan, with a good understanding of the role of water in the economy, and political connections. The Zambia Water Partnership Coordinator therefore worked with another champion, the Permanent Secretary in the Zambia Ministry of Finance and National Economic Planning, who was also coordinating the development of the National Development Plan.

The Zambia Ministry of Finance and National Economic planning was involved on the Steering Committee of the IWRM Programme from the start. Through this mechanism, Zambia Water Partnership was able to get up-to-date information on the progress of the National Development Plan. At a national workshop held as part of the process for development of the Fifth National Development Plan, the Zambia Water Partnership Coordinator highlighted the contribution of water to the economy, and the cost of not prioritising investments in water resources. Several dialogues were held between the lead Ministry for Water, the Ministry of Finance, and the Zambia Water Partnership. This led to essential buy-in from the Permanent Secretary in the Ministry of Finance.

However, champions can sometimes fall out of favour and when this happens, new champions need to be identified. For instance, due to some internal misunderstandings between the Zambia Water Partnership Coordinator and senior officials in the Ministry of Energy and Water Development, the ability of the Coordinator to play a championship role was compromised. The Zambia Water Partnership Coordinator decided to step aside, and although he continued to help mobilise the partnership, he could no longer play a champion's role.

As a result, a new champion was needed to help move the process forward. A well known water sector professional who had helped reform the country's water supply and sanitation sector was appointed as Chair of the Zambia Water Partnership. This champion helped stimulate the process by improving relations between the Zambia Water Partnership and the Ministry of Energy and Water Development (MEWD). The Chair played an important role in re-opening doors at the MEWD, facilitating cross-sectoral linkages in line ministries, and enhancing information flow to the ministers in charge of water and local government.

Facilitating national development interventions in a policy environment takes time. Developing countries often have urgent societal needs for food, clean water and healthcare. Development interventions with long-term benefits often have lower priority. Administrative bottlenecks and government bureaucracy also often stand in the way of progress. Development facilitators need to be aware of this reality and develop strategies to ensure that development interventions remain on the national government agenda.

Evidence from the IWRM Programme highlights the importance of a champion. They should be influential, dynamic and passionate: able to inspire government to take ownership of the process and commit to driving it forward. Champions should bring with them institutional 'image' and profile. Committed champions, with the right connections, respected and knowledgeable about the sector, help to open doors and accelerate the programme. In selecting a champion, care should be taken to understand what needs to be changed or influenced, and the nature of the difficulties that will be encountered.

As the national development context changes, development processes need to evolve and champions may need to be changed. Despite the importance of champions, stakeholder participation is still critical and champions complement rather than replace the role of partnerships.

In the IWRM Programme several champions were involved at various stages in different countries. These included ministers or former ministers, senior government officials, leading university professors and academics. The key characteristic was that each champion was linked to a specific objective – the desired change. For instance, Zambia's Permanent Secretary from the Ministry of Finance and National Planning was a key champion in facilitating the integration of IWRM in the Country's Fifth National Development Plan (see Box 4).

Mozambique's experience with champions also illustrates the use of multiple champions, according to the local situation (see Box 5).

In some cases, an elected official such as a Head of State or Minister may be the champion required to

Box 5: Creating trust between government and civil society in Mozambique

In Mozambique, stakeholder participation was not a fully established practice when the programme started in 2005. As a result of the mistrust generated by years of civil war, the government was cautious about the agenda of 'outside' stakeholders in development interventions in the country. As part of the process of establishing the country water partnership, trust needed to be created between government and civil society.

From the beginning of the process of establishing the Mozambique Water Partnership, a representative from the National Water Directorate (DNA) was considered a champion due to his engagement and commitment to the partnership and the national IWRM planning programme. The fact that he was a representative of the DNA facilitated discussions and communications with stakeholders outside the government on the establishment of the Mozambique Water Partnership, and vitalised the establishment process.

Several initial meetings were held between stakeholders and DNA representatives, resulting in the identification of potential issues with which the Mozambique Water Partnership could assist, and the development of a proposal for activities to be undertaken by

the Partnership. Without a champion, the initial negotiation and discussions would probably have taken much longer and would have been less productive. As part of the DNA, the champion understood water sector issues, added value to the process, and lobbied for a neutral platform, driving forward the IWRM planning programme for Mozambique.

As the Mozambique Water Partnership programme started, another champion was identified. The Chair of the Mozambique Water Partnership is a high profile individual who provides guidance, is well connected and has been successful in consolidating the name and role of the partnership, due mainly to his ability to open doors and discuss issues with both the national director and the minister in charge. Mozambique is socially segmented and it was crucial to communicate with key people in different sectors, as achieved by the Chair of the Mozambique Water Partnership.

As a result of the efforts and dedication of these champions the Partnership has had space to grow as a stakeholder platform and is seen as a strong partner.



Wolfgang Kaehler/Getty Images

initiate key reforms. For instance, the genesis and progress of the IWRM planning process in Kenya was political and evolutionary, with high level support from the government as well as civil society. This broad political representation helped mobilise the necessary action from both the public and private sectors, as well as development partners to support the reform process. As a result of President Daniel Arap Moi's active involvement in water management issues in Kenya, the launch of the national water reform process included 18 cabinet ministers, 13 of whom presented papers on their respective sectoral concerns related to water. Other papers were contributed by the international community, including the World Bank Kenya Country Director, the United Nations agencies in Nairobi, and the Ambassador of Sweden.

While participation at the highest level of government and the commitments made at the meeting signified strong political will for the on-going water sector reforms in Kenya, development of the IWRM plan required mobilisation of stakeholders from diverse background and managing expectations, and the process was not easy.

Selecting a champion is not an easy task and requires thorough analysis of the context and desired action. A champion need not necessarily be a high-level, influential person. They may simply be someone who is in the right position to offer relevant strategic information and guidance – for instance, a junior economist in the Ministry of Finance who offers support to senior officials, and is thus more involved at the operational level where the action takes place. Champions' usefulness can change dramatically too, especially when it comes to political champions.

The experience from the 13 countries highlights the fact that development facilitators need to continuously monitor the effectiveness of champions and where necessary, seek multiple champions depending on the desired changes. Carefully selected champions can facilitate government commitment to, and leadership of, the process, accelerating the development intervention.

Lesson: Champions are crucial, and they should be wisely selected and valued.

Recommendation: Carefully identify and select champions based on the desired outcome of the development process.



2.2.2 Strategic road map

• Integration with development priorities

Aim: To ensure harmonisation, ownership, sustainability and value addition to government development priorities

Development interventions must address government priorities. As emphasised by the Paris Declaration on Aid Effectiveness, development aid should be aligned with existing government policy frameworks, strategies and systems. Development programmes implemented outside the existing government framework risk fragmentation, high transaction costs due to the use of different and often conflicting systems, and a reduced chance of sustainability.

The integration of IWRM into national development plans and PRSPs was a key component of the national IWRM planning work. In practice, this required understanding national development priorities and building on existing national planning processes.

Experience from the programme showed that this required a pragmatic approach and the initial stages took longer than envisaged in order to get everyone on the same path. Existing government systems are not perfect and donors can complicate the process by promoting their own interests. The incentive is high for development facilitators to short-circuit existing systems. In some cases, aligning with existing government systems meant a loss of flexibility and space to influence the process, leading to delays and a loss of momentum. Nonetheless, experience from water management planning across the 13 countries showed that alignment, harmonisation and building on what exists makes a lot of sense.

The Mali Water Partnership aligned the national IWRM planning programme with an on-going water sector programme funded by the World Bank, France, the Netherlands and others. The process was also linked to Mali's PRSP, and thus encouraged the PRSP to adopt a greater focus on sustainable management of water resources (see Box 6).

Taking an integrated approach linked to the country's national development has been a key differentiating

Box 6: Adopting an integrated approach in Mali

Access is Mali's principal water resource challenge, due largely to an uneven temporal and geographical distribution of water, combined with under-exploitation. The Mali IWRM plan was developed at a time when significant reform was already underway in the water sector, together with a move towards decentralisation. The environment was therefore very favourable for creating an IWRM plan. Over a four year period, the Mali Water Partnership added value, contributing broad-based ownership and establishment of a multi-stakeholder platform.

The multi-stakeholder approach was new, both for the sector and for Mali. The Mali Water Partnership (formed in 2003) effectively brought the government together with NGOs and civil society and worked together with other donor-supported initiatives. Over the four years, membership of the Mali Water Partnership doubled from 50 to 100 local organisations. Eight sub-national water partnerships were also created, which proved instrumental in mobilising participation during consultations on the IWRM plan.

IWRM was incorporated into Mali's national development planning through the 2004 National Plan for Access to Potable Water. The principal implementing partners are the Ministry of Mines and

Energy, the Ministry of Water, and the Ministry of Environment and Sanitation. These ministries came together to introduce greater coherence and coordination in their efforts to achieve the water-related MDGs. Integrated management of water is a pillar of this new multi-ministerial approach, and the Mali Water Partnership has assisted in defining more specifically what IWRM means in practice. The most recent PRSP also has a greater focus on the sustainable management of water resources. Stakeholders considered the linking of the IWRM plan to the new PRSP to be one of the most important changes since 2003 in the way water is managed in Mali. The IWRM plan was finalised in December 2007 and approved by the government in April 2008.

As a result of the broad cross-sectoral approach undertaken with strong linkages to the PRSP, a donor roundtable organised in February 2009 by the Mali Water Partnership resulted in donors pledging to fund the implementation of the IWRM plan. Impressed by the quality of the plan, donors committed to fund 85 percent of the amount estimated in the IWRM plan. The Government committed to fund the other 15 percent. This was the culmination of a long process led by the Mali Water Partnership to involve major water sector and civil society stakeholders in the development of the plan.

factor in sustaining water reform processes and enhancing implementation of the IWRM plans. In Zambia, integration of the process into the Fifth National Development Plan resulted in broad ownership and political support (see Box 7).

Zambia's experience confirms the importance of aligning with the national development planning process. This helps build ownership, and enhances future collaborative

efforts. Two years after Zambia's national IWRM plan had been developed and launched by the government, the World Bank used the IWRM plan as a basis for the Joint Water Sector Assistance Strategy. In addition, the government requested the Zambia Water Partnership to work with the FAO and facilitate development of a national investment brief to expand on the utilisation of water resources for agriculture and energy.

Box 7: Integration of IWRM in Zambia's Fifth National Development Plan

In Zambia, stakeholders capitalised on the on-going multi-donor Water Resources Action Programme (WRAP) supported by the Norwegian Agency for Development Cooperation (NORAD), World Bank, Ireland Aid and GTZ. The WRAP was already endorsed by government at a high level and was in progress when the national IWRM Programme began. Rather than create a new programme, stakeholders identified the need to integrate with existing processes. Though it was not easy, the IWRM Programme was accepted as adding value to the WRAP. Important differences existed, largely due to the IWRM Programme's emphasis on linkages with the National Development Plan and cross-sectoral integration, while the WRAP was more focused on the creation of an effective institutional and legal framework for water resources management, and an information management system.

By focusing on value addition rather than duplication, it was possible to integrate the IWRM Programme with the National Development Plan. Thus, while the WRAP provided a suitable entry point, the added value of the IWRM planning process was achieved by integrating water resources management issues into the National Development Plan.

The Coordinator of the Zambia Water Partnership was appointed by the Ministry of Energy and Water Development to support the government in preparation of the water chapter for the National Development Plan. The draft IWRM plan that had been developed through a consultative process was synthesised and validated through national working groups established to provide inputs to the water chapter.

Besides increasing ownership, the integration of development interventions in national development processes also helps in building trust and confidence between local development actors and government. In Malawi, once the trust had been built between the Malawi Water Partnership and the lead ministry responsible for water, the government regularly invited the Water Partnership to briefing meetings with the Permanent Secretary and to donor coordination meetings. The Malawi IWRM plan was integrated into Malawi's Growth and Development Strategy in 2007.

Trust and confidence building were also key enabling factors for the Benin Water Partnership, which helped Benin's policy-makers revise the country's Growth and Poverty Reduction Strategy to take into account the role of water in development (see Box 8).

Experiences from Mali, Zambia and Benin show the importance of integrating development initiatives with a

country's national development planning framework. In all cases, experience shows the crucial role of ministries of finance and economic planning in providing the leadership for integration of these processes with macro-economic planning frameworks. To be most effective, the integration process has to go beyond an individual sector ministry.

In Malawi, for instance, the Ministry of Water and Irrigation Development was the lead ministry responsible for developing the IWRM plan. In 2005 the Ministry of Water invited 33 permanent secretaries from water-related sectors to a meeting to discuss IWRM, but none of them took up the invitation. Only when the meeting was re-convened through the Office of the President, did 29 permanent secretaries actively participate.

This highlights the importance of support from a higher level ministry when cross-sectoral integration is required. Line ministries such as water rarely have sufficient

Box 8: Integrating with Benin's national development plan

Following the March 2006 presidential elections, the new government of Benin formulated a National Development Plan (NDP). The 2006–2011 NDP centred around six 'strategic directions', covering social, economic and administrative reforms. These, in turn, are supported by 'strategic axes'. One axis was the implementation of the IWRM approach, aimed at securing fair access to drinking water, managing water for food security, and ensuring the sustainability of water resources.

Cutting across the strategic directions of the Benin NDP are several measures that should promote an institutional, policy and financial environment conducive to more sustainable water management approaches. These measures include resource mobilisation and the promotion of leadership, dialogue, participatory development and international partnerships. The strategic directions of the NDP are to be operationalised through Benin's Growth and Poverty Reduction Strategy, which dates from 2002 and operates through three-year action programmes. The original strategy called for improvements in water management, sharing of water resources among various users, establishment of a consultative national body, and support for integrated approaches to water resources management.

However, in the context of water management, the original strategy prioritised drinking water supply and water resource monitoring and paid scant attention to other key water resource issues. The national government and other authorities responsible for water management later realised that the first Growth and Poverty Reduction Strategy had too narrow a focus and needed a broader

perspective through the development of an IWRM and water efficiency plan. In support of this initiative, the Benin Water Partnership provided knowledge and experience arising from the IWRM planning exercises underway in other countries in West, East and southern Africa.

As a consequence, the Growth and Poverty Reduction Strategy was revised to include broader issues in water resources management, including water protection, management of wetlands and rivers, provision of technical assistance and advice, and training.

The Benin Water Partnership was instrumental in supporting the participatory consultation processes that were held during 2003 and 2005. These consultations included technical and financial partners within Benin's water sector, together with government as key stakeholders. Not only did this lead to the revision of the Growth and Poverty Reduction Strategy but also to a national water policy (adopted in August 2009) and a draft water law based on IWRM principles.



Meeting in Benin with the Benin Minister of Mines, Energy and Water (left).

influence to mobilise broad sectoral integration. In addition, integration in government frameworks can be complex and time consuming. To remain relevant, flexibility in time and scope of the development intervention are important.

The advantage of plans linked to national development planning processes is that implementation is driven as part of government's broader investment and management processes. In countries where the plan was simply a broad stakeholder product, it is not clear how the implementation process will be taken forward. This highlights the fact that there may be limited gains from promoting broad stakeholder activities unless they are accompanied by, or catalyse, a core government-based water resources management programme.

Lesson: Development processes have a better chance of success if they are integrated in national development planning frameworks and plans.

Recommendations:

- Efforts to integrate development processes in broader national development frameworks should involve senior officials from ministries of finance and economic planning.
- Development agencies should identify key government priorities and ensure that development programmes address and contribute to those goals.
- Design of development processes should be flexible to allow for a time-consuming process of integration in national development frameworks.

• **Institutional arrangements for coordination and financing**

Aim: To ensure effectiveness and efficiency in managing and sustaining the processes

Institutional arrangements for coordination, financing and monitoring of development processes should be lean, flexible and efficient, with minimal bureaucracy. While it is important to locate responsibility for coordination within existing governance frameworks, their capacity to carry this out needs to be taken into consideration.

On the surface, it might seem sensible to establish parallel coordination mechanisms where government does not have sufficient existing capacity. Nonetheless, this temptation should be resisted. In the long term it is important to build a more effective civil service and ensure adequate capacity exists within government coordination mechanisms.

Coordination arrangements

As water cuts across many sectoral interests, coordination arrangements within and between sectoral ministries and with other agencies are a fundamental part of the integrated approach. Coordination arrangements that make use of existing government frameworks help to build capacity, reduce duplication and institutionalise the development intervention. This in turn has the potential to increase the probability of follow-up action during implementation. For instance, the IWRM Programme in Zambia capitalised on a mechanism established by government for development and coordination of the water related programmes in the Fifth National Development Plan (see Box 9).

Zambia's experience confirms the importance of harmonising institutional arrangements for development initiatives within existing government frameworks. Once the IWRM programme had been incorporated into the existing institutional coordination framework, ownership across government ministries improved and the IWRM plan became the main reference document during cross-sectoral meetings on water sector coordination.

Building on broader sectoral coordination arrangements has a greater chance of enhancing the sustainability of development processes than arrangements that involve a single line ministry. In some cases, existing cross-sectoral coordination arrangements are weak and ineffective. Rather than create new coordination arrangements, experience shows that it is important to build on existing ones and strengthen them if necessary. Coordination mechanisms that are developed without linking to existing high level cross-sectoral coordination mechanisms have less potential to attract broad cross-sectoral ownership (see Box 10).

The location of the programme management team can influence the effectiveness of sectoral coordination.

Box 9: Coordination arrangements in Zambia

Realising the need to establish coordination arrangements for the national IWRM plan, the Zambia Water Partnership capitalised on a broader, sector-wide coordination mechanism, the Water Sector Advisory Group (SAG).

In 2003, the Zambian government introduced Sector Advisory Groups (SAGs) as a vehicle for planning, implementing, monitoring and evaluating the Poverty Reduction Programme. The Water SAG advises government on water sector policy issues, the performance of the sector, efficient and effective water use, and coordination of assistance to the sub-sectors. It provides a forum for sector-wide approaches to planning, budgeting, delivery and implementation of programmes. The Water SAG comprises representatives from key institutions and stakeholders, including line ministries, statutory bodies, partners, academic and research institutions, NGOs and other associations actively involved in the water sector. Membership is open to other organisations with an interest in the water sector.

The Water SAG is chaired by the Permanent Secretary in the Zambian Ministry of Energy and Water Development, which also provides the secretariat. It provides a forum which helps to harmonise the implementation of the national water policy and has improved coordination in the sector.

By the time Zambia’s IWRM plan was finalised, it had been institutionalised in the Water SAG coordination mechanism (see

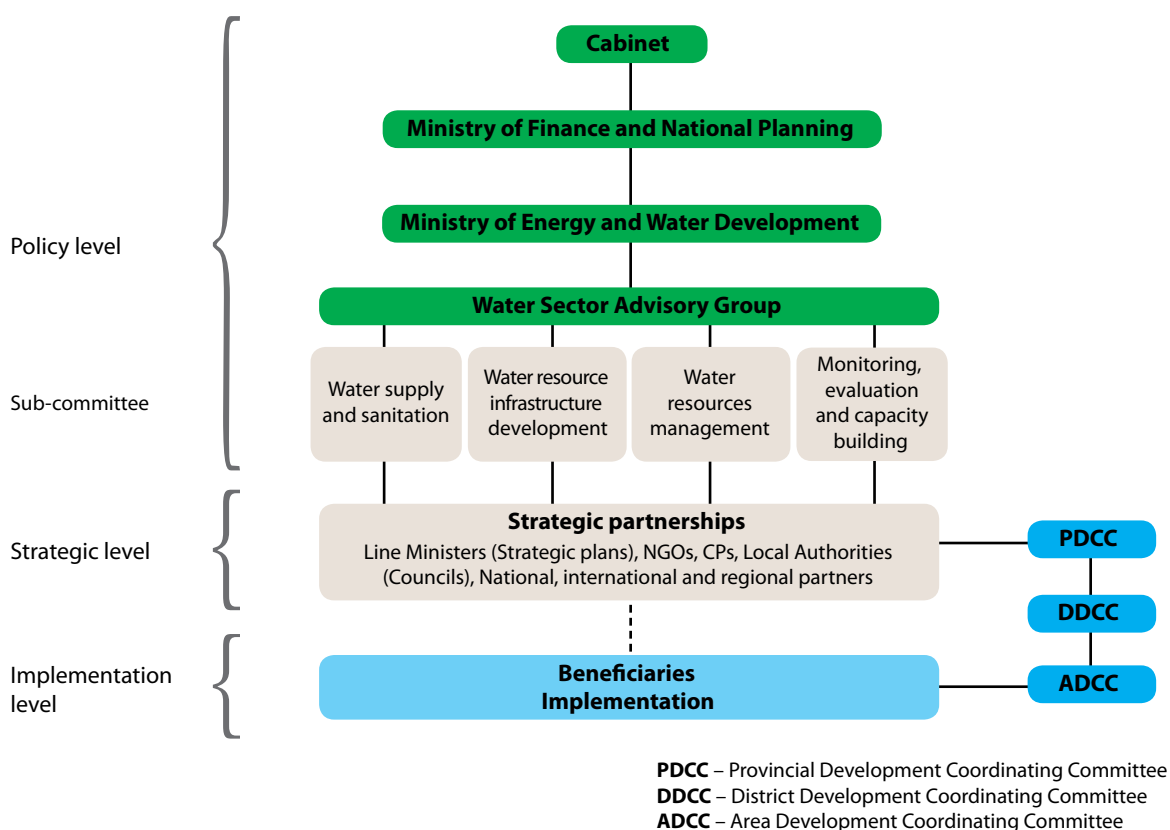
Figure 3). Members of the Water SAG designed and prioritised the water programmes in the IWRM plan, resulting in coordination arrangements that mirror those of the Water SAG.

In order to effectively manage the sector, without creating new organisations or departments, four sub-committees were established under the Water SAG to facilitate communication and coordination among institutions responsible for specific functions. The actions identified in the IWRM plan were organised around four clusters based on these sub-committees:

- Water Supply and Sanitation sub-committee, chaired by the Ministry of Local Government and Housing
- Water Resources Management sub-committee, chaired by the Ministry of Tourism, Environment and Natural Resources
- Water Resource Infrastructure Development sub-committee, chaired by the Ministry of Agriculture and Cooperatives
- Monitoring, Evaluation and Capacity Building sub-committee, chaired by the Ministry of Finance and National Planning.

The Water SAG in Zambia continues to play a monitoring and coordination role for the implementation of the IWRM plan, and the Zambia Water Partnership is a member of the sub-committee on Monitoring, Evaluation and Capacity Building.

Figure 3: Water sector coordination in Zambia



Box 10: Ineffectual water sector coordination in Cameroon

IWRM had been accepted in principle for some time in Cameroon but the political will for its practical application was lacking. Consequently, prior to the work on the IWRM planning process, responsibility for water management was highly fragmented and sectoral management approaches predominated.

Although a National Water Committee with broad representation, chaired by the Minister in charge of water resources, was established in 1985 to coordinate activities in the water sector, it was ineffectual, met only infrequently and never fulfilled its intended role. While the 1998 Water Law provided new impetus to allow it to function more effectively, there was no improvement in practice.

On 20 March 2007, the Cameroon Minister of Energy and Water Resources approved two decisions that created, and designated members to, a management team for the national IWRM planning process. An agreement was signed between the lead ministry and the Cameroon Water Partnership, providing a legal basis for the lead ministry to allocate financial resources for the national IWRM programme. To ensure cross-sectoral representation, the Cameroon Water Partnership supported the Water Ministry to select key government institutions to be part of the management team.

However, these efforts were not enough because they were not linked to the National Water Committee. During the entire five-year period over which the national IWRM plan for Cameroon was developed, the National Water Committee never met. Ownership of the process and its outputs was limited to the Water Ministry. This highlights the importance of coordination mechanisms that are linked to higher level government bodies with the capacity to mobilise cross-sectoral coordination across relevant ministries.

Experience from the programme suggests that there is no single solution and the location for the team's base has to be guided by local context. It is more important that the management team should be staffed by people who understand the broader institutional arrangements beyond the programme office.

Experience from the different countries showed that it was critical to include people in the management team who had experience in influencing policy processes and a good understanding of political and development

processes. Knowledge of the subject matter was important, but equally important were the skills to network and identify opportunities for advancing the agenda of the planning process. Political context is constantly evolving, and it was found that where the management team was firmly anchored within an established institutional environment, coordination efforts were more effective. This may also help to sustain the process during the implementation of the IWRM plan.

Lesson: Coordination arrangements for development processes that build on existing institutions stand a better chance of success.

Recommendation: Anchor the integration and coordination function in a higher level government body or ministry.

Programme financing arrangements

While integrating a development intervention into the existing institutional framework has the potential to increase coherence and improve coordination, there are challenges especially when harmonising financing arrangements. While most development interventions rely on external funding, long-term sustainability is enhanced if the intervention is integrated into existing national financing and planning mechanisms, through instruments such as medium-term expenditure frameworks and national budgets.

Modern international development interventions emphasise the importance of harmonising funding modalities. Donors, together with recipient countries, have made a commitment to observe a series of principles related to donor harmonisation, alignment with government policies and systems, and mutual accountability. These principles have gained international acceptance through the 2005 Paris Declaration on Aid Effectiveness and the subsequent 2008 Accra Agenda for Action (OECD, 2008). The Paris Declaration rests on five tenets (illustrated in Figure 4), that aid is more likely to promote development when:

1. Developing countries exercise leadership over their development policies and plans (ownership)

2. Donors base their support fully on partner countries' development strategies, institutions and procedures (alignment)
3. Donors coordinate their activities and minimise the cost of delivering aid (harmonisation)
4. Developing countries and donors orient their activities to achieve the desired results (managing for results)
5. Donors and developing countries are accountable to each other for progress in managing aid better and in achieving development results (mutual accountability).

The Paris Declaration aims to improve the efficiency with which donors interact with recipient governments, and to enhance country ownership, partnership and accountability. The IWRM Programme was developed with these principles in mind. However, experience from facilitating national IWRM planning suggests that there are constraints to the full-scale use of government systems. In many cases, government systems are weak,

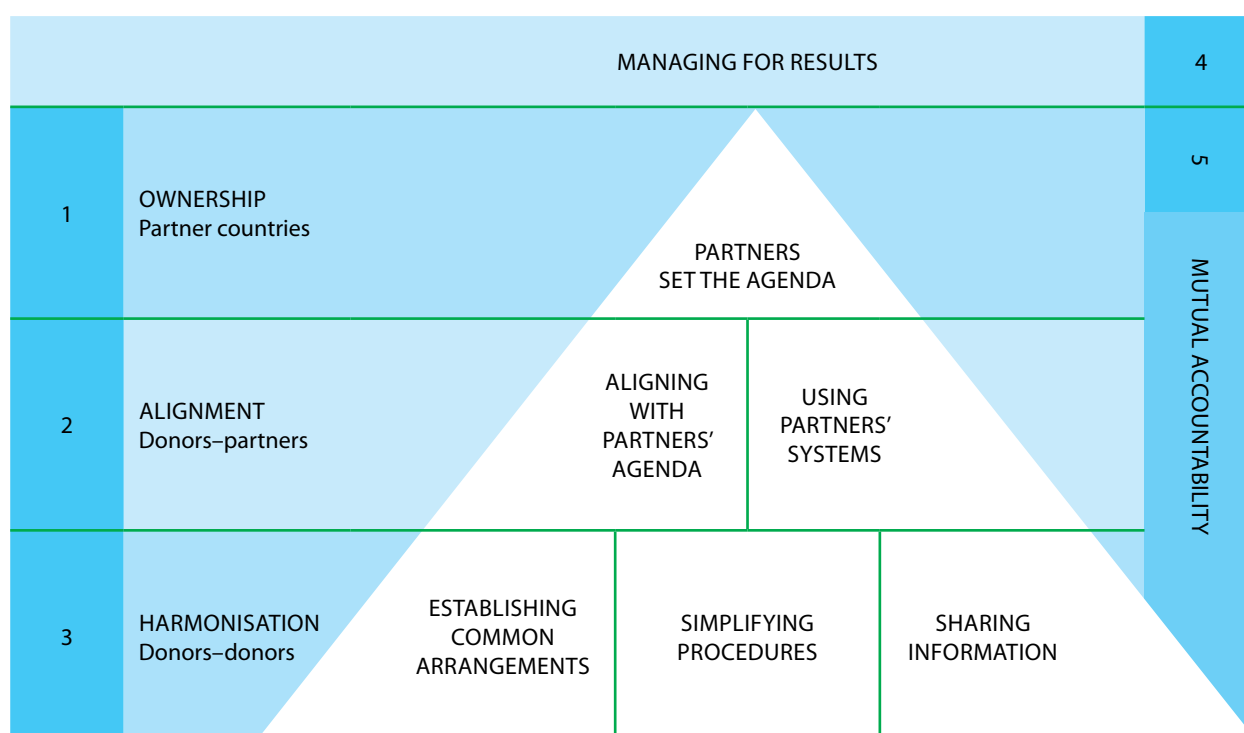
bureaucratic and create bottlenecks for the smooth implementation of development interventions.

Following the signature of the Paris and Accra Declaration, the Benin Government and its partners in development initiated steps towards harmonisation and alignment. A programmatic and budgetary framework called the Programme by Goal Budget (BPO) was designed for the water, and hygiene and basic sanitation sub-sectors. Through these efforts, the main administrations in charge of coordinating the water and sanitation sector have developed a significant capacity for synergy and coordination of various aid modalities.

Building on that momentum, efforts are currently being made especially on the side of the technical and financial partners of the sector, not only to harmonise their actions and give them a greater collective efficacy, but also to embed their entire support in the national development strategies, institutions and procedures of the partner country.

The Multi-Year Support Programme to Water and Sanitation (PPEA), 2007–2011 has four components:

Figure 4: The five tenets of the Paris Declaration



Source: Reproduced with permission from OECD (2007: p.16)

1. Strengthening of budget support to the water and sanitation sector
2. Transfer of skills and the development of community project management
3. Infrastructure development for drinking water supply and sanitation
4. Support to IWRM.

Recognising the danger of duplication and following the principles of harmonisation, the national IWRM planning process was aligned with the PPEA programme, with the support of the Benin Water Partnership. Funds were pooled and a joint work programme developed under component 4 of the PPEA. The harmonisation was not implemented in its entirety as the government system was only used for some of the joint work programme activities.

In practice, harmonisation meant that donors would provide funds to the Benin Ministry of Finance, which would disburse them to the Ministry of Mines, Energy and Water, the lead implementing ministry in charge of water. National Directorate of Public Procurement procedures were then used for all procurement processes by the Ministry in charge of water.

Use of the government systems slowed down the execution of important activities, leading to delays in the preparation of the IWRM plan. After three years of implementation, the execution rate for funds channelled through the government system was only eight percent (see Box 11).

The work in Benin illustrates the difficulty of conforming to the ideals set out in the Paris Declaration. Other countries that took some steps towards harmonisation experienced similar delays, even though full-scale harmonisation was not undertaken.

The Mozambique Water Partnership developed a joint work programme with the National Directorate of Water in the Ministry of Public Works and Housing. Key responsibilities were assigned with designated funding either from government or through an independent non-government host institution responsible for managing

Box 11: Alignment and harmonisation in Benin

The PPEA and the IWRM Programme have worked jointly to develop IWRM in Benin. However, there have been serious delays in implementation because of the conditions attached to national procedures. In 2007, the Benin Water Partnership helped government to produce a situation analysis on water management in the country. The situation analysis identified thematic studies that were needed to address some information gaps and help move to the next stage of the process. One of these gaps was a detailed financing study for the water sector.

The procurement process for these thematic studies and the selection of the consultants took from December 2007 to December 2008. The study itself, which was expected to last four months, took nearly a year because of delayed payment of the initial pre-financing.

Other processes related, in particular, to the development of the plan to strengthen the capacities of the water administration for IWRM implementation and for the development of the Water Development and Management Master Plan (SDAGE) for the Ouémé river basin had not started at the end of 2009, although the tender documents were drafted and presented to the National Directorate of Public Procurement by the ministry in charge of water in 2008. Thus, for a budget of €3.5 million (FCFA 2,353 million) allocated to the Directorate of Planning and Water Management for the implementation of component 4 of the PPEA, by June 2009 the level of financial performance was 8.01% (€287,487 or FCFA 188 million) for a programme that was entering its third year of implementation. This situation is common to most national institutions.

A new Procurement Code passed by the National Assembly was enacted by the President of Benin, but according to procurement experts, the new code provides no significant improvement and may even create greater delays.



Representatives of GWP, government and donors in Benin discuss the IWRM programme.



James P. Blair/Getty Images

the Water Partnership funds earmarked for the work programme. The programme was delayed as the ministry underwent a protracted tendering process to appoint key consultants to lead the drafting of the IWRM Plan. The process lasted more than a year; shortly before the consultant was to be appointed and the first funds disbursed, a national presidential election was called and the process was further delayed.

A similar situation occurred in Swaziland. Initially the budget for the Swaziland Water Partnership programme was fully managed by an independent host institution. During the early stages, activities progressed as planned and there were few delays. Recognising the importance of harmonisation with an on-going government water reform programme led by the National Water Authority, a joint work programme was developed between the government and the Swaziland Water Partnership, with agreement on the activities to be funded by each party. As soon as this happened, the process slowed down due to delays in appointing key consultants to lead components of the government-funded activities.

The cases from Benin, Mozambique and Swaziland illustrate the practical realities of trying to comply with the principles of the Paris Declaration and indicate some of the challenges of full-scale harmonisation and use of government systems.

The experiences of the IWRM Programme generally confirm the importance of integrating interventions with national development frameworks. However, they also underscore the dilemma in which governments and donors find themselves regarding full-scale implementation of the Paris Declaration. In many cases IWRM Programme funds were pooled with other funding sources using government systems – this always led to delays. The challenge is thus to achieve a balance, to maintain the forward momentum for the development intervention within existing systems.

Given these circumstances, the flexibility and partnership approach adopted by the water partnerships has proved very valuable. Flexibility in approach allows existing constraints in government systems to be accommodated, while the core activities necessary to keep the reform agenda on track are maintained, and support is given

to capacity building initiatives important for the implementation of the plan.

This also suggests that practical considerations need to be taken into account, to avoid the pitfalls of joint funding arrangements. Flexible facilitation mechanisms outside the harmonised programmes are necessary to accelerate progress.

Lesson: Compliance with the Paris Declaration will take time and require extensive reforms and capacity development.

Recommendation: To accelerate implementation, donors and other development agencies need to have flexible facilitation mechanisms, while working towards more harmonised programmes.

• Roles and responsibilities

Aim: To clearly distinguish roles, and avoid duplication and role conflict so as to increase effectiveness.

The establishment of clear roles is important in development facilitation. Government bodies and facilitating agencies have different mandates and capacities. The responsibility and legal mandate for carrying out development work lies with the government. Development facilitators need to keep this in mind, and acknowledge that their role is to support government, aid the implementation of the development programme, help remove barriers and constraints to effective policy implementation, and accelerate development implementation.

In some cases, there are capacity constraints in public institutions and this is often used as an excuse for outside development agents to take on roles that should rightly be in the hands of government. While the constraints may be real, evidence from the IWRM Programme in Africa suggests that taking over the role of government officials simply leads to conflicts and misunderstandings and in the end to lack of ownership. Regardless of capacity constraints, governments should be given the leadership role and if capacity to lead is an issue, effort should be made to develop such capacity. Thus from the outset, it should be clear that government

is the leader and the development facilitator is there to complement government efforts.

In Kenya, the early stages of the planning process faced challenges due to misunderstandings about roles between the Kenya Water Partnership and various institutions (see Box 12).

Box 12: Roles and responsibilities finally resolved in Kenya

Kenya's traditions of water resources management are similar to those of other African countries. Water has been considered a free and infinite resource, with different sectors and ministries responsible for different aspects of its supply and use. Since the mid-1990s, the dire state of the country's water infrastructure and services, and the undermining effect this has had on the economy, has precipitated commitment for change at the highest levels of government. The 2002 Water Act set out the institutional arrangements and legal framework for the necessary water reform, which included greater stakeholder participation in decision-making. The Kenya Water Partnership was set up in 2003 and focused on supporting water resources management planning.

However, in the early stages, balancing the different interests of the various ministries and stakeholders proved to be a substantial challenge. One of the key issues was establishing the role of the Kenya Water Partnership as a facilitator, because initially it was perceived to be an implementing or donor-led agency, and as a competitor to the Government rather than a partner. The problem was finally resolved through good communication and networking, but underlines the need to establish roles and responsibilities clearly at the outset and to allow time to build trust between partners.

In the IWRM Programme, Memoranda of Understanding (MOU) defining roles between the GWP country water partnerships and respective governments were encouraged. The MOUs defined the roles among the players and allocated key responsibilities. Nonetheless, clarifying roles can sometimes be a protracted process which can in itself lead to delays.

In Mali, an MOU was signed between the government and the Mali Water Partnership on 19 December 2003, at the start of the programme. The MOU allocated responsibility for leading the planning process to the National Director



of Hydraulics and responsibility for facilitating the process to the President of the Mali Water Partnership.

In Zambia attempts were made at the start of the programme to establish a MOU between the Ministry of Energy and Water Development (MEWD) and the Zambia Water Partnership. While the national IWRM planning programme, inception reports and work plans were approved by the ministry, an MOU defining roles and responsibilities was never signed and was a subject of discussion throughout the four years of implementation of the programme. Officials at MEWD argued that the government had issued instructions that all agreements, including MOUs, must be signed by the Ministry of Justice, and that this would be a lengthy process as there was a backlog of agreements awaiting approval. Officials from MEWD did not see the need to sign an MOU because they were already working together with the water partnership. Unfortunately, the lack of an agreed document clarifying roles between government and the Zambia Water Partnership contributed to misunderstandings and conflicts throughout the process.

The division of roles between the Water Resource Action Programme (WRAP) and the IWRM planning process facilitated by the Zambia Water Partnership was never

clear and was always subject to discussion. As role conflicts and misunderstandings increased, it was decided that instead of signing a MOU clarifying responsibilities, a 'collaborative arrangement' would be signed by MEWD and the Zambia Water Partnership. Unfortunately, this collaborative arrangement was never signed either, and while programme implementation continued successfully, role conflict often delayed the process.

In Mozambique, DNA and the Mozambique Water Partnership decided they would not start implementing the programme until an MOU clarifying roles was signed. Unfortunately, this process was also protracted, leading to serious delays (see Box 13).

Lesson: Clarification of roles at an early stage helps in building trust, transparency, credibility and accountability. However, it can take time.

Recommendation: Project design should be flexible enough to accommodate a variety of roles and time for clarifying them.

Box 13: Clarifying roles takes time in Mozambique

In Mozambique, the government had been undertaking water sector reforms, had developed a national water resources management strategy (NWRMS) and had reviewed the Water Policy prior to the initiation of the IWRM planning process.

The establishment of the Mozambique Water Partnership, in a broad sense, resulted from the need for a neutral platform to discuss water resources management issues, but specifically aimed to contribute to the development of an IWRM Plan, building on the NWRMS.

Initially the role of the Mozambique Water Partnership was not clear for most stakeholders and especially for the National Water Directorate, the governmental institution responsible for water resources management. There was concern that the partnership could compete with the National Water Directorate for the implementation of activities that were the responsibility of government. Clarifying these roles and responsibilities took almost two years and delayed project activities. Finally in July 2008 the Mozambique Water Partnership and the National Water Directorate signed a MOU, clearly defining roles and responsibilities of each institution. Subsequently, effective coordination mechanisms were put in place and communication between the two institutions improved.

2.2.3 Ensuring sustainability

- **Institutional memory**

Aim: To ensure a sustained process of change.

Development interventions requiring policy changes take time. Yet, while a development intervention is on-going, the people involved often change. This poses the risk of losing the experiences and lessons acquired along the way. Often, the early champions and pioneers of the development intervention move on. The experienced project managers and facilitators with memory of what has happened may leave too. People who were trained as part of the development intervention join other, unrelated, programmes. People migrate.

As new governments are elected, key decision and policy-makers also change. Government departments are constantly reorganised, merged or moved to other ministries. In some cases, key government ministries are totally dissolved and tasks reallocated to other government departments. The development intervention risks losing its momentum and may even fizzle out with no impact. Maintaining institutional memory throughout the process is necessary, and requires special attention.

Institutional memory should be considered at political, institutional and project levels. At the political level, while government ministers provide relevant political will, they are subject to frequent change. Senior civil servants in government are often less prone to change. They provide much of the institutional memory for government ministries and in many cases inform and influence ministerial priorities. At the project level, staff also change as development interventions take time and individuals move on.

In this environment, experience, institutional memory and valuable capacity are easily lost. In the IWRM Programme, various strategies were employed, and time and resources were invested, to ensure continuity of institutional memory. For example, in several cases, the ministers of water were changed during the programme, sometimes more than once, and the programme team carefully introduced each new appointee to the IWRM Programme. This required patience and time, but the

result is likely to be much greater long-term impact. Moreover, as ministers often move to other sectors the knowledge gained on water continues to be important (see Box 14).

Box 14: Impact of frequent ministerial changes in Cameroon

Between the start of the IWRM planning process in Cameroon in 2004 and November 2009, five different ministers were appointed with responsibility for water. Each new minister had to be made aware of the IWRM concept and its importance. This has been a major factor contributing to the slow progress of the planning process.

It has further resulted in a situation where funds allocated for the planning process in the government budget have not been effectively disbursed. This is due partly to the fact that some ministers do not give the same level of importance to the IWRM planning process as others, and may at times reallocate IWRM funds to other activities. Sometimes by the time the minister fully appreciates the added value of the planning process, no further funds are available for that year.

One effective strategy employed by the Malawi Water Partnership was to involve as many high level decision-makers as possible. Early on in the process the Malawi Water Partnership organised awareness raising workshops for all senior civil servants (the permanent secretaries in charge of water related sector ministries).

On one occasion, 29 of the 33 relevant permanent secretaries attended an awareness raising workshop on national IWRM planning, its added value, and the goals of the programme. Each of these permanent secretaries then briefed their ministers on the initiative. As a result of this approach, the national IWRM Programme benefited from sustained institutional memory at higher political levels. When the minister in charge of water was changed, there was no loss of momentum as the new minister already knew about the programme. In one case, the permanent secretary responsible for gender affairs participated in an IWRM planning workshop convened by the Malawi Ministry of Irrigation and Water Development with support from the Malawi Water Partnership. A few weeks later the President appointed the permanent

Box 15: Ensuring continuity – the cases of Mali, Swaziland and Cape Verde

In Mali, the project management team for the national IWRM programme was almost the same as the team responsible for the implementation of the broader water sector government reform programme. The management teams in the two countries were made up mostly of civil servants seconded by various government ministries and available to work full time on the programme. These teams were tasked with responsibilities for developing the national IWRM plan in addition to their responsibilities for water reform. This arrangement contributed to synergy and institutionalisation of the process in a government reform programme. As most of the staff were seconded from government ministries, it allowed for continuity and institutional memory even after the national IWRM programme had ended.

In Swaziland, an experienced programme manager, seconded from the ministry responsible for water to manage the team responsible for the planning process, was recalled by government while the programme was still being implemented. Fortunately, the manager's deputy was knowledgeable and trained in IWRM, and held relevant academic qualifications. The transition was therefore smooth, with no delays in the programme and the assistant simply took over the management of the process. No delays were experienced in the programme due to staff changes.

In Cape Verde, the programme manager left to take up a study position towards the end of the programme. Other team members also left at around the same time. The sudden departure of all key programme staff almost at the same time led to a serious loss of institutional memory that adversely affected the smooth completion of the programme. This led to a loss of momentum at the end and delayed programme closure.

secretary from the Ministry of Gender as the new permanent secretary for the Ministry of Irrigation and Water Development. When a delegation from the Malawi Water Partnership went to see her to discuss the IWRM programme, she confidently supported the initiative, with which she was already familiar.

Anchoring the processes – including the management team – in an existing government institution was also found to be an important strategy. However, experience from other countries in the programme showed that there are merits to locating the management team in a neutral institution that is not aligned to a particular government body. Because of the cross-sectoral nature of the national IWRM programme, a neutral and independent home may be required to ensure that the project team members are able to access and mobilise support from other ministries.

This rationale was widely accepted by various stakeholders especially where there were institutional disputes between ministries. For instance, the Ministry of Energy and Water in Zambia was engaged in a long-standing turf battle over water supply with the Ministry of Local Government. It was often argued that if the project team for the national IWRM planning programme were housed in the lead Ministry of Energy and Water, it would be impossible for the Ministry of Local Government to participate. A number of key stakeholders in Zambia noted that the management team was able to foster dialogue between the two ministries, as it was perceived to be a neutral, trusted broker. This experience demonstrated the importance of an independent facilitator for IWRM planning processes.

The experiences from Zambia, Cameroon, and Mali (see Box 15) suggest that there is no standard approach and the individual country's context is important. Whatever approach is taken, it is important to consider the continuity and sustainability of the process beyond the lifetime of the programme funding. A combination of strategies is required to ensure institutional memory is maintained at political, institutional and project levels.

Lesson: Institutional memory enhances sustainability of development interventions during and after initial development effort.



Recommendations: Develop and implement a comprehensive and coherent plan to ensure institutional memory at the political, institutional and project level throughout the process.

- **Stakeholder participation**

Aim: To have a trusted and credible neutral platform for dialogue and stakeholder involvement in development processes.

Stakeholder participation has long been recognised as an important element in sustainable development. Participation of stakeholders offers diverse perspectives on development challenges and allows people who are directly or indirectly affected the opportunity to offer their perspectives on solutions. Stakeholder participation is also important for the legitimisation of development programmes. This increases both ownership of the outcomes and the probability of successful implementation.

Stakeholder partnerships can provide platforms for dialogue and on-going consultation. To be effective and influence policy processes, partnerships need to be open and allow the free exchange of ideas. They can also provide a mechanism for monitoring and accountability on agreed deliverables.

A credible and inclusive platform is required to enable free dialogue on key issues. National partnerships that are organised around a common purpose with an effective dialogue process stand a good chance of success. This process can be challenging but provides an opportunity to discuss the value added by the development intervention and agree on appropriate entry points.

From the start of the national IWRM planning processes, stakeholders prioritised the establishment and strengthening of partnerships at sub-regional and national levels. The close collaboration between national and regional partnerships was decisive in sharing learning between countries and taking critical issues on water security further, through processes at the pan-African level. These partnerships not only provided

Box 16: An inclusive platform gains recognition in Eritrea

Since its formation, the Eritrea Water Partnership has moved in leaps and bounds to define its place at the centre of the planning and management of water resources in the country. Initially it seemed unimaginable to create an all-inclusive platform with so many players across a variety of sectors, NGOs, the private sector and training institutions. Many actors were uncertain, the approach was untested and above all, developing national plans had previously been the sole responsibility of government. Nonetheless, the basic foundation of a strong and credible stakeholder platform was built from the start.

In 2005, the creation of water partnerships and steering committees at operational levels (local and national) provided the first milestone. A number of informal awareness-raising meetings were held by key players, ministries and institutions that were expected to be part of the process. Supported by a project management team, the Ministries of Agriculture, Trade, and National Planning and Development, as well as regional government representatives, the National Union of Women and the private sector, among others, were galvanised to form the pioneer Eritrea Water Partnership steering committee. Five years later, this team has grown in stature and numbers. Other members of the committee now include UNICEF, Oxfam and local NGOs. By 2009, the partnership had developed its own statutes with a membership of 36 participating institutions. The statutes were approved by the Ministry of Internal Affairs, fulfilling a key requirement for national water partnerships to increase the recognition of the role of the partnership by the government.

For details, see the case study in the IWRM Toolbox. Case study No. 366: Eritrea – Vital aspects of the Eritrean IWRM Planning Process. Available at: www.gwptoolbox.org

platforms for dialogue but also helped to facilitate the national IWRM planning programme.

National and local platforms for dialogue

The extent of stakeholder involvement varied across the 13 countries leading to mixed results. In some countries stakeholders were involved at both national and local levels (see Box 16). Where partnerships were mainly composed of central level institutions, the IWRM planning process had limited ownership at local level. Conversely, where stakeholders from local and grassroots levels were involved, the planning process attempted to address local needs through pilot programmes on the ground.

Establishing a credible and vibrant stakeholder platform involves some challenges, as stakeholders come with different expectations. None of the partnerships across the 13 countries were without challenges. However, as the capacity and governance of the stakeholder platforms are improved, roles and expectations are gradually clarified (see Box 17).

To ensure the meaningful participation of stakeholders in rural communities, the IWRM Programme also involved establishing consultation platforms at sub-national levels. Consultations were carried out in different parts of each country with support from the country water partnerships. In some cases, the water partnerships also carried out local level pilot projects to address stakeholders' immediate concerns.

In Benin for example, local partnerships were established as part of the national platform to facilitate stakeholder

engagement in the national IWRM planning process. Between August 2004 and October 2005 the Benin Water Partnership established six local water partnerships at the grassroots level, which continue to operate as a real platform for stakeholders in the water sector, and as a spearhead for local action to promote IWRM in the field. The local water partnerships were organised around specific issues related to water resources identified by those stakeholders.

The local partnerships offer a platform for stakeholder involvement at the local level and contribute to increased visibility of the IWRM planning programme in Benin at both national and local levels. The existence of the Benin Water Partnership in the field has encouraged membership by several local bodies including local authorities. Local water partnerships also played a major role in facilitating the participation of different categories of stakeholders in the process of preparing the National IWRM Action Plan in Benin. Through the local water partnerships, representatives of different regions of Benin have been able to participate in the process via training sessions, and local and national workshops.

For example, the local partnerships enabled Benin to respond to stakeholder concerns on the threat of water quality degradation to the Okpara Dam (see Box 18).

The results of the Benin Water Partnership's action on the Okpara dam highlight the importance of the mobilisation of all stakeholders. The Benin Water Partnership provided a valuable contribution to the development and regionalisation of IWRM in Benin and remains the key facilitator to which different actors resort in case of bottlenecks.

Local pilot projects carried out within the broader context of national development processes can help in demonstrating to government and stakeholders the potential development outcomes from an intervention. This in turn helps to ground the development intervention in the local context. Lessons learned at the local level can help to inform national policy formulation and avoid policies that cannot be implemented on the ground. For instance, the lessons learned in the local context of KaLanga, Swaziland (see Box 19) have more general application in IWRM planning. This project

Box 17: Building a stakeholder platform: a slow start in Kenya

The Kenya Water Partnership was launched in November 2003 as a multi-stakeholder platform to advocate for IWRM approaches and give voice to stakeholders' perceptions on water resources management issues. By February 2004, working groups were formed and mandated to develop the partnership's work programme. In 2005, the Kenya Water Partnership secretariat was established but due to its low capacity and late emphasis on governance, this did not initially provide the much needed impetus for the partnership. In 2006, this process was revitalised at a national stakeholder meeting where new proposals for improving the partnership's effectiveness were discussed. The governance structures of the Kenya Water Partnership were improved and means of participation were institutionalised.

As a result, civil society found greater acceptance by the government as a source of capacity for water resources management, and the Kenya Water Partnership took on a central role in the reform of the Kenya water sector. Working closely with the Water Resources Management Authority (WRMA), the partnership provided substantial technical inputs in the development of the IWRM plan for Kenya.

In recognition of the important role played by the multi-stakeholder platform, the Ministry of Water and Irrigation offered to house the partnership even after the completion of the programme. This offer by the government was an important sign of its growing appreciation of the need for the platform.





Neil Ovey/Getty Images

Box 18: Saving the Okpara dam

The Benin Water Partnership and Local Water Partnership for Borgou-Alibori, where the Okpara dam is located, together mobilised the main water stakeholders to address the degradation of water quality in the Okpara Reservoir, which provides water for more than 200,000 people in Parakou, Benin's third largest city. A preliminary mission, led by the national and local water partnerships, aimed to assess the level of degradation of the Okpara dam in May 2008. The investigation showed that the structure of the dam was increasingly sandy and muddy, and that it had lost nearly a third of its original capacity. In addition, increasing erosion threatened to occur downstream, and an invasion by floating plants made it difficult and costly to pump and treat the water. There were therefore serious concerns about the reservoir and the river, which play major roles in meeting domestic and cultural needs of local residents, provide fishing grounds, and contribute to horticulture, livestock, textile dyeing and construction.

In response to advocacy carried out by the Benin Water Partnership, the Ministry of Mines, Energy and Water established a conceptual framework for the sustainable management of the Okpara dam, which includes representatives from the Ministry of Mines, Energy and Water, the Directorate General for Water (DGEau), the National Water Society in Benin (SONEB), the Directorate of Mines, Energy and Water for Borgou-Alibori district, the Borgou-Alibori Prefecture and the Local Water Partnership for Borgou-Alibori. The Benin Water Partnership acts as a facilitator.

In 2009, the national budget included €259,163 for baseline studies, and a second amount of €670,776 for rehabilitation works on the dam, mechanical and manual removal of plants by SONEB, and the re-settlement of market gardeners and farmers in the vicinity of the reservoir. The combination of local and national action by the water partnerships has produced concrete results.

Box 19: Learning from local experience – the KaLanga Community in Swaziland

With the aim of building on lessons learned at the local level, the Swaziland Water Partnership targeted an area that was beset with water challenges, conflicts and recurrent droughts, the KaLanga Community. Lying on the outskirts of Swaziland's capital city, Mbabane, the 9,600 people of the KaLanga Community are supplied with water from the Makhondvolwane earth dam that was constructed by the Ministry of Agriculture in 1973 to supply water to a 100 ha livestock farm.

Recurrent droughts compounded by lack of maintenance, have significantly reduced the quantity of water in the dam, giving rise to conflicts among the different users. The water was severely polluted by livestock, recreational use and construction, yet it was still used for drinking, fishing, swimming, and religious and traditional rituals. Overall, there was lack of any comprehensive water management approach at KaLanga.

Against this backdrop, the Swaziland Water Partnership saw the opportunity to address local needs as part of the national IWRM planning programme. In 2007, the KaLanga demonstration project was initiated to secure water for the people of the KaLanga Community by integrating water into poverty reduction at a local level. Initial survey findings revealed an apparent lack of awareness among the KaLanga Community on the need for improved water quality, even though the incidence of diarrhoeal diseases was high.

In implementing the project, the Swaziland Water Partnership mobilised partner organisations that include the Ministries of Health and Social Welfare (MoHSW); Agriculture (MoA); and the Natural Resources and Energy's (MNRE's) Department of Water Affairs (DWA), as well as NGOs such as the Africa Cooperative Action Trust (ACAT), Lilima, and the Swaziland Farmer Development Foundation (SFDF). These partners carried out various capacity building activities that included training in conflict resolution, vegetable production, dam maintenance, sanitation and hygiene, protection and fencing of the dam, and construction of water harvesters and ventilation improved pit (VIP) toilets.

After two years the KaLanga Demonstration project has yielded tangible results. One of the project partners installed three boreholes; 108 homestead water harvesters were installed, two livestock drinking troughs were constructed, and 98 homestead toilets were built. In addition, this pilot project demonstrated to the government some of the real benefits of implementing IWRM principles of coordination, equity, stakeholder participation and decentralised management of water resources. It also revealed the need for government to translate policies into practice, for instance through the development of guidelines for local level IWRM interventions.

For details see the GWP ToolBox, Case study No. 358. Available at: www.gwptoolbox.org

highlighted a number of important insights, that:

- Collaboration and partnering between institutions involved in water resources management is vital and efficient, as partners tend to bring different skills, experiences and knowledge, as well as resources.
- Local area traditional authorities must be involved early in the process, as they can ensure project acceptance and ownership, and can help defuse community conflicts. It is important to build on local knowledge as well as existing institutions.
- 'Quick wins' help in creating commitment and ownership. Starting at a small scale allows results to be seen rapidly and subsequent steps can be built on the lessons learned.
- A long term financing strategy is necessary to ensure cost recovery and sustainability.

As well as the involvement of grassroots stakeholders, targeting young people in schools can help generate awareness and enhance the appreciation of the development intervention.

For example, the Benin Water Partnership and its partner PROTOS facilitated a programme targeting children in primary schools, which aimed to raise awareness of IWRM and to integrate them into primary education curricula. Through this process, the water partnership contributed to strengthening the capacities of some 70 stakeholders (including inspectors, educational advisers, school principals and teachers).

Involvement of stakeholders at the local level and of children in schools has helped increase hygiene in schools, raised awareness of water issues, and increased ownership of the IWRM planning process across the country. This in turn helped raise the profile of the Benin Water Partnership to engage in the policy reform process for the water sector.

Experience from Ethiopia provides another example of the importance of local level IWRM programmes in helping to resolve water-related conflicts.

Ethiopia adopted the principles of IWRM in its Water Resources Management Policy and put in place water legislation, a strategy and a programme for their

implementation. Although the policy environment is highly supportive of IWRM, there are considerable constraints around its implementation. These include institutional capacity and financial limitations, a lack of coordination among stakeholders and limited participation in planning and implementation of water management activities (see Box 20).

Box 20: From conflict to joint planning in the Berki River Basin, Ethiopia

The Ethiopian Water Partnership provided facilitation support for IWRM pilot projects in two watersheds: the Berki in the Tigray Region and the Messena in the Amhara Region. The main objective was to establish a framework and to promote the application of IWRM through multi-stakeholder participatory planning at the catchment level.

The Berki River originates in the highlands of Tigray in northern Ethiopia, and joins the Giba River, which ultimately flows into the Nile. Farmers in the upper Berki catchment pump water from the river for irrigation. A plan to introduce 100 more pumps aroused fears that it would negatively affect irrigation activities downstream. Three streams that irrigate more than 150 ha have already been diverted. To complicate matters, a spring near the Berki diversion is used by the Church for spiritual purposes, providing holy water. The Church, anticipating that the government would develop the spring to supply water to the town of Agula, asserted full control over the source, leading to a conflict with the Bureau of Water Resources of the Tigray Regional State. Moreover, a conflict between the downstream traditional irrigation water users and upstream Laelay Agula diversion water users, resulted in the destruction of the diversion weir by the downstream users.

Water is the scarcest resource in the Berki basin and a cause of conflicts between up and downstream communities, the administrative authorities, local businesses and NGOs. Underlying this complex conflict is a low level of awareness of IWRM, and a lack of an institutional framework for stakeholder participation.

The IWRM pilot project was implemented between 2006 and 2008 to help resolve water-related conflicts in the basin through the development of an IWRM plan. The project resulted in the development and adoption of the Berki Basin IWRM Plan with concrete legal, institutional, financial and technical measures to address the conflict. Stakeholder platforms and consultation have resulted in a reduction of the water-related conflicts in the catchment, and communities now have a greater awareness of water resources management issues.

For details see the GWP ToolBox, Case study No. 365. Available at: www.gwptoolbox.org



Stakeholder partnerships can accelerate progress towards water security and other development interventions.

As in KaLanga, the implementation of a pilot project at a local level highlighted some more general lessons for IWRM planning, including:

- Consensus building and decision support systems are useful tools for conflict management and could be widely applied. Decentralised participatory multi-stakeholder platforms are key instruments for conflict management. Consensus building is an essential component of IWRM implementation.
- Capacity building activities (training courses, workshops and dialogues) should be embedded in each IWRM project.
- Understanding the water resource potential and socio-economic dynamics provides a basis for better decision-making.

Undoubtedly, stakeholder partnerships can accelerate progress towards water security and other development interventions. The partnerships bring diverse experiences and their flexible ways of operating can help to improve processes. However, involvement of stakeholders is costly, time consuming and needs to be managed. Conflicts, misunderstandings and divergent stakeholder interests can sometimes get in the way of progress. Partnerships can also be captured by institutions, resulting in a loss of neutrality and inadequate involvement of stakeholders from diverse backgrounds. Some of these concerns can be managed by strengthening the water partnerships to enhance their credibility, transparency and profile. Despite these difficulties, the benefits of using partnerships outweigh the costs.

Lessons: Stakeholder partnerships at both national and local level provide platforms for dialogue and mechanisms for resolving water security challenges.

Recommendations: Stakeholder partnerships should be supported and strengthened so as to enhance their effectiveness.

Regional platforms for dialogue

Regional platforms for dialogue are provided by regional water partnerships (RWPs) in four sub-regions: Central, Eastern, Southern and West Africa. The regional partnerships were organised along geographical boundaries established by the following Regional Economic Communities:

- Economic Community of Central African States (ECCAS)
- East African Community (EAC) and the Intergovernmental Authority on Development (IGAD)
- Southern African Development Community (SADC)
- Economic Community of West African States (ECOWAS).

The agenda of the regional water partnerships (RWPs) is closely linked to the regional economic communities' efforts to achieve greater regional integration. The regional water partnerships do this by supporting regional cooperation in the management of water resources. Their value has also been immense in catalysing action at the national level.

With more than 60 shared river basins in Africa, regional cooperation on water resources management and development has clear potential to advance regional economic integration. The 2009 United Nations Conference On Trade And Development (UNCTD) Report highlights the importance of regional integration in promoting national food security, and in advancing trade and tourism for development (UNCTD, 2009).

Facilitating water resources development at the national level is also dependent on its management in neighbouring countries. National strategies cannot deal with the development of water resources that are shared with neighbours if the actions of other countries are not taken into consideration. A water crisis in one

country has the potential to impact negatively on others in the region, as refugees cross borders and impose burdens on neighbouring countries. What happens in the water sector in one country will become even more important to neighbouring countries as the impacts of climate change are felt. National level action is no longer adequate: regional interventions are essential.

Regional water partnerships have been critical in catalysing national action in water management planning. They are also engaged in regional and pan-African processes on water reforms leading to improvements in continental and national water policies and strategies.

The stakeholder platforms in the four regions came together to exchange experiences and engage in broader pan-African processes in support of the Africa Water Vision. At the broader pan-African level, this entailed working closely with the African Union's specialised technical committee on water, AMCOW, as well as the African Development Bank (AfDB) and other international organisations. The objective however remained focused on influencing development at the national level.

GWP-Eastern Africa played a crucial role in facilitating pan-African engagement with AMCOW. A MOU was signed by the four regional water partnerships to facilitate joint collaboration on various aspects of water development in the continent, in support of the African Developmental Agenda promoted by the African Union's New Partnership for African Development (NEPAD).

GWP worked closely with AMCOW and the AfDB in the preparations for the first Africa Water Week in March 2008, and also the Heads of State Summit at Sharm el Sheik in June 2008. During Africa Water Week progress, challenges and lessons learnt in facilitating the national IWRM planning processes were shared. In February 2009, AMCOW and GWP selected three focus areas for their cooperation: adaptation to climate change and mitigation of its impacts; financing infrastructure; and improving water governance.

The importance of regional cooperation on water was acknowledged at the 2nd Africa Water Week, in November 2009, when the President of AMCOW, Congo Brazzaville's Minister of Energy and Water, endorsed the

impact of the regional water partnerships in supporting the African water development agenda.

The increased profile of the partnerships at both the regional and pan-African levels has helped unlock opportunities for other countries beyond the 13 included in the Programme to accelerate their water reform processes. For instance, financial support to Burundi and Namibia from the AfDB to develop IWRM plans. Botswana also received financial support from UNDP-GEF to develop an IWRM Plan.

The southern Africa region is home to 15 shared river basins across 12 mainland states. The Water Division of the SADC has overall responsibility for developing regional policies and instruments for better water management. The regional water partnership, GWP-Southern Africa, has worked very closely with SADC, drawing on its 250 partners to support regional reform processes and develop a new water policy and strategy. The Regional Water Policy was adopted and endorsed at a Council of Ministers meeting in August 2005 (Box 21).

Box 21: Facilitating a new regional water policy and strategy in SADC

Between 2004 and 2005, GWP-Southern Africa supported the SADC to develop a regional water policy and strategy. Using its extensive technical resource base and flexible operational mode, GWP-Southern Africa provided technical resource people who helped draft and review the regional strategy. The regional water partnership raised awareness about the importance of the strategy and its formulation process, and supported dialogues to seek inputs from stakeholders in the region. This helped create ownership of the process and the strategy.

GWP-Southern Africa continues to work with the SADC to facilitate the implementation of IWRM in the region. As elsewhere in the continent, the regional process has helped reinforce water reform processes at the national level and has facilitated the exchange of lessons between countries. GWP-Central Africa demonstrates a similar effect of regional action on national water planning (see Box 22).

Box 22: New regional water policy and strategy in Central Africa

Central Africa is home to the largest river basin in Africa, the Congo Basin, which has historically predominantly been used for navigation. Together with ECCAS, the Commission Internationale du Bassin Congo-Oubangui-Sanga (CICOS) and other development partners, GWP–Central Africa has worked to draw up a regional water policy for Central Africa and promote its adoption by heads of state.

GWP–Central Africa's partnership with the Secretariat of CICOS has resulted in a shift of focus towards a fully integrated river basin management approach. It is also helping ECCAS to embrace an integrated approach to water and establish an IWRM unit within ECCAS. The regional water partnership is providing technical assistance to develop a Strategic Action Plan for the Congo Basin and provide capacity building for decision-makers.

Many ECCAS states did not have a national water policy in place at the time and the ECCAS Regional Water Policy generated momentum in member states to develop their own policies.

In West Africa, the regional water partnership played an important role in supporting regional efforts for the establishment of the ECOWAS Water Unit, and to develop a regional water policy, strategy and strategic implementation plan.

In collaboration with the AfDB, GWP–Eastern Africa and GWP–Southern Africa joined forces to undertake a survey of the water sector in 26 countries in the eastern and southern African regions. The survey showed gradual and varied progress in IWRM planning. Much work has been done to establish an enabling environment in most countries, but legislation in many countries lags behind policy reforms. At the same time there are significant barriers in moving policy and legal documents from the draft stage to approval, and hence to institutional development and implementation. Inadequate financial investment, weak institutional capacity and political commitment that is not backed by action, were among several issues identified.

Following up on this work and within the context of the programme for national IWRM planning, GWP



collaborated with AMCOW and AfDB to convene a high level meeting during the 2009 World Water Week organised by Stockholm International Water Management Institute (SIWI). The event was attended by officials from the development community, including water experts from donor agencies, the G8, United Nations Advisory Board on Water and Sanitation (UNSGAB) and others. The survey results were presented and the progress of the IWRM Programme in Africa was outlined.

Such surveys and other needs assessment initiatives enabled the regional water partnerships to better target areas of support to countries.

The regional water partnerships have been critical in capacity building with national water partnerships. Capacity building initiatives were organised on a regional basis in order to pool financial, human and knowledge resources. The exercise started with a capacity needs assessment process that was closely linked to the key stages of IWRM planning. Regional and team-building workshops helped the water partnerships to identify their most important issues. The regional water partnerships also provided capacity building sessions on a variety of practical programme management topics, including ensuring the engagement of stakeholders in the process.

The catalytic role of the regional water partnerships in advancing efforts towards water security at continental, regional and national levels is unequivocal. These platforms need to be supported and strengthened to help advance the agenda of regional integration and reinforce national level action.

Lesson: Regional partnerships are crucial to advance efforts towards regional integration and to catalyse action at national, regional and continental level.

Recommendation: Regional partnerships should be strengthened and supported.

2.3 Strengthening functions

2.3.1 Capacity development and knowledge management

Aim: To build capacity for existing institutions and individuals to enhance knowledge sharing, application and delivery and implementation capacity of development interventions.

Weak institutional capacity is one of the key challenges facing many developing countries. A lack of implementation capacity affects the sustainability of development processes and capacity development needs to target both institutions and individuals. But to be effective developing capacity has to be relevant to on-going processes and embedded in development activities.

Capacity building with stakeholders enhances meaningful stakeholder participation. It brings diverse stakeholders to a common understanding of the objectives of the development intervention.

According to the OECD (2006: p. 3), capacity development is more than a technical process; nor is it simply a transfer of knowledge or institutions from North to South. It is essential to recognise the critical importance of country ownership and leadership, as well as the broader political context within which capacity development occurs. The OECD argues that capacity development is an endogenous process that should include agreement at country level on capacity

objectives, and monitoring of outcomes from the perspective of the beneficiaries.

In the IWRM Programme, a great deal of attention was paid to building stakeholders' capacities to understand the planning processes for water management. Staff from both government and non-governmental institutions were targeted for inclusion in various capacity building programmes.

In Eritrea, the objective of the capacity building programme was to develop stakeholders' skills at sub-national and national levels and to build their capacity for involvement in the planning process (see Box 23).

Box 23: Building stakeholder capacity in Eritrea

During the initial stages of the IWRM programme, a weak understanding of IWRM concepts affected the planning process by reducing the ability of stakeholders to contribute. Training programmes were therefore designed and prepared by the Eritrea Water Partnership in collaboration with government representatives. A capacity needs assessment was carried out on the key IWRM principles and approaches. In designing the training programme, the team considered potential sources of expertise and decided priority training areas according to the availability of resources.

About 300 people from all over the country were trained during the four year implementation period, leading to a high level of involvement and better understanding of the need for improved water management. IWRM-related capacity building programmes were provided to more than 40 high level stakeholders, including decision-makers, water professionals and experts from institutions related to water resources management.

The training programmes included river basin management, policy and legislative frameworks, institutional roles, water resource strategy formulation, planning for water supply and sanitation, results-based management, project planning, fund raising, gender mainstreaming and conflict management.

These capacity building efforts led to a high level of involvement and an improved understanding of IWRM principles. Members of the programme management team also developed their own confidence to facilitate the IWRM planning process in a participatory manner.

For details see the GWP ToolBox, Case study No. 366. Available at: www.gwptoolbox.org



Philip Cplentz/Getty Images

Box 24: Working with allies to build capacity in Cameroon

As part of its capacity building effort, the Cameroon Water Partnership included two members of staff from the Environment Department of the Douala Urban Council in an IWRM training workshop. Following the workshop the trainees worked with the Cameroon Water Partnership to convince the Council of the importance of adopting an IWRM approach in managing their water resources. The Partnership obtained funding from the Council and organised a workshop on IWRM in June 2007, which resulted in the creation of an IWRM think tank in the Douala area. The workshop was facilitated by experts from the Cameroon Water Partnership, and brought together over 70 stakeholders from different sectors.

Partnering with organisations with expertise in specific activities also added value to the work of the Cameroon Water Partnership. In 2008, the water partnership worked with the francophone branch of the Gender and Water Alliance (GWA) network to organise a training workshop on gender mainstreaming and water resources management. This provided high quality training to a broad range of stakeholders drawn from member institutions within the GWA network.

Given the diversity of issues that affect water security, the water partnerships worked with a number of other organisations in their capacity building efforts. Alliances were established with a variety of local training institutions to help in training delivery and mobilisation. This approach was a key characteristic for most of the water partnerships across the 13 countries in the IWRM Programme. The water partnerships collaborated with regional capacity building networks under Cap-Net, a UNDP global capacity building network for IWRM.

The Cameroon Water Partnership invited the UNDP office to the workshop to launch the national IWRM planning programme, and kept them regularly informed of progress. This led to the selection of the Cameroon Water Partnership as a strategic partner by UNDP, for the development of a national strategy for soil and water management in rural areas. As a result of the water partnership's awareness raising, capacity and partnership building with alliances, Cameroon was able to mobilise additional resources to promote sustainable water resources management (see Box 24).

In Mozambique, the water partnership developed a training needs assessment for the water sector nationwide, which was designed to match the strategic objectives in the national water resources management strategy. Awareness raising materials related to the national water policy, law and water resources management strategy were distributed under the coordination of the water partnership, and contributed to a better understanding of the legal framework for the water sector.

Capacity building was a major catalyst in the IWRM planning process in Swaziland. A capacity development and research needs assessment was supported by the water partnership to identify water management gaps and weakness. The findings highlighted the need for increased understanding of integrated water resources management.

Capacity development was promoted at both political and grassroots levels, through community development pilot projects. The stakeholders, including media partners,

helped in publicising the project objectives, achievements and intended goals. Local training courses and workshops covered team building for stakeholders, participatory monitoring and evaluation, logical frameworks in project planning, and integrated approaches for water management, among others.

The need to build the capacity of newly established river basin institutions was highlighted in order to improve decision-making in water resources management. By the end of 2009, with support from the water partnership, the Swaziland government had initiated a process to roll out a capacity building programme for River Basin Associations.

Knowledge sharing was a key part of capacity building in the IWRM Programme. The planning process provided a fertile ground for learning, and knowledge sharing formed a major part of the work.

Experience sharing workshops were held from time to time, bringing together country and regional representatives from participating countries to share experiences and lessons. These workshops promoted learning from each other's experiences across the countries, and covered a broad range of process and content-related issues. These included better ways of facilitating the IWRM planning processes, involvement of stakeholders, programme management, communication, ensuring gender mainstreaming and others. In addition, the IWRM Plans themselves were discussed, and in particular how to decide on the plan contents, how to mainstream water in national development programmes, and the prioritisation and structuring of IWRM plans. The experiences and lessons learned were thus shared across the participating countries.

An important aspect of knowledge sharing was the documentation of case studies, success stories and experiences, which were uploaded to a free access, on-line database, the IWRM Toolbox (www.gwptoolbox.org). This database of knowledge, experience and guidance on water resources management is continually updated on the web with a steady flow of inputs from water practitioners, researchers and other experts from around the world.

In addition, the GWP Technical Committee provided demand driven support through the development of

technical papers and policy briefs on various aspects of IWRM planning (Box 25).

In addition to the knowledge products shown in Box 25, GWP collaborated with UNDP Cap-Net, to develop an IWRM Training Manual and Operational Guide. This provided training material on IWRM planning for national teams embarking on national or basin-level water resource planning. These products enriched the knowledge base for countries involved in the IWRM Programme. Along with others, they were used as reference materials during capacity building activities throughout the programme.

While it is essential to draw on a range of experiences, the application of this knowledge needs to be put in context: what works in one place may not automatically work elsewhere. In addition, building capacity through

Box 25: Sharing technical knowledge

One of the key documents developed by the GWP Technical Committee was a guide entitled "Catalyzing Change: A Handbook for Developing IWRM Strategies" (GWP Technical Committee, 2004). This guide was compiled based on the knowledge of hundreds of experts drawn from different disciplines via the GWP's global network. Other knowledge products developed to support the IWRM Programme include:

- IWRM and Water Efficiency Plans by 2005: Why, What and How?
- How to Integrate IWRM and National Development Plans and Strategies, and Why this Needs to be Done in the era of Aid Effectiveness
- How IWRM will Contribute to Achieving the MDGs
- Climate Change Adaptation and Integrated Water Resources Management
- Mainstreaming Gender in Integrated Water Resources Management Strategies and Plans: Practical Steps for Practitioners
- Monitoring and Evaluation Indicators for IWRM Strategies and Plans
- Gender Mainstreaming: An Essential Component of Sustainable Water Management
- Policy Brief for Governments on the Practical Steps for Making National Water Management Plans
- Checklists for Change: Defining Areas for Action in an IWRM Strategy or Plan
- Tools for Keeping IWRM Strategic Planning on Track

These products and others from the GWP Technical Committee can be found at www.globalwaterpartnership.org



Representatives of GWP and government reviewing the draft IWRM Plan in Swaziland.

knowledge sharing is a long-term process that goes beyond classroom training. Individual capacity is enhanced when complemented with on-the-job experience. Capacity development efforts should compliment existing institutional capacity and not set up parallel delivery mechanisms.

These observations reinforce experiences highlighted by the OECD, which noted that capacity development involves much more than enhancing the knowledge and skills of individuals. It depends crucially on the quality of the organisations in which they work. In turn, the operations of organisations are influenced by the enabling environment – the structures of power and influence and the institutions in which they are embedded. Capacity is not only about skills and procedures; it is also about incentives and governance (OECD, 2006: p.7, para.3).

Lessons:

- Developing capacity of local institutions enhances the probability that they will be able to implement agreed actions.
- Capacity needs are huge. There are opportunities to bring in the private sector and universities.
- Knowledge management enhances capacity development if applied with the local context in mind.

Recommendation: Build on existing capacities rather than creating new ones. The use of national expertise is a priority, and national institutions may need to be revived and strengthened.

2.3.2 Communication and advocacy

Aim: To raise awareness, create visibility and mobilise stakeholder action to reinforce and vitalise the process

On-going communication and advocacy are necessary to maintain stakeholder awareness and interest in the progress of a development programme. To support this, a communication and advocacy strategy is important. Good communication can avoid many of the conflicts associated with a lack of adequate information on the goals, objectives and achievements of the programme. Key messages targeting specific audiences need to be developed and disseminated on a consistent basis.

In the IWRM Programme, communication and advocacy were key strategies for raising awareness at the start of the programme, and re-invigorating the process when it began to flag. A wide range of approaches were used (see Box 26).

Other countries in the IWRM Programme also used communication as a key vehicle for raising awareness and lobbying for political support. For instance in Eritrea, key communication and advocacy activities included raising awareness among stakeholders and decision-makers, and mobilising political support for the IWRM planning process; carrying out stakeholder analysis and developing a stakeholder participation plan to involve stakeholders in different phases of the process. Occasional briefings were provided to the minister and director generals of the leading ministry, while annual and bi-annual reports kept the ministry up-to-date with progress.

In Senegal, regular communication with stakeholders and government officials enhanced their appreciation of water resource challenges (see Box 27).

In the IWRM Programme, the media has played a pivotal role in mobilising government, civil society and the public to accelerate the water reform process. Various strategies were used to engage the media. These included supporting the establishment of a journalists' network on water, including media representatives in the management structures of the programme, and building the capacity of the media to report on water issues.

Box 26: Several approaches to awareness raising in Malawi

In Malawi, print and electronic media, including all the major newspapers in the country and the National Television Radio Broadcasting station, were used to raise awareness of IWRM. The Malawi Water Partnership worked with a network of media to disseminate messages countrywide in local languages. Items such as newsletters, calendars, umbrellas, t-shirts and caps were produced and distributed with key information about the national IWRM planning programme. These items were strategically distributed to target audiences that included government offices, private sector institutions, NGOs, district assembly offices, hospitals and schools throughout the country.

TV and radio programmes were frequently aired on the programme goals, progress and challenges. This was complimented by a website through which stakeholders could follow the programme's progress and find up-to-date information.

One-to-one meetings were also held with key policy-makers. For instance, quarterly briefings were held between the Malawi

Water Partnership and the Minister for Irrigation and Water Development, and regular meetings were convened with heads of government institutions such as the Ministry of Energy, Mines and Natural Resources, the Department of Land Resource Conservation, and the Ministry of Economic Planning and Development. This advocacy helped raise awareness and reinforce political support. The Ministry of Energy, Mines and Natural Resources organised a meeting for its six directors to brief them on the need to mainstream IWRM within their departments.

The Parliamentary Committee on Agriculture and Natural Resources pledged to support the Malawi Water Partnership in its efforts to help mainstream IWRM into various sectors and support the water resources management reform process both in and outside parliament. The Committee supported the lead water ministry to lobby for more financial support for water resources during the 2006/2007 budget session, which resulted in a budget increase of about 64 percent.

In Zambia, the media played a key role in reinforcing messages from the Zambia Water Partnership, urging the government to integrate water into Zambia's National Development Plan, as illustrated in one news article in the country's leading independent newspaper in August 2005 (Figure 5).

In Benin too, the media has formed an important ally for the water partnership in communication and advocacy. In 2004, the Benin Water Partnership initiated a series

Figure 5: Water makes the news in Zambia



Box 27: Awareness and understanding lead to empowerment in Senegal

At the start of the planning process, Senegal faced numerous water resources management challenges. The main ones related to a lack of understanding of water management methods, incomplete data on water resource issues, and a lack of knowledge sharing and communication between stakeholders. In addition, the frameworks for shared planning were inadequate, and there was little institutional support, weak application of policy and legal instruments for water management, weak capacity to mobilise financial resources, and low budget allocations for follow-up and inadequate maintenance of water infrastructure.

The IWRM planning process built on the knowledge already in place through the creation of a country water partnership

in 2002. The planning process involved regional workshops, a situational analysis and validation of the IWRM plan through a steering committee and multi-stakeholder platform.

A national dialogue on water made a significant contribution to raising awareness about IWRM. This communication strategy made the water resource situational analysis more accessible to participants. Awareness and capacity building workshops were also held in the rural districts. Course materials were translated into the local language, which had not previously been attempted. The efforts to raise awareness also gave new confidence to the ministry with responsibility for water resource planning.

of informal actions that aimed to make the media an effective partner in its advocacy. Through this advocacy work the water partnership hoped to accelerate the legal and institutional reforms related to IWRM development, and necessary for achieving the MDGs on water and sanitation. As a result of this introduction, a media network of 40 journalists was formed to promote water and sanitation (see Box 28).

The Swaziland Water Partnership also worked with the media to generate public interest in the programme and stimulate debate on key water issues (see Box 29).

The experiences from Benin, Eritrea, Malawi, Swaziland, Zambia and other countries involved in the programme confirm the importance of, and demonstrate some of the varied mechanisms for communication and advocacy in the development process.

Lesson: Communication is important to generate understanding on goals, progress and achievements of the intervention.

Recommendation: Embed communication from the start in all development activities and interventions and allocate realistic human and financial resources.

Box 28: Forming a journalist's network in Benin

From 2004 onwards, the Benin Water Partnership worked with a network of journalists drawn from different types of media, and from all districts of the country. Training sessions helped strengthen the capacity of the network's members on the role of the media in the promotion and effective management of information on water and sanitation, and the need for monitoring the achievement of the water and sanitation MDGs by citizens and the media. The journalists' network carried out various awareness raising activities, including a walk to raise awareness among members of parliament, and producing a documentary called "Sharing the Water".

During the COP 15 Conference in Copenhagen in December 2009, the journalists' network organised a number of video-conferences on climate change in Benin to reinforce the importance of water in climate change adaptation.

The Benin Water Partnership worked with the journalists' network on various media campaigns. These included one campaign to encourage the government to adopt a national Water Policy in 2009, and a drive to ensure the government transferred a draft law on the ratification of the 1997 UN Convention on transboundary rivers to the National Assembly to be voted upon.

To encourage journalists, media competitions were organised and awards presented in various categories of reporting on water. The award ceremony was co-sponsored by the Minister for Water and the President of the Audiovisual and Communication High Authority, and awards were presented in the presence of donors to the water sector and other key individuals in the media and water sectors.

Box 29: Stimulating debate and dialogue on water in Swaziland

The Swaziland Water Partnership media strategy was launched by the Ministry of Natural Resources and Energy in 2007. The launch and subsequent events aimed to publicise project activities through a quarterly newsletter, and through a reward for the best reports on water issues in electronic and print media.

In October 2007, the media awards for excellence in water reporting were held. This event was highly publicised and top officials in the Ministry of Natural Resources and Energy presented the awards. One of the prizes was a trip to participate in the annual water conference (WaterNet) organised in the southern Africa Region by a network of universities. This annual event brings together researchers and scientists to share experiences and new technologies in water resources management.

This prize was of particular interest to the heads of the media houses from which the journalists were picked, as they saw it as an opportunity to learn more about other countries' water resources management.

Increased media reporting helped raise awareness and stimulate the debate on recurrent water challenges. For instance, an article written on April 21, 2008 prompted action by the Minister in charge of water and natural resources. The article, entitled 'Where is the water – residents celebrated the drilling of boreholes but the taps are still dry', prompted the Minister to direct senior government officials in the Department of Water Affairs to follow up countrywide and ensure that the boreholes were working.

3

RISING TO THE CHALLENGE



Moving towards national water security

3.1 Introduction

This section describes the process by which actions were identified to improve water resources management and move towards national water security in the IWRM Programme. The participatory nature of the process, making use of local capacities, enhanced the value of the outcomes. In most countries, action plans and strategies were developed by local stakeholders in a participatory manner and support from outside was limited to peer reviews. This approach enhanced ownership of the outputs from the process.

The main objective of the IWRM Programme was to support national governments to develop their water management plans; where necessary, other actions were also taken to accelerate progress towards water security. In some countries the water partnerships supported their governments in the development of new water laws, regulations and guidelines for implementation.

For instance, new water policies were drafted in Benin and Swaziland, as well as regulations for water quality enforcement, water abstraction, water allocation and financing of water resource strategies. In Mali, the country water partnership accelerated the implementation of the water law by supporting the establishment of the National Water Council and the River Basin Committee for the main tributary of the River Niger. It also facilitated the formation of other stakeholder consultation bodies envisaged in the water law and helped set up the Water Fund that was legally established by the water law to facilitate financial investment in water.

3.1.1 The reference group

To support national capacity for technical analysis and the identification of strategic actions to address water security, GWP established a reference group in 2007 to capitalise on the experiences of each country, share

knowledge on water management planning, and offer peer review support. Part of the GWP Global Technical Committee, the reference group included international and regional African experts on water resources management. It provided robust peer review support to countries in face-to-face meetings when requested to do so. The reviews were carried out in collaboration with local experts and proved useful in providing insights to countries on better practices for water management drawn from international experience. It also provided a useful way to understand and learn from the challenges faced by each country.

3.2 Situation analyses

In all 13 countries, a comprehensive situation analysis was undertaken on the status of water resources. The analysis covered water resource availability and requirements, legislation, governance, institutional capacity, and environmental and socio-economic conditions; critical issues in water resource development and management, and an outline of their root causes.

The situation analysis was an essential first step, establishing a sound basis on which to develop the IWRM plan. A review of the situation analyses from most of the IWRM Programme countries revealed that they faced similar constraints. In all countries, water resource infrastructure is inadequate, data and information are out-of-date, and financial investments are largely dependent on external sources, through grants and loans. Management of water resources is often fragmented and coordination mechanisms are weak.

Most hydrological infrastructure for water resource monitoring is not operational, and institutional capacity to follow up and update the water data and process them into information for decision-making is inadequate. Utilization of the available water resources is, in many cases, weak.



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For instance, Senegal's hydrological network coverage is limited and infrastructure is old and dilapidated. Of the 150 hydrometric stations available, only 71 are operational. In Cameroon, only 10 percent of the 408 rainfall stations are operational and most of the water data are very old and poorly stored (Ministère de l'énergie et de l'eau, 2009). Of the network of 74 hydrometric stations, only 30 percent are functional. In Kenya, a lack of reliable data was one of the greatest challenges in the preparation of the IWRM plan. Similarly, daily flow records from gauging stations in Swaziland suffer from extensive missing data, especially after 1984 (Ministry of Natural Resources and Energy, 2009).

Similar stories were found throughout the IWRM Programme countries. A lack of data conceals issues such as the low levels of water utilisation across the continent and the untapped potential for irrigation and hydropower that exist in a number of countries (see Box 30).

Early drafts of the situation analyses were reviewed by the reference group, which highlighted the need for additional work to be undertaken in some countries before IWRM plans could be developed. In Cameroon for example, the situation analysis was divided into four components: water resources and their use, environmental issues, socio-economic and financial issues, and institutional and legal issues. Cameroon has abundant water resources, although the northern part of the country is drier, bordering on arid. As a result, there are problems of abundance, such as flooding, storm water drainage and poor sanitary conditions, rather than scarcity in many areas.

In their review of the early drafts of the situation analysis, the reference group and local experts in Cameroon felt that the problems of abundance were not fully reflected, and the analysis concentrated too much on scarcity and water supply, rather than on issues of excess and sanitation. Given the threat to water security posed by climate change, further attention to water resource variability was recommended.

Most of the weaknesses found in the draft Cameroon situation analysis were due to a lack of data in the country. This challenge was highlighted, and it was

Box 30: Water utilisation and potential for development

Water utilisation is generally low across Africa and there is considerable potential for greater water use to support development. Zambia uses just below 40 percent of the estimated 100 km³ available per year. Of the 40 percent that is used, 92 percent is destined for non-consumptive use, such as hydropower generation, and only 8 percent for consumptive uses like irrigation, industrial and domestic water supply (Republic of Zambia, 2008, pp. 17–5).

Similarly in Cameroon, of the estimated 275 km³ available, only 4 percent is utilised (Ministère de l'Énergie et de l'Eau, 2009). In Benin, 4–8 percent of the estimated surface water of 13 km³ per year is utilised (République du Bénin, 2009). Kenya's safe yield of surface water resources has been estimated at 7.4 km³ per year, and groundwater at 1 km³ per year. Current water extraction is about 13–19 percent of the assessed safe yield (Republic of Kenya, 2009).

Agriculture is by far the largest consumptive water use in most countries. Irrigation uses 95 percent of Swaziland's water, mostly for sugar cane cultivation. In Kenya, irrigation accounts for over 75 percent of total water demand.

There are many challenges involved in providing water for irrigation, including unfavourable geographical conditions, a lack of investment, insufficient skills and information, poor market services and inadequate infrastructure. Nonetheless, abundant water and land resources, and large hydropower potential in some countries, offer many opportunities.

pointed out that areas that were being exploited, such as the Sagana River, were relatively well monitored, whereas in stressed areas such as the Lake Chad basin, flow monitoring had collapsed. This was a key issue that the Cameroon Water Partnership had identified and was trying to address. Despite the weakness of the initial drafts, the final situation analysis is the most comprehensive report on water resources in the country.

In Malawi, the overall data on which the draft water management plan was based appeared adequate, but it was noted that it would be a challenge to gather adequate water resource information to enable detailed priorities to be acted upon in the future. In Eritrea – a predominantly water scarce country – food security is closely linked to efficient water development. The situation analysis identified many priority areas including food security, intensive commercial agriculture, expansion of domestic water supply, support to emerging industry and environmental protection. The need for soil and water conservation in the highlands, which have been the subject of community level programmes supported by government, was highlighted as a particular environmental problem. In addition, inadequate institutional coordination was identified as a constraint to overall management of water resource interventions.

In all countries, the situation analysis was organised into thematic studies. These studies were carried out by local experts; in some limited cases, outside consultants were also involved. Each thematic study focused on a specific issue such as water resources availability and use, the environment, institutional setting, and financing. The findings of the studies were validated by stakeholders in workshops organised by the water partnerships, leading to a consensus on the constraints facing the water sector and the required actions (see Box 31).

Financing and investment in water resources management and development was found to be a key constraint in most countries. Government funding is generally low and in most countries financing comes from external sources.

According to the Mali IWRM plan, 85 percent of funding to the water sector in the country comes from external donors (Ministère de l'énergie, des mines et d'eau,

Box 31: Situation analysis in Mali

In Mali, six thematic studies were undertaken during the situation analysis:

1. socio-economic and political context, highlighting the country's development objectives and the main elements of the national water policy
2. knowledge, monitoring/evaluation and planning of water resources, providing an update on the country's water resource potential and the techniques underlying its evaluation and planning
3. legislative and regulatory framework, reviewing the legal framework for water resources management and enforcement
4. institutional reforms, exploring the institutional framework with a view to developing advisory bodies on water resources management
5. economic and financial aspects, defining the value of water in Mali and establishing a sound economic basis for sustainable water resources management
6. international waters, reviewing issues related to aquifers and cross-border river basins (Senegal, Niger and Volta Rivers).

Regional workshops in various parts of the country allowed an exchange of views and ensured the analysis reflected the real situation on the ground. These consultations were critical in the process of identifying priority water resources management problems and their solutions.

The situation analysis revealed important gaps that needed to be addressed. Sectoral management and a low level of collaboration between institutions, lack of a water policy to guide interventions, inadequate decentralisation of water management, and inadequate water resource infrastructure were all identified as constraints to effective water management.

2008). In Senegal, the IWRM plan estimated government funding to the water sector to be around 40 percent while external donors accounted for the remaining 60 percent. In Cape Verde, the draft IWRM plan estimates between 80–90 percent of investment in the sector as being provided by external sources. Absorption capacity is also weak in some countries, with completion rates as low as 35 percent in Cameroon.

While most country water partnerships worked with their governments to revise and update the situation analyses, the process highlighted underlying weaknesses in technical capacity at government level, as well as in some cases, pre-conceptions on the part of stakeholders about the nature of the key issues to be addressed.



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3.3 Integrated water resources management plans

Integrated water resources management plans were developed based on the situation analysis. Each country IWRM plan defined, prioritised and calculated costs for a number of strategic actions. The implementation arrangements, defining the institutional and coordination mechanisms, roles and responsibilities were also outlined, and strategies for mobilising financial resources were described. Lastly, communication activities and indicators for monitoring the implementation of the plan were defined.

While each country's water resource situation and development context was different, the general framework for all water management plans was similar (see Box 32).

One of the challenges faced by some countries during the development of the IWRM plan was how to prioritise actions or projects in line with country priorities. It is clearly not possible to implement all the identified

However, the situation analyses helped increased awareness of the constraints facing the water sector and the essential actions needed to move towards water security. The processes of prioritising the key issues and building commitment to take action, provided useful steps towards water security. The knowledge base to guide investments and interventions has been established.

Lessons:

- Existing institutions and local stakeholders should be empowered to find solutions to their water security challenges. Outsiders should not do the work of local experts but complement it through peer review support.
- Understanding of the water resource situation is a key step in defining actions for advancing water security.
- Inadequate investments in water resources undermines national water security and development.

Recommendations:

- Provide technical and peer review support to local institutions and stakeholders and build capacity for them to perform key water related functions.
- Scale up investment in the water sector to advance water security and development.

Box 32: General framework for the IWRM plans

- Background – a broad overview of the status of water resources in the country
- Situation analysis – status of water resources in the country in relation to water resource availability and demand, legislation, governance, institutional capacity, environmental and socio-economic conditions; critical issues in water resource development and management, and their root causes
- Strategic options – options for improving water management and development, strategic objectives of the plan, strategic actions and a portfolio of prioritised projects
- Implementation plan – schedule of projects and costed activities
- Implementation arrangements – institutional and coordination mechanisms, institutional roles and responsibilities
- Financing strategy – sources of funding for the plan and a strategy to mobilise resources
- Communication – activities for communicating objectives and progress during the implementation of the plan
- Monitoring and evaluation – indicators for monitoring implementation and on-going updates to the plan.

actions at the same time, due to financial constraints and lack of implementation capacity. Nonetheless, some sectors tried to impose their own priorities or define criteria for implementation that would give priority to their particular activities. The development of ranking criteria was an area that needed serious consideration in the development of the IWRM plans. A clear methodology for identification of real causes of water challenges other than symptoms was important.

In Malawi, problem tree analysis and root cause analysis were used for prioritisation. Five priorities were identified in Malawi's IWRM Plan (Government of Malawi, 2008):

- Harmonisation of natural resources policies and legal frameworks
- Integrated catchment management
- Sustainable water resource utilisation
- Institutional capacity building for IWRM/WE
- Strengthening coordination mechanisms for IWRM/WE implementation.

In Senegal, seven priorities were identified for implementation by stakeholders (see Box 33).

Eritrea's IWRM plan contained 95 actions or projects focused on removing barriers in the enabling environment and institutional framework (The State of Eritrea, 2009). Management tools were developed and categorised into short, medium and long-term planning horizons. However, the IWRM Plan mainly focused on core, technical water resources management activities. It included a wide range of activities in water resource assessment, development and protection; water resource allocation and use; disaster management; implementation and financing mechanisms; research and information exchange; a basin management plan; and gender mainstreaming.

The cost of funding the activities in the IWRM plan was estimated at €14 million (US\$19.86 million²) for the period 2009–2016. This represents an average of €1.75 million (US\$2.48 million) per year over an eight-year period. According to the African Development Bank (AfDB, 2010), Eritrea's GDP in 2008 was US\$1.5 billion:

2 Exchange rate of 30 December 2008: US\$1 = €0.705

Box 33: Senegal's IWRM plan

In Senegal, the overall objective of the IWRM plan was to strengthen management capacity, and guide institutional and legal reform to improve the protection and management of water and increase the financial resources available (Republique du Senegal, 2007). Stakeholders selected seven priority projects for implementation over the period 2008–2015:

- Improving knowledge of water resource utilisation and management
- Strengthening capacity for water resources management
- Establishing an integrated water resource information system
- Managing water related risks
- Establishing an enabling environment for IWRM reform by developing relevant legislation and policies, and streamlining institutional roles
- Enhancing the participation of women and other disadvantaged groups in the integrated management of water resources
- Improving communication, education and water awareness.

thus the average cost of the IWRM plan per year was 0.165 percent of the 2008 GDP.

While this amount may appear realistic, a review by the GWP reference group suggested that the IWRM plan needed to take account of the country's budgetary constraints. The actions proposed in the IWRM plan are focused on core water resources management issues; in order to secure funding they could be linked to other government priorities such as agriculture.

This highlights the importance of understanding the financial context of the country and making sure that the IWRM plan, while addressing long-term priorities, also responds to immediate government priorities. Nevertheless, the IWRM plan was adopted by the government and it remains to be seen to what extent it will be financed.

Zambia's plan outlines the key issues, and groups problems into clusters around the policy, institutional and legal framework; water resource information; institutional and human resource development; water resource demand, supply and infrastructure; economics and financing; water and the environment; managing

international waters; and advocacy, public involvement and awareness. Analysis of the issues in each cluster led to the conclusion that inadequate water resources management has had a significant negative impact on economic growth, poverty alleviation and the environment in general. In addition, institutional fragmentation was a problem and there was a need to foster cross-sectoral coordination.

To enhance integration and strategic focus, the priority issues were organised into four strategic programmes that aligned with the Water Sector Advisory Group's inter-sectoral sub-committees on water resources management; water resource infrastructure development; water supply and sanitation; and monitoring, evaluation and capacity building. This approach is expected to ease coordination and monitoring of project implementation, from local to cabinet level.

Despite some initial difficulties, especially in relation to data availability, the approach used for developing the IWRM plans, which allowed local experts to draft their own plans rather than using outside consultants, was found to be useful. At the end of the planning process in Mali, for instance, stakeholders believed that the integrated water management strategy developed for the country has a much broader national ownership than previous plans. This was because the external consultants who helped draft previous plans tended to be the drivers of the process, rather than the local community.

According to the reference group (GWP Reference Group, 2007), an encouraging feature of all the plans they reviewed was the extent to which local participants had engaged with the process. Very different approaches to drafting the plans were taken in different countries because an effort had been made to integrate water management planning into other development activities. This meant that the approach in each country reflected its broader institutional environment.

In all countries, the relevant water ministry was involved in finalising and adopting the IWRM plan. However, in some countries the final IWRM plan was also submitted to a higher-level government forum for sign-off, whether at the level of head of state, cabinet or other inter-ministerial forum.

There is evidence that the IWRM plans will have a positive impact in each country, although it is unlikely that they will be implemented in their entirety. In some countries, implementation of the plans started before they were finalised using government or external resources. Apart from advancing water management, in a number of countries the plans provide a mechanism to promote communication between stakeholders, as well as an analysis of the key issues to guide and direct action and advocacy.

Lessons:

- IWRM plans are more likely to be implemented when they have been developed through a participatory approach, include well-prioritised actions, address immediate development priorities, and take into account financial and capacity realities.
- Proposed actions that are developed from a sound knowledge base with the involvement of local institutions have more credibility, and are more likely to be accepted, endorsed and implemented.

Recommendations:

- IWRM plans should address immediate development priorities and be part of a broader government development framework.
- Local institutions should take the lead in drafting the plan; key ministries beyond that responsible for water, should be involved through a neutral platform for dialogue.
- The financing strategy for the plan should be based on the country's existing financial context and realities.



Georgios Goetzi/Getty Images

3.4 Summary of achievements and added value of the programme

Plans have been developed and considerable progress has been made in reforming water management in all 13 countries involved in the IWRM Programme. While the country water partnerships played a pivotal role in this process, there is no doubt that the close working relationship with and commitment of governments and other partners enabled the water partnerships to have an impact.

Progress was made on other issues, for instance on the integration of water into national development plans and PRSPs, and raising the profile of water on the national agenda. In some cases, these efforts led to significant outcomes with national governments increasing their budgetary allocation to the water sector. IWRM plans were developed for all 13 countries, and in some the final plans were formally adopted by government.

Facilitating planning for water management is a development activity and the outcomes of the process are a consequence of several factors. As pointed out by the International Development Research Centre (IDRC, 2001: p.1, para.1), all organisations engaged in the work contribute to the long-term development impacts. A single actor alone rarely accomplishes impact and the complexity of the development process makes it difficult to attribute credit. In the past individuals have worked in isolation and as a consequence were less effective, while the risk of negative impacts was greater. The IWRM Programme was designed from the outset with a partnership approach in mind. This was an innovative approach that was initially criticised, especially by those more accustomed to a consultancy approach, and although it took longer it had a greater positive impact locally. Although the country water partnerships facilitated the process, responsibility and leadership rested with national governments. In addition, the work of other actors in each of the countries tended to reinforce and facilitate the task of the national water partnerships.

Thus in presenting the outcomes below, GWP acknowledges that it is only one of a number of players



whose combined actions have contributed to the results. According to an evaluation commissioned in 2008 for those countries supported by the Canadian International Development Agency (Kenya, Malawi, Mali, Senegal and Zambia), the IWRM Programme was a success (Plan:Net Limited and Mosaic.net International, 2008).

A summary of the achievements and added value of the programme are presented below (Table 1).

Facilitating these processes takes time and the impacts on livelihoods and the economy can only be seen in a longer time frame. However this programme has achieved some immediate results that have great value in

advancing water security in the target countries. Some of these achievements are shown below, while summaries for each country are shown in the Appendix.

Enhancing the enabling environment for IWRM to move towards water security

- Water integrated into National Development Plans and PRSPs in Benin, Malawi, Mali and Zambia
- Water policies drafted and updated in Benin, Eritrea and Swaziland, and new water legislation developed in Benin; a new legal framework for the administration of water resources developed in Cape Verde.
- Institutional roles and coordination enhanced in all countries and in some cases new institutional frameworks proposed.

Strengthening water management capacity for water security

- Regulations developed for the issue of permits for water use and construction of water infrastructure in Eritrea; water quality guidelines developed in Eritrea, and guidelines reviewed in Cape Verde
- Knowledge base on water resources enhanced in all countries; GIS-based information management system established in Cape Verde
- Local capacity and understanding of integrated approaches to water management enhanced through capacity building programs.

Enhancing financing to support water security

- Water financing strategy developed in Benin, Burundi, Kenya, Malawi, Mali, Mozambique, Swaziland and Zambia (as part of the national IWRM plans)
- Additional financial resources mobilised from partners. For example, €1.6 million was mobilised from Denmark and the Netherlands in Benin. During a round table for financing Mali's IWRM plan, nearly €20 million was pledged by donors (AfDB, Belgium, Denmark, Germany, the Netherlands, UNEP, UNESCO, Sweden and WHO) to support the implementation of the plan. Water sector funding was increased by an estimated 64 percent by the national treasury in Malawi in the 2005/06 financial year.
- Water pricing strategy developed in Cape Verde.

Enhancing water security at local level

- Water secured for 200,000 inhabitants in Benin's third largest city, who are dependent on water from the Okpara dam
- Access to clean water for drinking and to support their livelihoods gained by over 9,600 people affected by polluted water in the KaLanga Community. Water related diseases with potential risks to health reduced.
- Access to water enhanced and water related conflicts reduced in Ethiopia's Berki River Basin.



Alexander Joe/Getty Images

Table 1: Summary of achievements

What was planned	What was achieved
National frameworks for sustainable water resources management and service provision in place or well advanced	Seven IWRM plans completed and adopted by government (Cape Verde, Eritrea, Kenya, Malawi, Mali, Senegal and Zambia), two finalised and in the process of approval (Benin and Burundi), one draft available and being finalised (Swaziland), two under advanced preparation (Cameroon and Mozambique). One basin plan finalised and adopted in Ethiopia.
Ownership of national frameworks and process by all stakeholders	Stakeholder participation throughout the development of the IWRM plans and broad-based support for plans achieved through water partnerships in 13 countries.
Improved water resources management and service delivery	Too early to assess, but some evidence of change in each country; improvements not yet systemic.
Stronger collaboration with potential financing institutions	Increased access to financial resources achieved in seven countries (Benin, Burundi, Kenya, Malawi, Mali, Senegal and Zambia), and on-going discussions in others with involvement of ministries of finance and bilateral donors.
Effective multi-stakeholder platforms established	Functional water partnerships in place in all 13 countries supported by four regional water partnerships.
Water issues integrated into PRSPs and national development plans	IWRM integrated with PRSPs and national development plans in three countries, and partnerships working with governments to highlight IWRM in national development plans in others

4

TOMORROW'S CHALLENGE



Water security for development

4.1 Reflections and insights

This section summarises the key messages from the IWRM Programme and looks ahead at the implementation of the plans. Key players such as the World Bank, FAO and some members of the OECD donor countries have joined hands with national governments in Africa to take the IWRM plans forward, confirming the value of the country water partnerships in advancing water security.

The report concludes by presenting policy recommendations for future IWRM planning processes and other development interventions. In the light of the projected impacts of climate change, pressure is mounting on governments to secure water for people's livelihoods and socio-economic development. GWP proposes to use the experience gained in the IWRM Programme to further advance the agenda on water security by supporting national governments to integrate water and climate change in development planning processes and build economic resilience in support of national development priorities.

4.1.1 Partnerships are essential for water security

The potential of partnerships to advance water security is unequivocal, and remarkable progress has been made. Thirteen countries now have comprehensive information about their water resource situations and the gaps and constraints are well understood. New water policies have been developed, and in some countries water legislation and guidelines have been put in place to regulate use, and allocate water between different sectors. Most countries have adopted their IWRM plans at the highest level of government.

The national IWRM planning processes already represent a few firsts:

- It is the first time that such a locally driven and managed participatory approach has been used to prepare national water management plans

- It is the first time that different sectors have come together to discuss and identify solutions to their water challenges
- It is the first time in most of the target countries that water management has been given political priority by integrating it into national development plans and PRSPs, with funding from national budgets.

Capacity has been developed by direct involvement in the process as well as training workshops leading to increased knowledge and awareness across a wide range of stakeholders beyond the normal water professionals.

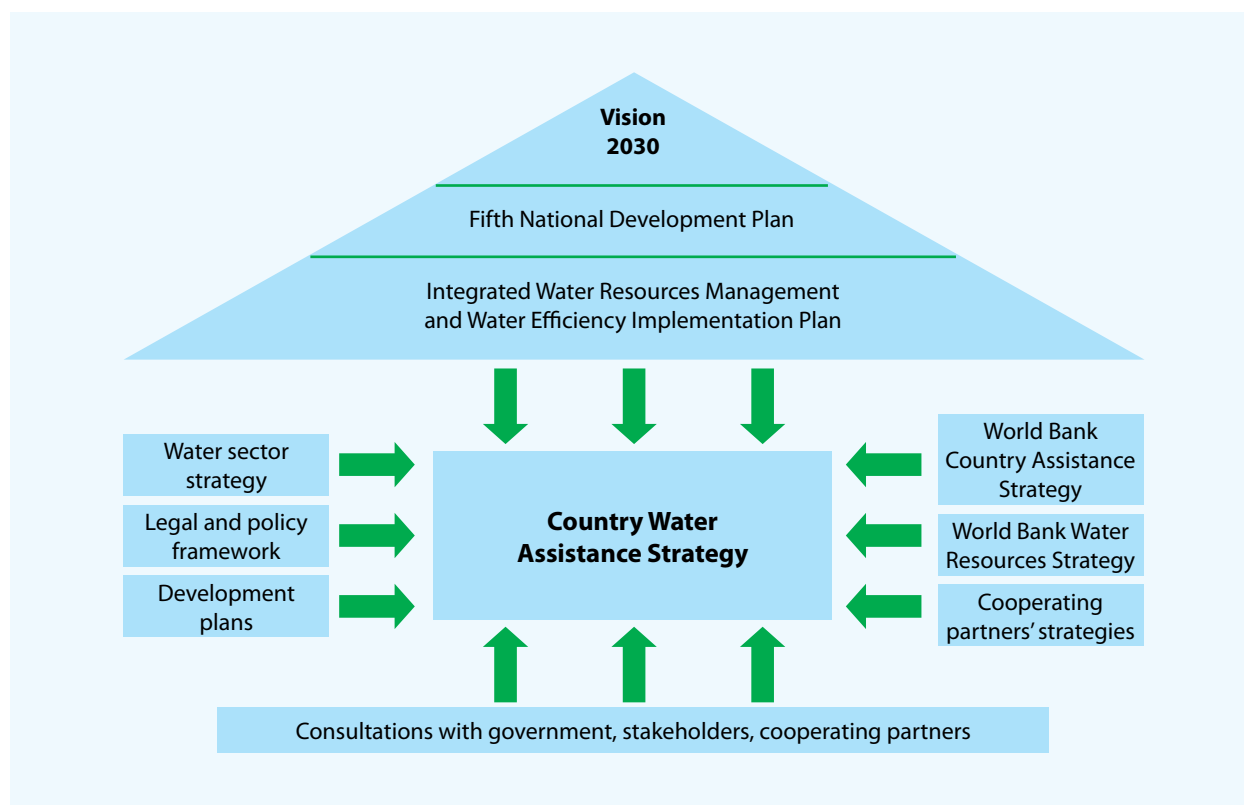
It is perhaps no surprise that implementation started even before the plans were finalised. The programme was intended to help develop national water management plans, yet, because of the water partnerships' influence and the catalytic role of many actors, new policies and water laws have also been developed in several of the countries.

The water partnerships continue to provide a platform for dialogue and provide continuity and institutional memory. They remain ready to support the implementation of the national water management plans. They are also ready to help promote the understanding of the role of water in the economy and to advance wider development aims. Other institutions are beginning to build on the foundations laid by the water partnerships to advance their efforts towards water security.

In Zambia the World Bank's Country Water Assistance Strategy uses the national IWRM Plan as a basis for supporting the government's efforts to implement the water programmes in the Fifth National Development Plan, by promoting the principles outlined in the IWRM Plan and other national initiatives in the water sector (Figure 6).

The CWRAS recommends a prioritised set of actions in the water sector for financial and technical support by the World Bank. This contributes to the further prioritisa-

Figure 6: World Bank 2009 Country Water Resource Assistance Strategy¹ for Zambia – taking the IWRM plan forward



Source: Reproduced with permission from World Bank (2009, p.19).

tion of the government's plans on water resource development and the coordination of partners in the sector.

The Food and Agriculture Organization (FAO) is also using the platform provided by the Zambia Water Partnership. Together with the Zambian government, under the Ministry of Agriculture, and Ministry of Energy and Water Development, FAO has requested the Zambia Water Partnership to facilitate the development of a national investment brief to expand on the utilisation of water resources for agriculture and energy.

In Benin the Dutch Embassy, Danida and GTZ are using the platform provided by the Benin Water Partnership to lobby policy-makers, parliamentarians and others to adopt important legislation to push forward the national water sector programme. The Swiss Development Agency in Mali has used the platform provided by the water partnership to advocate for the integration of climate change considerations into national development plans and sector policies.

At a sub-regional level, the regional water partnerships are providing a platform through which SADC, ECOWAS and ECCAS can advance regional integration by supporting cooperation in water management. And finally, at the pan-African level, AMCOW is working with the regional water partnerships to provide a forum for dialogue on pan-African issues related to the implementation of the 2008 Sharm el Sheikh Declaration on water and sanitation.

These experiences have evolved from the participatory IWRM planning process and highlight the important role of the water partnerships, and the potential they have to integrate and catalyse action at all levels.

4.1.2 Moving forward – it's not over yet

While remarkable progress has been made towards water security in many countries, climate change threatens to reverse those gains (as discussed in Part I). During the preparation of national water management plans,

many governments did not appreciate the magnitude of the potential impacts of climate change and thus considered it a low political priority. Following COP 15, climate change has gained in political recognition and is now on the agenda in many countries. The political environment has become more favourable to addressing climate change adaptation and advancing water security considerations at the same time.

The experience from the preparation of national water management plans shows that progress has been greatest in countries where water management was integrated into national development plans and PRSPs. The experiences from Benin, Mali and Zambia have revealed the importance of involving senior officials from the Ministries of Finance and Economic Planning early in the programme, and of allocating them key responsibilities, especially in relation to the integration of water into national development plans. The processes in these countries have demonstrated the importance of identifying champions within these ministries.

Further, integration into development planning processes requires the mobilisation of development

planners at all levels. Capacity building is required to ensure that stakeholders outside the key agencies understand national development planning processes, the development planning cycle and how the whole process links to the national long-term vision. A key element in transforming good plans into real change is securing adequate finance for the identified actions. Whilst the IWRM Programme made a start, more is needed to improve linkages to the macro-economic framework, the medium-term expenditure framework and the annual budget cycle. Understanding the different sources and instruments available for water funding is critical to putting the plans into action.

Many of the lessons learnt in developing national water management plans will equally apply to efforts to advance water security as part of climate change adaptation.

4.1.3 Building on what works – applying our experience

The experiences from the water partnerships have helped identify a number of useful elements for effective facilitation processes, described in Sections 2.2 and 2.3. They confirm the GWP Technical Committee's key message on the need for water resources planning to be linked to a country's sustainable development strategy and public administration framework (GWP Tec 2009, pp. 205–208). The elements identified from the experiences of the water partnerships are also confirmed by more than 20 years of international development by the OECD (OECD, 2001, p.46).

Moving forward, the GWP would like to use the experience gained in the IWRM Programme to further advance the agenda on water security by supporting national governments' on three key actions:

- Incorporating adaptation to climate change into development processes through better water management
- Supporting institutional capacity development to help integrate water and climate change into development processes and strengthen economic resilience
- Addressing the financing needs of water resources management.



Travel Ink/Getty Images

Climate change adaptation must be an integral part of development, and should not be considered in isolation. Integrating water and climate change adaptation measures into development planning and decision-making processes is thus a critical next step for this work. Financing for water resources management is still poorly understood, and without the reality of strategic financial planning the full potential benefits from implementation of IWRM plans will remain unfulfilled aspirations.

This report relates to work in only 13 countries in sub-Saharan Africa: there remain more than 30 countries that have not benefited from the programme. In particular, weaker states need support to develop their own participatory IWRM planning processes. Through the regional water partnerships there is considerable scope for Africa–Africa learning, including exchanges between neighbouring country water partnerships. This would also help to build cooperation and develop synergies in those regions with shared waters.

4.2 Policy recommendations

On the basis of the experience and lessons learned from the national IWRM programme, a number of policy recommendations can be made, shown in Box 34. As with many of the lessons, these recommendations are applicable to any development work that involves working across sectors.

The main audiences for these recommendations are policy-makers and those who influence policy, as well as international development facilitators. The recommendations aim to help improve the way in which development processes are designed and implemented and highlight the importance of:

- Cross-sectoral coordination and integration
- Alignment and harmonisation with existing development frameworks
- Clarifying potential differences in expectations and ambitions for the programme
- Improving the design of development support

Box 34: Policy recommendations drawn from water management planning

integrated approaches to water management and other development interventions should:

- Be undertaken as part of the broader national development planning process. Cross-sectoral coordination and responsibility for integration should be anchored in a government institution with capacity to influence and mobilise other sectors. Higher-level government bodies such as ministries of finance and economic planning, the cabinet and the prime minister's or vice president's office are good locations for facilitating integration.
- Be aligned with high-priority national development processes with broad cross-sectoral and stakeholder support, even if these are outside the water sector.
- Be flexible, realistic and structured as a continuous process rather than individual projects.
- Take into account country differences and accommodate variations of scope and budget, based on the country's development context.
- Embed water-related climate change adaptation into water resources management plans and not treated as a separate issue, in order to avoid duplication and fragmentation. The capacity of local institutions must be built to address climate change adaptation as part of the water security agenda in development planning and decision-making processes, in line with national development priorities.
- Develop economic arguments for financing water resources management. Opportunities for accessing adaptation funds for financing water resources management must be explored.





References

- African Development Bank (2010) *Key Facts, Eritrea*. AfDB, Tunis. Available at: <http://www.afdb.org/en/countries/east-africa/eritrea/1/>.
- Boko, M., Niang, I., Nyong, A., Vogel, C., Githeko, A., Medany, M., Osman-Elasha, B., Tabo, R. and Yanda, P. (2007) *Africa. Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson (Eds). Cambridge University Press, Cambridge, UK, pp. 433–467.
- Comprehensive Assessment of Water Management in Agriculture (2007) *Water for Food, Water for Life: A Comprehensive Assessment of Water Management in Agriculture*. Earthscan, London and International Water Management Institute, Colombo. Available at: http://www.iwmi.cgiar.org/Assessment/files_new/synthesis/Summary_SynthesisBook.pdf.
- Global Research and Development Centre (2008) *International Decade for Clean Drinking Water, 1981–1990*. Available at: http://www.gdrc.org/uem/water/decade_05-15/first-decade.html.
- Government of Malawi, Ministry of Irrigation and Water Development (2008) *Integrated Water Resources and Water Efficiency Plan for Malawi*. Malawi Government.
- Grey, D. and Sadoff, C. (2007) *Sink or Swim? Water Security for Growth and Development*. *Water Policy*, 9(6): 545–571.
- GWP (2009) *Climate Change: How Can We adapt?* Briefing Note. pp 1. (Online) Available at http://www.gwp.org/Global/The%20Challenge/Resource%20material/GWP_Briefingnote_climatechange.pdf.
- GWP (2010) *Global Water Security*: Submission by the Global Water Partnership to ICE/RAE/CIWEM Report to Professor John Beddington, Chief Scientific Adviser to HM Government, pp 5–6. (Online) Available at http://gwp.org/Global/Activities/News/GWP_on_WaterSecurity_Feb_2010.pdf.
- GWP Technical Committee (2004) *Catalyzing Change: A Handbook for Developing Integrated Water Resources Management (IWRM) and Water Efficiency Strategies*. Elanders, Stockholm, Sweden.
- GWP Technical Committee (2009) *Integrated Water Resources Management in Practice – Better water management for development*, pp. 205–208. GWP, Earthscan, London, United Kingdom.
- GWP Technical Committee (2009) *Water Management, Water Security and Climate Change Adaptation: Early Impacts and Essential Responses*. Background Paper 14, pp. 68–69. Elanders, Stockholm, Sweden. Available at: http://www.gwptoolbox.org/images/stories/Docs/tec_14_web.pdf.
- International Development Research Centre (IDRC) (2001) *Outcome Mapping: Building Learning and Reflection into Development Programs*. IDRC, Ottawa, Canada, pp. 1. Available at: <http://www.idrc.ca/openebooks/959-3/#page-1>.
- Ministère de l'Energie et de l'Eau (2009) République du Cameroun. *Projet de rapport. Connaissances Et Usages Des Ressources En Eau* (in French). Cameroon – Yaoundé, August 2009.
- Ministry of Natural Resources and Energy, Department of Water Affairs (2009) *Government of Swaziland Integrated Water Resources Master Plan*. Draft Final Report. Knight Piesold Consulting. May 2009.
- OECD (2001) *The DAC Guidelines, Strategies for Sustainable Development*. OECD Publishing Service.
- OECD (2006) *The Challenge of Capacity Development: Working Towards Good Practice*. OECD, Paris. Available at: <http://www.oecd.org/dataoecd/4/36/36326495.pdf>.

- OECD (2007) *2006 Survey on Monitoring the Paris Declaration*. OECD, Paris. (Online) Available at: http://www.entwicklung.at/uploads/media/OECD_2006_Survey_on_Monitoring_the_Paris_Declaration.pdf.
- OECD (2008) *Paris Declaration on Aid Effectiveness and Accra Agenda for Action*. OECD, Paris. Available at: <http://www.oecd.org/dataoecd/11/41/34428351.pdf>.
- Plan:Net Limited and Mosaic.net International (2008) *Program Evaluation of Partnership for Africa's Water Development Program (PAWD) – Global Water Partnership: Final Report*. Prepared for Canada Fund for Africa – Canadian International Development Agency, July 2008. Global Water Partnership (GWP), Stockholm, Sweden.
- République du Bénin (2009) Direction Générale de l'Eau. *Projet de rapport: Etudes thématiques pour l'élaboration du plan d'action, national de gestion intégrée des ressources en eau au Bénin*, Cotonou, Benin.
- Republic of Kenya (2009) *Integrated Water Resources and Water Efficiency Plan for Kenya*. Government of Kenya Government. Available at: <http://www.gwptoolbox.org/images/stories/cases/en/iwrmpplan%20kenya.pdf>.
- République du Mali (2008) Ministère de L'Énergie, Des Mines et de L'Eau. *Plan d'action National de Gestion Intégrée des Ressources en Eau*. Bamako, Mali. Available at: http://www.gwptoolbox.org/images/stories/cases/fr/pagire%20mali_volume%201_french.pdf.
- République du Sénégal (2007) Ministère de l'hydraulique, direction de la gestion et de la Planification des ressources en eau. *Plan D'actions Pour La Gestion Intégrée Des Ressources En Eau Du Senegal*. Available at: http://www.gwptoolbox.org/images/stories/cases/fr/cs_334_senegal%20pagire%20final%203%20der.pdf.
- Republic of Zambia, Ministry of Energy and Water Development (2008) *Integrated Water Resources Management and Water Efficiency (IWRM/WE) Implementation Plan*, pp. 17–25, Volume 1 Main Report, 2008–2030. Republic Of Zambia. Available at: <http://www.gwptoolbox.org/images/stories/cases/en/iwrmpplan%20zambia%20volume%201%20final%20final%20iwrmpplan%20zambia%20volume%201.pdf>.
- The State Of Eritrea (2009) *Action Plan for Integrated Water Resources Management (IWRM) in Eritrea*. Ministry Of Land, Water And Environment, Water Resources Department. Available at: <http://www.gwptoolbox.org/images/stories/Docs/eritrea%20iwrmpactplan2009.pdf>.
- UNESCO (2003) *About Water: Water Problems – Irrigation*. Available at: http://unesco.uiah.fi/water/material/05_water_problem.html.
- United Nations (2003) *Monterrey Consensus of the International Conference on Financing for Development–Monterrey*, Mexico, 18–22 March 2002. DPI/2329–October 2003–20M. United Nations Department of Public Information, New York. Available at: <http://www.un.org/esa/ffd/monterrey/MonterreyConsensus.pdf>.
- United Nations Conference On Trade And Development (2009) *Economic Development In Africa Report 2009. Strengthening Regional Economic Integration for Africa's Development*. United Nations, New York and Geneva. Available at: http://www.unctad.org/en/docs/aldcafrica2009_en.pdf.
- WHO/UNICEF (2010) *Progress on Sanitation and Drinking-water: 2010 Update*. World Health Organisation, Geneva and United Nations Children's Fund, New York. Available at: http://whqlibdoc.who.int/publications/2010/9789241563956_eng.pdf.
- World Bank (2009a) *Africa's Infrastructure: A Time for Transformation*. The World Bank, Washington.
- World Bank (2009b) *Zambia Managing Water for Sustainable Growth and Poverty Reduction – A Country Water Resources Assistance Strategy for Zambia*, p. 19.
- World Bank (2010) *Climate Smart World Within Reach*. Press Release Number: 2010/068/DEC. Updated 15 September 2009. Available at: <http://web.worldbank.org/WBSITE/EXTERNAL/NEWS/0,,contentMDK:22312494~pagePK:64257043~piPK:437376~theSitePK:4607,00.html>.



Appendix: The added value of the IWRM Programme

Benin

- A national IWRM plan was developed.
- The water policy was reviewed to incorporate IWRM principles.
- A comprehensive situation analysis helped to identify the context for IWRM and link it to national development priorities.
- The PRSP was revised to include a cross-sectoral approach, essential for water resources management and development.
- Institutional reforms of the water sector were undertaken.
- The water reform process was accelerated and energised, and new goals and targets were defined.
- A strong stakeholder platform to support the water reform process was established with local partnerships at sub-national level.
- The Okpara dam, the main source of drinking water for the country's third largest city, was saved, securing water for 200,000 inhabitants.
- A media network was developed that played a prominent role in communication about the water sector.
- Education about water was introduced in primary schools across the country, resulting in greater teacher awareness of water hygiene issues.
- Over €1.6 million in additional financial resources were mobilised from partners for IWRM planning.
- Government attention was drawn to the need to address climate change in national policies and legislation.
- A Blue Book for water and sanitation was developed. This is a tool that promotes exchange, dialogue and mobilisation of stakeholders involved in managing water resources and services, in order to promote large-scale projects in partnership with decision-makers, civil society and the private sector.

Burundi

- A national IWRM plan was developed.
- The national water policy was reviewed to include IWRM.
- A water resource situation analysis was produced, generating greater knowledge on the challenges and constraints of water development for economic growth.
- Institutional reform in the country was influenced to bring stakeholders on board and enable them to provide inputs on ways of improving water governance.
- Awareness of IWRM was enhanced in the country and the profile of IWRM increased.
- The water sector was enabled to openly discuss water resources management issues.

Cameroon

- Strategies for the draft IWRM Plan were developed.
- The IWRM reform process was initiated and a comprehensive water resource situation analysis was carried out.
- IWRM is now considered in the national strategy for water and land.
- There is provision for the national IWRM programme in the budget of the ministry responsible for water.
- The Prime Minister, in his address to Parliament on 18 November 2009 during the session on the budget, stated that the government will adopt an integrated approach to addressing the problems of the water sector in Cameroon.

- Cameroon was able to share its experiences on stakeholder participation through the documentation of case studies, increasing knowledge on the importance and challenges of stakeholder participation.
- Capacity building was undertaken on various aspects of water management, including conflict resolution.

Cape Verde

- An IWRM plan was prepared. The plan was adopted and launched in 2010.
- The legal framework for the administration of water resources was developed.
- Strategies for financing water resources were developed.
- An information management system for water resources using GIS was set up.
- Political and stakeholder ownership were enhanced. Stakeholders and political institutions were involved in consultations on the situation analysis and draft IWRM plan.
- Understanding of the challenges and constraints affecting water resources has been enhanced through consultation with central government directors and the heads of public institutions such as the Ministries of Agriculture, Environment and Sea Resources, as well as the minister in charge of water, and senior government officials from the National Water Council.
- Water quality standards were reviewed.
- A national discussion on water pricing was facilitated.

Eritrea

- An IWRM plan was developed.
- There is a high level of involvement and understanding of IWRM among decision-makers, staff in government institutions and major stakeholders.
- A comprehensive situation analysis report was produced that outlines the country's water resource base, its main opportunities, challenges and constraints, existing legal and institutional frameworks, and the major barriers for IWRM.
- Regulations were developed for the issue of permits for water use and construction of water infrastructure.
- Water quality guidelines were developed.
- The ability of key stakeholders to participate in IWRM planning was improved through capacity building on gender mainstreaming, river basin management, policy, legislative frameworks, and institutional roles for IWRM.
- A draft national water policy was produced and an institutional framework proposed.

Ethiopia

- The Berki Basin IWRM Plan was developed and adopted.
- Concrete legal, institutional, financial and technical measures were defined for ensuring water security.
- Conflict among water users was defused.
- Through the participatory approach, communities are now better aware of water resources management issues, and understand the implications of their actions for others.

Kenya

- Collaboration was initiated between the Ministry of Water Resources and potential financing institutions to support projects in the IWRM Plan.
- Stronger links were forged between government, civil society and the private sector by establishing the Kenya Water Partnership.

- The Kenya Water Partnership influenced a number of development processes in the water sector through regular participation in sector reviews and PRSP processes.
- Broad ownership of the IWRM plan was encouraged among key stakeholders in Kenya, each responsible for a substantial contribution to the development process.

Malawi

- IWRM was integrated into the Malawi Growth and Development Strategy, the main national planning instrument.
- Political will and awareness were mobilised among key actors, including the Office of the President, Cabinet Office and the Ministry of Economic Planning, resulting in a 64 percent budget increase to the water sector in 2005/06.
- Revision of the water law and water policy was catalysed.
- An integrated approach was adopted in the National Water Sector Development Programme II.

Mali

- The National IWRM Plan was developed and adopted by the Ministerial Council and funding was secured.
- The development and adoption of the National Water Policy was assisted.
- IWRM was integrated into the Strategic Framework for Growth and Poverty Reduction (CSCR) 2007–2011.
- Public awareness about IWRM and water issues has increased.
- Political decision-making in relation to water issues has been catalysed.
- Water sector stakeholders were mobilised and the partnership between water actors was strengthened.
- Donors made firm commitments to support the water sector.
- Regional and international training sessions on IWRM were provided.
- The Mali Water Partnership is now seen as a partner who can bring in financial and technical support for government action.
- A network of journalists was supported, which reports on water issues.

Mozambique

- An issues paper was developed to feed into the draft IWRM plan. The issues paper identified emerging critical water issues not covered in the National Water Resources Strategy earlier developed by the government.
- There is an enhanced appreciation of the role of stakeholder participation in the country.
- A financing strategy was developed.
- A gender mainstreaming strategy was developed.
- Guidelines were developed for integrating water in PRSPs.
- Broader stakeholder involvement in water resource issues was achieved through the establishment of the country water partnership.
- Strategic options were developed with key stakeholders as a contribution to the IWRM planning process
- Awareness of water management instruments was increased among stakeholders at the river basin level.
- Capacity building courses in Portuguese were initiated on water resources management issues.

Senegal

- A national IWRM Plan was developed and adopted.
- Stakeholders were involved at all geographic, institutional and thematic levels, which supported good decision-making.

- An appropriate negotiation framework was established, which made it possible for national and local actors to understand IWRM and water sector challenges.
- Capacity building was provided on issues related to IWRM for many water sector stakeholders, as well as on presentation and organisational skills for team members.
- The participatory approach was greatly appreciated by all the actors who declared their support for the IWRM plan.
- Challenges facing the water sector were identified; the use of national languages in order to implement IWRM in the field was identified as a major communication challenge.

Swaziland

- A draft IWRM plan was produced and is in the process of being finalised and adopted.
- The draft water policy included all the elements of the IWRM.
- The water reform process was accelerated by broader stakeholder participation, which highlighted the urgency of the need for action.
- The process of setting up River Basin Associations was accelerated; consultation and stakeholder participation were enhanced.
- The process of formulating the water master plan was broadened from a narrow focus on water resources management to a broader cross-sectoral focus with linkages to national development priorities.
- Participation and guidance were forthcoming from the country's Ministry of Economic Planning and Finance.
- A financing strategy was developed to support implementation of the IWRM plan.
- Experiences and lessons were brought from other countries engaged in a similar process in the SADC region, such as Zambia and Malawi.
- More than 9,600 people affected by polluted water in the KaLanga Community gained access to clean water for drinking and to support their livelihoods. Water related diseases with potential risks to health were reduced.
- Advocacy and media capacities around water issues were enhanced.

Zambia

- IWRM was integrated into the Fifth National Development Plan.
- A national forum of all sector directors and heads of planning was encouraged, to forge a coordinated approach to implementing IWRM in the National Development Plan.
- A coordination mechanism, the Water Security Advisory Group, was enhanced for all water-related government ministries and sectors, including donors.
- The 1948 Water Law was revised as part of the contribution to the Water Resources Action Programme, a government reform program. A draft bill is in place.
- Revision of the 1994 Water Policy was supported through the participation of some partners in the review process.
- The IWRM Plan influenced the World Bank's joint Water Sector Assistance Strategy, which was developed after the IWRM plan was completed.

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"The quest for water security, optimizing water's productive use for development (such as for human settlement, industry, food and energy production, and ecosystems), coupled with minimizing its destructive impacts on development (such as those of floods, droughts and contamination), has been a challenge throughout human history and remains one today. This challenge is now intensifying with rapid change in populations, economies, geopolitics and, significantly, climate. Much of Africa has a uniquely complex and costly water security challenge, caused by an already highly variable and unpredictable climate which has remained a significant constraint on Africa's development. This Global Water Partnership report describes how many nations across Africa are tackling this extraordinary challenge and draws important lessons from experience." *Professor David Grey of Oxford University, previously the World Bank's Senior Water Advisor and co-chair of the Bank's Water Resources Management Group*

"To the Zambia Water Partnership, which has been assigned to facilitate the development of the National Investment Brief of expanding the utilisation of water resources for agriculture and energy: I have no doubt that you will lead the process effectively and efficiently and give us the product in time. I acknowledge your competencies in this area as you played the same role in the development of the Integrated Water Resources Management Plan. I must state that, as Government, we cherish the partnership that we have established with you." *Hon. Kenneth Konga, MP, Minister for Energy and Water Development. Adapted from a quote in the Zambia Daily Mail, February 2010*

