GWP in action



The Global Water Partnership (GWP), established in 1996, is an international network open to all organizations involved in water resources management: developed and developing country government institutions, agencies of the United Nations, bilateral and multilateral development banks, professional associations, research institutions, non-governmental organizations, and the private sector. Its mission is to support countries in the sustainable management of their water resources.

Through its network, the GWP fosters integrated water resources management (IWRM). IWRM aims to ensure the coordinated development and management of water, land, and related resources in order to maximize economic and social welfare – without compromising the sustainability of vital environmental systems. The GWP promotes IWRM by facilitating dialogue at global, regional, area, national and local levels to support stakeholders in implementing IWRM.

The GWP network works in 12 regions: Southern Africa, Eastern Africa, West Africa, the Mediterranean, Central and Eastern Europe, Central America, South America, Central Asia and the Causasus, South Asia, Southeast Asia, China and Australia. The GWP Secretariat is located in Stockholm, Sweden.

ACKNOWLEDGMENTS

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Chair Report

even years ago the Global Water Partnership came into being. It was a daring step: could a small group of people working out of the Swedish International Development Cooperation Agency (Sida) in Stockholm - with a mandate patterned loosely after a group of Agricultural Research Centers actually make an impact on how the world manages water? And, even with growing water crises, was there sufficient interest in water management reform around the world to justify such a move?

After seven years, the answers to these questions reveal a variegated pattern. The partnership concept and the push for better water management have both spread quickly. The GWP is now a network operating in twelve regions of the world with thirty-two Country Water Partnerships and sixteen Area Water Partnerships, supported by an independent intergovernmental organization in Stockholm; IWRM has been adopted as an element in official water management policy in many GWP countries; Technical Committee documents of high quality continue to be produced and be translated into many languages, while the IWRM ToolBox grows in content and use. The GWP and World Water Council-sponsored report, Financing Water for All, sparked follow up at the G-8 Evian Summit this year leading to the creation of new mechanisms and analyses within the international financial institutions on how their procedures serve water infrastructure and service financing. Networks on capacity building for IWRM have been set up in Africa, Southeast Asia and Latin America and over 100 dialogues on elements of water governance have been held across the globe. It was gratifying that the recent External Review of the GWP undertaken this year by our donors acknowledged, "GWP has established a very large regional network with activities apparent at the regional and country level. The brand relating to both the GWP name and its definition of Integrated Water Resources Management (IWRM) has achieved a very high level of recognition across the global water sector.'

This is good achievement in this short a time, as this report shows. But there is another reality. Funding for water infrastructure and services is not increasing - in national budgets, in the lending programs of financial institutions, or in Poverty Reduction Strategy Plans. The use of the IWRM phraseology increases a great deal faster than the actual process of bringing sectoral groups together - words are easier than actions, in this field as in others.

Also with the maturity of seven years, the



Margaret Catley-Carlson GWP Chair

bers have left the Steering Committee. Donors have changed. We welcomed the appointment in January of Emilio Gabbrielli as the new GWP Executive Secretary, and said farewell and thanks to Khalid Mohtadullah. Now we welcome Roberto

GWP has moved

into renewal - with

both the benefits and pangs that such

change brings. Long-

serving Regional

stepped down; and

long serving mem-

Directors have

Lenton, who succeeded Torkil Jønch-Clausen in August as the Chair of the Technical Committee, and warmly thank Torkil for his inestimable contributions.

With the infusion of new people and their skills, building on past experience, and with a new sense of confidence, GWP offices around the world will try to channel all of these elements into an intensified process to tackle the National Water Resource Development plans called for by the Johannesburg Summit on Sustainable Development. As water crises intensify for countries and people around the world, we must take maximum advantage of the opportunity provided by the agreement of the world's leaders to move toward creation of robust, thoughtful national processes to tackle water management for the benefit of each of us. So now, on to year eight!

Overview

arrived at the GWP in January, attracted by the principles and ideals of the Global Water Partnership. I did not know the GWP very well, but it was an easy task to become quickly aware that a vibrant GWP network was actually in place, that a remarkable basic body of knowledge on IWRM had been developed and pulled together and that advocacy for IWRM had been successful. As a consequence, the challenge ahead became immediately clear: how to transform all of this into effective action on the ground, especially after the World Summit on Sustainable Development in Johannesburg had put water high on the agenda and set the target for producing national IWRM plans by 2005. We have tried to address this challenge in the revised strategy for 2004 to 2008, the key points of which are highlighted in this report.

During the strategy revision process that we undertook this year, many people asked me what my personal vision was of where the GWP should be at the end of the next five years of its work program. My answer has been that I would like to see, by 2008, that the process of developing country water management strategies incorporating IWRM is well under way in several countries thanks to the facilitating actions of the GWP's global network of regional and local water partnerships, supported by the GWP's body of knowledge and experience. I also would like to see the network as truly global, facilitating South–South, North–North and South-North dialogues. I would like to see that the Partnership has kept its characteristics of being cost-effective, flexible and non-bureaucratic - though with good governance and accountability - and fully integrated with sister organizations committed to IWRM, together with all entities and stakeholders directly or indirectly involved with the overall management of water resources.

I also noted after my arrival that, as a result of GWP's good work, we have generated an expectation that the GWP and its partners can quickly ensure that IWRM is adopted and implemented to resolve the current water crises. Development processes in general however, are slow and society is often not inclusive and lacks awareness and capacity. We are all aware that demands by society are for fast action, even those for social causes like the fight against poverty, but often produce unsustainable solutions.

However, for the sustainability of our water resources, there is no alternative to IWRM. I trust that the GWP network of IWRM believers will contribute to maintain the necessary attention and patience, while at the same time facilitating and speeding up the process with appro-



Emilio Gabbrielli Executive Secretary

priate mechanisms. As you will read in this report, a key GWP activity in promoting IWRM remains with building water partnerships around the world as the neutral ground where all stakeholders in IWRM at global and local levels wish to meet, and places that really represent all

sectors, not only those that are involved directly. IWRM is not a static concept, it needs to keep adapting to changing circumstances and evolve with issues of the debate. Thus, the network should represent a credible, influential, informed, inclusive partnership of practitioners at global and local levels that will continue collecting and creating a body of knowledge and experience in IWRM and making it available throughout the network. I believe this is what the GWP is and should continue to be about.

In promoting IWRM, the GWP must remain aware that there is no room for complacency, as the task is enormous, remain committed to pursuing IWRM with the necessary humility and determination and always look for synergies with others. By consolidating all these efforts, the GWP will be creating the opportunities for bringing together knowledge, experience and commitment among all stakeholders in the interest of our ultimate goal – a better life for all.

Strategy: From advocacy to action

vibrant GWP network is already in place, the basic body of knowledge on IWRM has been developed and pulled together and advocacy for IWRM has been successful. "This is an important time for GWP", says Emilio Gabbrielli, the new Executive Secretary of GWP, "as 2004 marks the beginning of the implementation of the revised strategy that will be in place for the next five years.

"The challenge ahead is how to transform all of this into effective action on the ground, especially after the 2002 World Summit on Sustainable

GWP STRATEGY 2004–2008

The immediate objective is to ensure that IWRM is applied in a growing number of countries and regions as a means to foster equitable and efficient management and sustainable use of water. This objective will be achieved by means of five consolidated outputs:

- IWRM water policy and strategy development facilitated at relevant levels;
- IWRM programs and tools developed in response to regional and country needs;
- linkages between the GWP and other frameworks, sectors and issues ensured;
- GWP partnerships established and consolidated at relevant levels; and
- GWP network effectively developed and managed.

IWRM MAKES AN IMPORTANT ADVANCE

The GWP has been promoting the principles of IWRM since its establishment in 1996 and the concept is becoming widely accepted among decision-makers and opinion leaders. An important advance in safeguarding the world's water resources was taken during the September 2002 World Summit on Sustainable Development, when participating countries pledged to begin formulating national IWRM and water efficiency plans by the year 2005. Development (WSSD) in Johannesburg put water high on the agenda and set the target for producing national IWRM plans by 2005."

The GWP is basically a network of people who believe that IWRM practices will help lead to more sustainable development and, ultimately, a better world. By advocating IWRM principles, the GWP network worldwide aims to have all stakeholders - in particular governmental institutions join in a common effort to implement IWRM practices.

"In moving forward with the revision of the strategy for the years 2004 to 2008," Gabbrielli continues, "The GWP needs to preserve, strengthen and extend its worldwide partnership of experts and stakeholders and make sure that its strength results in the successful application of IWRM practices, right down to the local level."

This process was not designed to reinvent GWP but to make sure that it realizes the full potential of its activities and meets the expectations of the Partnership and its donors. There is already widespread agreement within the GWP network that the basis of the way forward for the next five years needs to be a further strengthening of the GWP focus on regional and country partnerships. Sufficient resources and the right procedures need to be put in place to ensure the effectiveness and transparency of the network so that the direct allocation of funds can be obtained in a framework of proper assessment of priorities and accountabilities.

One key element towards achieving this will be to fully enforce the guidelines for establishment of water partnerships in the regions and in the countries as quickly as possible. "Among other things," Gabbrielli says, "this means that every Regional Water Partnership should be able to count at least on two full-time staff members. And with the increased focus on regional and country water partnerships, it is becoming more and more important to have very clear accountability with regard to budgets, as well as systems to identify priorities within the allocated funds to ensure that the money is expended in the best possible way."

KEY ELEMENTS OF THE STRATEGY

At the core of the new strategy lies the development and strengthening of the GWP's role in facilitating IWRM change processes at different levels and developing the knowledge base on IWRM – requiring the Partnership to improve understanding of IWRM and further develop tools, such as the IWRM ToolBox, that will help stakeholders turn principles into practice.

The new strategy is guided by a series of "outputs." These reflect the GWP's enhanced focus on action and implementation (outputs 1, 2 and 3) and the need to strengthen the partnerships and manage the network effectively (outputs 4 and 5). Output 1. IWRM water policy and strategy development facilitated at relevant levels. Here, the GWP will help facilitate the transformation of IWRM principles into mainstream regional and national water policies. The GWP will work with regions and countries in the process of their water reforms by facilitating the necessary multi-stakeholder processes, while encouraging policy development within the IWRM framework of equity, efficiency and sustainability. Helping countries prepare their IWRM and water efficiency plans, as called for by the WSSD, lies at the heart of this output.

Output 2. IWRM programs and tools developed in response to regional and country needs. Building on its earlier work, the GWP will consolidate its position as an international network that supports the use of IWRM programs and tools in the day-to-day practice of water resources management. It will do this by further developing its IWRM programs and tools based on the policy decisions and strategy needs of the regions and countries in which it works.

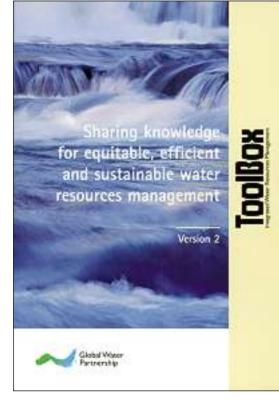
At all levels, knowledge management, awareness-raising and capacity-building will constitute the cornerstone of these tools and programs. The IWRM ToolBox with its database of practical case studies and the GWP's Associated Programmes – on capacity-building, gender and water, groundwater management, water basin management, floods and others – are becoming increasingly important integrating components.

Output 3. Linkages between the GWP and other frameworks, sectors and issues ensured. The management of water cannot be undertaken in isolation from demographic development, poverty, employment, trade, economic growth, health and other resource

A START HAS BEEN MADE

In just seven years, the GWP has established a global network and made a significant contribution to political-level recognition of the need for IWRM. The partnership has facilitated policy reform and legislation change in the governance and management of water in several countries. There is broad recognition of the value of the neutral multi-stakeholder platform that the GWP provides both internationally and at a local level. An important beginning, but a long road lies ahead and there is no room for complacency.

A key GWP activity is to build partnerships around the world where stakeholders at global and local levels can meet. The Partnership is further developing the IWRM ToolBox in order to help stakeholders turn principles into practice.



demands. It is important, therefore, that the GWP encourage dialogues among all those involved and that appropriate partnerships are developed to ensure that IWRM principles are taken into consideration in the programs from other frameworks and sectors.

Output 4. GWP Partnerships established and consolidated at relevant levels. It is only through strong partnerships with broad legitimacy involving different stakeholders that water policies and institutions can be successfully reformed and IWRM implemented. Fundamental to the success of facilitating these processes is the GWP's worldwide network of Regional and Country Water Partnerships – right down to the more local partnerships such as the Area Water Partnerships in South Asia and the Provincial Partnerships in China. Consequently, the GWP network will strengthen its capacity for facilitating participatory multistakeholder processes, especially at the local level.

Although these partnerships are designed as autonomous, representative, self-regulating and basically self-financing bodies for development and implementation of IWRM action programs, they should comply with the GWP's basic principles of engagement. To ensure inclusiveness, the network will continuously seek to broaden its stakeholder base and actively look for a variety of approaches for developing its partnerships for action.

Output 5. GWP network effectively developed and managed. To be effective, the GWP network must foster synergy and coherence across its diverse components. Effective network management is essential then, to protect the GWP "brand" and its associated value as a neutral and inclusive platform. Building on the experience of the last seven years, the GWP will endeavor to continue to build its organization and management systems to support the network, in line with its basic founding principles as a lean and cost-effective structure, with a high degree of independence and autonomy. Within the framework of these principles, the GWP will increase the decentralization of responsibilities for it operations while enhancing the robustness and capacity of its partnerships at regional and country levels.

THE PHILOSOPHY BEHIND IWRM

Chapter 18 of Agenda 21 adopted at the United Nations Conference on Environment and Development in Rio in 1992 emphasized the need for an integrated approach to water resources management and development that recognizes the conflicting multiple demands on freshwater resources. In accordance with this and the Dublin Principles, the GWP recognizes that:

- fresh water is a finite and vulnerable resource, essential to sustain life, development and the environment;
- water development and management should be based on a participatory approach, involving users, planners and policy-makers at all levels;
- women play a central part in the provision, management and safeguarding of water; and
- water has an economic value in all its competing uses and should be recognized as an economic and social good.

The GWP, while founded on the Dublin Principles, also endorses the fact that water, a scarce resource essential for life, has a fundamental social value. Though IWRM can be defined in many ways, the present GWP definition reads: "A process that promotes the coordinated development and management of water, land and related resources in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems." While recognizing the difficulty of ensuring a sense of unity, shared understanding of responsibilities and quality control in such a diverse network, the GWP believes that its decentralized network model is the most efficient way to access and share the rapidly evolving body of knowledge and experience on IWRM and promote effective communication among its stakeholders. The Technical Committee (TEC), the GWP's "think tank," will play a fundamental role in this process by working closely with GWP partnerships worldwide in strengthening the network's knowledge management mechanisms.

THE LONGER-TERM GOALS

There are no blueprints for sustainable water resources management. Countries are at different stages of development and have different aspirations and different political frameworks. So each situation requires its own analysis, prioritization and approach to IWRM implementation through specific policy and institutional reforms. "To facilitate these change processes," Gabbrielli says, "The GWP will make continued and sustained efforts to further strengthen and empower its regional and country networks."

Implementation of IWRM rarely offers a "win-win" situation. Hard choices and difficult decisions have to be made, some interests may be negatively affected and there are generally some stakeholders who lose out in the short term. Consequently, building capacity for conflict resolution is an essential component of the process and relies on having empowered and effective partnerships in place. And these partnerships will endeavor to reinforce efforts to ensure that the marginalized groups – such as women, the poor and non-governmental organizations (NGOs) and others – are included.

The initial stimulus for the formation of the GWP's regional, country and area partnerships comes from the Regional Technical Advisory Committees (RTACs), a small multidisciplinary team of water professionals based in their respective regions. "Today most of these have evolved into Regional Water Partnerships that have a much larger, broad-based cross-sectoral and multistakeholder group of organizations, governed by elected representatives," says Gabbrielli. "Many regions have already completed this conversion but much more needs to be done to ensure these partnerships become fully representative, robust and effective, as well as financially self-sufficient."

An ongoing challenge for the GWP is to encourage communication beyond the water community. If IWRM is to be fully realized, it is essential to reach out to the wider world to stimulate more integrated and sustainable development. In trying to accomplish this, the GWP plans to put its work in the context of a broader socioeconomic perspective and reach out to those responsible for overseeing economic growth, trade, and other development issues, especially those relating to the poor. But adding these perspectives will bring additional levels of complexity that will require new approaches to address them.

The GWP's progress so far has been rapid. But what must be done to maintain this momentum? Gabbrielli concludes: "In promoting IWRM, GWP must remain aware that there is no room for complacency as the task is enormous. The GWP must be committed to pursuing IWRM with determination, though with the necessary humility and always looking for synergies while listening and learning from others. By consolidating all these efforts, the GWP will be creating the opportunities for bringing together knowledge, experience and commitment among all stakeholders in the interest of our ultimate goal – a better life for all."

THE UNITED NATIONS MILLENNIUM DEVELOPMENT GOALS

- Eradicate extreme poverty and hunger
- Achieve universal primary education
- Promote gender equality and empower women
- Reduce child mortality
- Improve maternal health
- Combat HIV/AIDS, malaria and other diseases
- Ensure environmental sustainability
- Develop a global partnership for development

The Millennium Development Goals (MDGs) were agreed upon in 2000 when all United Nations member states pledged to reduce by half the proportion of people without access to safe drinking water by 2015. At the WSSD in 2002, it was further agreed to reduce by half the proportion of people without basic sanitation by 2015. Sustainable water resources management is closely linked to most, if not all, the MDGs. The GWP is a member of the MDGs Task Force, where its representatives are highlighting the role of IWRM in achieving these goals.

Partners: Progress in the regions

The GWP aims to bring together all water users – governments, research and academic institutions, communities, agricultural and business groups, NGOs and others, creating a platform for dialogue at many different levels. The aim is to encourage stakeholders to work together to solve their water management problems.

GWP networks have now been established in almost all of the developing countries. In addition, in the few areas where the GWP has no formal presence, regional organizations, NGOs and aid agencies are promoting IWRM policies and planning within their own programs. In addition, through global meetings such as the World Summit on Sustainable Development (WSSD) and the Third World Water Forum, more and more governments are pledging their support for IWRM implementation.

While raising awareness is an intangible activity that is difficult to quantify, it is the first step towards action and implementation. "It is the spontaneous growth of the GWP which makes it so special," says GWP Executive Secretary Emilio Gabbrielli. "Now that we have the world's attention, we can begin to implement our new strategy, which is all about transforming awareness into action."

MEXICO: FORMAL PARTNERSHIP

The breadth of the network is, not surprisingly, putting extra pressure on resources. Country partnerships, therefore, will now have to adopt a more self-sustaining approach, which means securing additional funding from local sources. This is one of the objectives of the Mexico network. Although Mexican water professionals have participated in the GWP since its inception, the country is only now moving towards formalizing a country water partnership.

"The reasons are complex, but are based on the fact that Mexico has little in common with either South America or Central America," reports Eduardo Mestre, a member of a group of water professionals promoting the establishment of the Mexico Water Partnership. "The size of the Mexican economy and perceived relatively 'developed' status – everyone has to pay for their water, for example – mean that donors have largely overlooked the country's water resource problems. The main reason for creating the country water partnership is therefore to attract local finance, which has already been secured from the government and the private sector."

Mestre believes that private sector involvement is vital and is actively encouraging water utility companies and consultant firms to join the partnership. Another important participant is the national Water Consultative Council, a "watchdog" body that oversees government-funded water initiatives. The first meeting of the Mexico partnership is scheduled for October 2003 and there is already a high level of interest in the network.

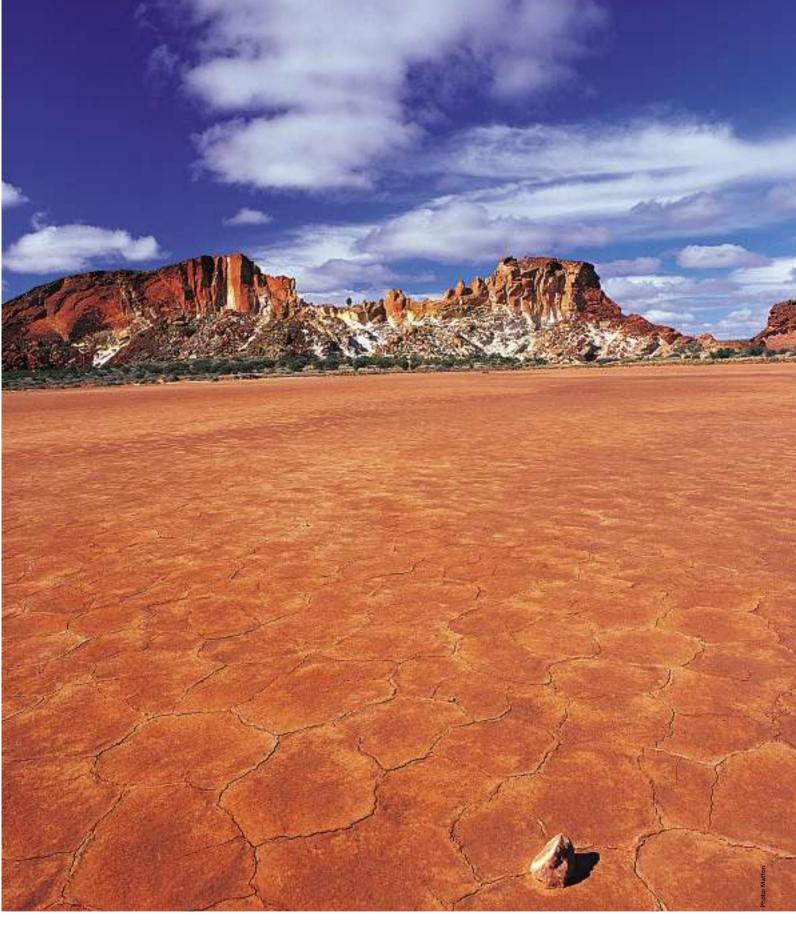
"Our initial task will be to help the government produce a national IWRM plan," explains Mestre. "The GWP will play a facilitating and supporting role and we already have a good network of contacts among key decision-makers. Forming the country water partnership should be the catalyst that will lead to positive changes in the way our water is managed."

THE SOUTH PACIFIC

The lead organization for better water management in the Pacific islands is the South Pacific Applied Geoscience Commission (SOPAC). In the past two years, SOPAC has successfully facilitated the Pacific Regional Action Plan (RAP) on Sustainable Water Management (endorsed by 18 countries, 14 at the ministerial level), the Pacific component of the Pacific-Caribbean Small Island Dialogues on Water and Climate consultations and at the Third World Water Forum. SOPAC also facilitated the WSSD process which resulted in the formation of the Pacific Type II Partnership Initiative on Water, to implement the Pacific RAP.

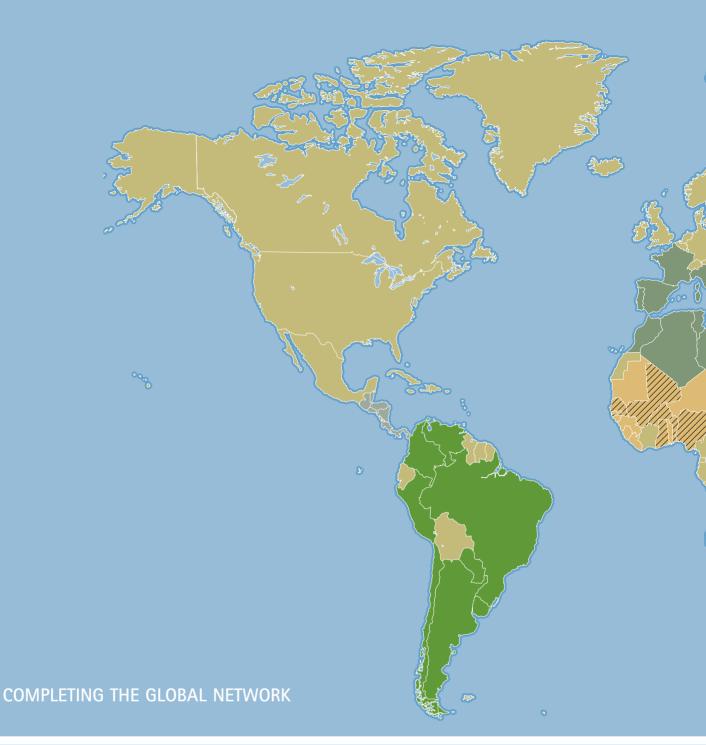
DEVELOPED COUNTRIES JOINING

The GWP's activities have, until now, been focused on developing countries, where better



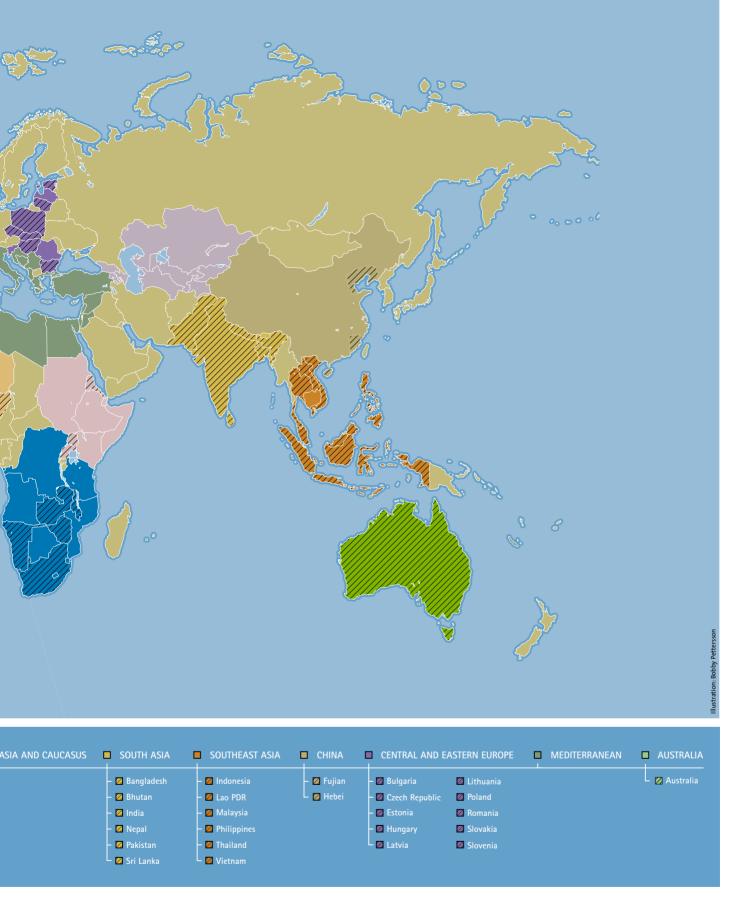
water management will play a vital role in global efforts to alleviate poverty and create sustainable livelihoods. But the GWP will become truly global only when developed countries become a more integral part of the network. Developed countries already participate through various channels, such as providing advisory centers. But only a handful – Australia, Denmark and the Netherlands for example – have taken the initiative to form national water partnerships.

As a water-stressed country, Australia has a wealth of expertise and experience to share with the rest of the world. The country water partnership was formally established in June 2003 with funds provided by the Australian Government. "We already have many water netAustralia established a country water partnership in 2003. As a country that is both developed and water stressed, it has a wealth of experience and expertise to share with the rest of the world.



GWP REGIONS	EASTERN AFRICA	SOUTHERN AFRICA	U WEST AFRICA	CENTRAL AMERICA	SOUTH AMERICA	CENTRAL #
COUNTRY WATER PARTNERSHIPS	– Ø Eritrea – Ø Uganda	- ☑ Malawi - ☑ Namibia - ☑ South Africa - ☑ Zambia _ ☑ Zimbabwe	 Ø Benin Ø Burkina Faso Ø Ghana Ø Mali Nigeria Senegal 			

works within the country," explains Colin Creighton, President of the Australia Water Partnership. "More importantly, we are starting to build links with our near neighbors so that we can exchange ideas and expertise in water resources management. Becoming a member of the GWP will help us to share Australia's experience and learn from others." As a developed country, with substantial investment in science and a continuing policy agenda for improved water resources management, Australia is in a good position to support others in Southeast Asia and the Pacific. "Of course, the emphasis is on sharing and joint learning," adds Creighton. "We need to ask our neighbors what help they require and broker



networks between experts from all countries."

Sharing information through the GWP network can benefit both developing and developed countries. Australia is investing in science to better understand the role and management of environmental flows, such as the mix of water uses within estuaries. Seeking a balance between consumptive uses such as irrigation and ecological needs such as those of fisheries is a key challenge for Australia – and one the team is keen to share, particularly with other developed countries.

"Now that the practical application of IWRM principles has become our driving force, it is even more important to have a truly global and inclusive network of IWRM practitioners and opinion leaders," says Gabbrielli. "There is still a long way to go – both in the North and in the South – before we will achieve widespread adoption of IWRM, but the path towards progress is becoming clearer all the time."

SOUTHEAST ASIA: TAKING ACTION

GWP Southeast Asia was one of the first regional networks, established in 1997 with members from Indonesia, Malaysia, Philippines, Thailand and Vietnam. Cambodia and the Lao People's Democratic Republic joined in 2000.

At first, the partnership concentrated on raising awareness among opinion leaders and decisionmakers of the principles of IWRM. One of the key targets was the Association of Southeast Asian Nations (ASEAN), an organization that co-ordinates economic and political development within the region. An important breakthrough occurred this year when ASEAN agreed to establish a working group on water resources management. GWP Southeast Asia is now working closely with this group to develop plans for regional cooperation in the areas of networking, information exchange and capacity building in IWRM.

The GWP provided technical, logistical and financial support for the first meeting of the group, which was held in Bangkok, Thailand, in January 2003. The main output was an official long-term plan for water resources management in ASEAN countries. Participants also drafted a water information status report, which will be completed by each country and will serve as the basis for regional strategic planning for water management.

One of the keys to gaining such high-level and influential support for IWRM is to have the right people in the right place. As Dr Apichart, Chair of the Southeast Asia RTAC explains, "When select-

FIRST SOUTHEAST ASIA WATER FORUM – CHIANG MAI, THAILAND, NOVEMBER 2003

The forum aims to build regional capacity among IWRM practitioners with an emphasis on putting policy into practice. It will focus on the following themes:

- access to safe drinking water;
- conflict resolution and basin organizations;
- community and local management of water resources;
- water, environment and ecosystems;
- integrated coastal area and river basin management; and
- water and food.

ing people to be involved with the GWP, we are careful to ensure that we have a good balance of men and women from all disciplines. And we are especially keen to attract people who have connections and influence at the political level."

Indeed, Dr Apichart himself is a member of the National Water Resources Committee of Thailand, a body that has the ear of the national government. Additional pressure for change has come from the country water partnerships, which, through their members, were able to influence national governments to put more emphasis on water issues within the ASEAN framework.

FACILITATING CHANGE IN MALAYSIA

The country water partnerships have also been highly successful in facilitating policy change on a national level. Malaysia, for example, has one of the longest-established country partnerships. "Increasing pressure on water resources due to rapid economic development left the planning and construction of related water utilities and infrastructures way behind," explains Dr. Salmah Zakaria, the partnership's Secretary. "The GWP, through the Malaysia Water Partnership, has helped to bring all the major stakeholders together and was instrumental in developing a new Malaysian water vision – a technological road map that charts the development of the water sector through to 2025."

In July 2003, a national policy paper presented by the Department of Irrigation and Drainage, which is one of the partners, was accepted by the National Water Council. The paper concluded that development initiatives dealing with the two basic natural resources, land and water, must be managed on an integrated river basin basis, with each river basin having a master plan.

In line with that finding, the various partners are currently involved in a number of pilot projects, including the development of a system of registration for all river basin units that will capture all information of relevance to water management. They are also designing an accompanying decision support system. This system will involve a wide range of stakeholders in decision making and, when completed, will provide an invaluable tool for policy makers and implementers.

RESTRUCTURING IN THAILAND

In Thailand, a new national water resources policy (formalized in 2000) is leading to extensive institutional restructuring. Water resources were previously under the jurisdiction of many different government departments, leading to both



fragmentation and duplication of effort. The new Ministry of Natural Resources and Environment is now re-drafting the national water law, consolidating the current fragmented legislation and making water management much more efficient, as well as ensuring the principles of IWRM are built into all new management plans.

The Thai Government has also committed funds for capacity building in IWRM. The money will go directly to the river basin committees, which involve water users at all levels. This approach takes account of the fact that, when water users become more involved in the management of their water resources, they become motivated to take a much more proactive role. River basin management plans are defined at a local level and the decisions of the committees are respected, empowering and motivating stakeholders to take responsibility for their own water resources.

DIALOGUES IN THE PHILIPPINES

The Philippines Water Partnership has been successful in promoting dialogue among different water stakeholders, which include national and local government officials, water utility personnel, representatives of non-governmental organizations and academics. Several dialogues were held during 2003, revealing the importance of discussing issues at a neutral venue where stakeholders can express themselves freely.

Specifically, the dialogue on governance resulted in adoption of a national policy on IWRM. This has been incorporated into the Philippine Government's Medium-Term Development Plan. The Philippines partnership has also gained recognition from the highest socio-economic planning body of the government – through becoming a partner with the National Economic Development Authority Board's committee on infrastructure. Through this committee, the members provide advice at the presidential level on water-related matters connected to infrastructure policy and development.

REFORMS START IN VIETNAM

In Vietnam, the GWP has played a pioneering role in introducing the concept of IWRM to the country. After several years of awareness raising, the process of reform in water institutions is GWP Southeast Asia was one of the first regional networks. It was established in 1997 with members from Indonesia, Malaysia, the Philippines, Thailand and Vietnam. Cambodia and the Lao People's Democratic Republic joined in 2000. starting to happen and GWP members are involved in discussions of water sector governance and river basin organization issues as well as assessing the water law.

Existing country partnerships in Southeast Asia are providing information and support to Cambodia and the Lao People's Democratic Republic as they prepare to launch their own country partnerships in the near future. In November 2003, Thailand will host the first Southeast Asia Water Forum (see box).

"The purpose of the forum is to identify common issues and formulate plans – and the ASEAN Water Ministers will meet at the end of the forum," says Dr. Apichart. "The stage is set for them to make a firm commitment for action that will lead to a real improvement in the way water is managed throughout the region. An impressive result for the GWP!"

EASTERN AFRICA: ON THE FAST TRACK

The development of country water partnerships has mostly been stimulated by high-profile regional activities, raising awareness among stakeholders of the need for dialogue and change in water policy to take account of the principles of IWRM. But the most recent regional water partnership, set up in eastern Africa in November 2002, is taking a different approach and is working hard to form country water partnerships straight away.

"By starting regional and national activities simultaneously, we hope to develop a network that will be oriented towards implementing IWRM through the partners from the very beginning," says Simon Thuo, coordinator of the Eastern Africa Regional Water Partnership. This "fast-track" approach is only possible now because of the GWP's seven years of raising awareness.

Despite a previous lack of GWP presence, the region is poised to benefit greatly from increased global attention on water issues. "We are working with the Nile Basin Initiative, the East African Community and other regional water agencies towards the Millennium Development Goals, which have become the rallying focus for many different actors," adds Thuo. "The GWP's new strategy and the ToolBox are providing a valuable framework for discourse and action – even though few water professionals are familiar with them at present."

The Eastern Africa Water Partnership has identified increased knowledge-sharing and communication as the key factors needed to enhance and accelerate implementation of better water management programs. "We want to focus on the real issues that affect local people and food security is one of the most important," explains Thuo.

The partnership is also encouraging all water users and managers to work together to make the most of the limited water resources in the region. Increasing the voice of women in water management decisions is another objective, although social sensitivities against women in positions of authority will take some time to overcome. Obtaining political support among decision-makers is a central part of creating sustained and effective action.

The partnership, which involves members in Djibouti, Eritrea, Ethiopia, Kenya, Somalia, Sudan and Uganda, builds on links already formed through the Nile Basin Initiative, which encompasses ten countries in central, eastern and northern Africa.

Despite poor communication infrastructure in the region, country partnerships in Uganda and Eritrea are already beginning to influence national policy on water issues and the Kenya Government has pledged its support for implementing IWRM policies. In Somalia, the collapse of conventional government structures following the years of conflict has meant a different approach is needed, but plans to launch a CWP are moving ahead. Here, the members are working at two levels - with Somali-based NGOs that are linked to local authority structures (and effectively govern even if not officially recognized), and with Somalis living in other countries, who have a strong desire to support reconciliation through development in their home country.

With global awareness of IWRM high, and changes in national and regional policies taking place, the task now is to ensure effective action at all levels. Only then will the ultimate target of alleviating poverty and hunger be achieved.



human activities, the South American water hyacinth shoreline of Lake Victoria by the late 1990s, altering today, it is being harvested and used in fertilizer, feed supplements and as a source of biogas.

A threatened paradise

THE AREA AROUND LAKE VICTORIA is one of the best places in Africa to grow crops and raise a healthy family. But if the water and other natural resources of the area are not managed in a more sustainable way, the people who rely on them may soon be facing widespread poverty.

Lake Victoria is the largest lake in Africa and the second-largest freshwater lake in the world. The region around the lake is blessed with abundant rainfall, its soils are fertile and the climate is warm. Nevertheless, the lake is one of the most profoundly disturbed ecosystems ever observed.

The changes began during the 1920s, when vast areas of forest were cleared to grow tea, coffee and cotton. As a result, soil, fertilizer and pesticide residues were washed into the lake. The spread of human settlements added further pollution. Deforestation and intensification of agriculture have increased surface runoff, leading to soil erosion and declining soil fertility. During the 1950s, the predatory Nile perch was introduced and, although they thrived and provided fishermen with a good catch, they steadily munched their way through the lake's indigenous fish stocks.

Many of the native cichlids wiped out by the perch were algae eaters. With them gone, algae blooms have occurred on an unprecedented

scale, sucking oxygen from the water and leaving large areas devoid of life. Then the South American water hyacinth found its way into the lake. By the late 1990s, it had virtually encircled the entire shoreline, altering the lake's ecology, hampering fishing activities and disrupting transport links.

Fortunately, Lake Victoria and its basin continue to provide many people with reasonable livelihoods. In addition to the Nile perch, fisherman are catching a small, surface-feeding fish, known locally as dagaa, in large numbers. And the cichlids wiped out by the perch have been replaced by massive numbers of freshwater prawns.

Even the ubiquitous water hyacinth is being harvested and put to use as a fertilizer for crops, a feed supplement for livestock and a source of biogas energy. However, with a growing population to support, the need for well thought out management strategies that take account of the needs of all water users, has never been greater.

Three countries (Kenva, Tanzania and Uganda) share the lake basin, so developing a regional approach to water management is the only feasible option. Programs like the Nile Basin Initiative and the Lake Victoria Environmental Management Project are beginning to address the issues.

Plans into practice: Changing water policy

ater issues, and IWRM in particular, have received high-level political attention during the past few years, with several major international conferences dedicated to water issues. At the World Summit on Sustainable Development (WSSD), water topped the agenda for many countries and there was an almost universal acknowledgement of the need for IWRM.

In addition, the effectiveness of the GWP was often mentioned in ministerial and official statements on water management. Here we explore further how the GWP is helping countries around the world to 'think IWRM' and to make the policy changes that are appropriate to IWRM implementation.

"There is an important message for the GWP here," suggests Torkil Jønch-Clausen, the outgoing Chair of the GWP Technical Committee. "Although our main focus is, quite rightly, on action at the country level, we shouldn't forget that national policy makers are greatly influenced by international trends and opinions."

The key output of the WSSD for the GWP was the goal to "develop IWRM and water efficiency plans by 2005, with support to developing countries." Such high-level global support for IWRM represents a huge achievement and will stimulate action throughout the world.

However, the goal needs careful interpretation, as Jønch-Clausen explains: "The wording of the goal does not take into account the fact that IWRM is a long-term process, not a oneoff activity. Formulating a national IWRM plan will take between two and five years, and it is important that countries do not rush into making ill-considered plans just to meet the deadline of 2005.

"The GWP needs to define what the goal really implies – which is to begin the process of formulating a national IWRM plan by 2005."

LEADING THE PLANNING PROCESS

Originally started by Torkil Jønch-Clausen, the GWP Technical Committee, which is under the

new chairmanship of Roberto Lenton, is now in the process of producing a guide to help countries prepare their IWRM and water efficiency plans. It will be an evolving document and provides guidance for decision-makers and water managers by suggesting preparatory steps and topics for inclusion. The process, structure and content of an IWRM plan will, of course, vary from country to country, but some features are common to all countries.

The IWRM ToolBox developed by the GWP can be regarded as a checklist for those preparing their plans. It is a compendium of good IWRM practices and focuses on policies, legal issues, financing, institutional roles and capacities as well as on management instruments and mechanisms.

Burkina Faso has already used the ToolBox to help it draw up a national IWRM plan and lessons learned from this planning exercise now feature in the ToolBox. Examples of how other countries have approached the planning exercise will be developed further to supply more case studies and examples of good practice. Country partnerships will be given more control over this section so that they can make it more relevant to individual situations.

ROLE OF DEVELOPED COUNTRIES

The country water partnerships will play a key role in mobilizing their local networks to encourage multi-stakeholder consultation during the preparation of the IWRM plans, and it is hoped that developed countries will also play a role. The Canadian International Development Agency has already launched an initiative to support African development and water management. A total of 50 million Canadian dollars has been pledged over five years to promote better water management and improve access to water and sanitation, and an additional 10 million to develop financially viable water projects.

The GWP's regional networks in Africa will play an important role in channeling this support and in feeding back learning and experience to the GWP team involved in preparing the



IWRM plan guidelines. The GWP regional secretariats will provide a link between the countries involved in the program and will provide support where necessary, but the emphasis will be on building capacity within the countries to manage the process themselves. The program is already attracting attention from other prospective donors and may, in time, be extended to additional countries.

"Preparing national IWRM plans provides a great opportunity to address water resources issues at country level," adds Jønch-Clausen. "And this includes how to reach the Millennium Development Goals, the so-called MDGs, most of which depend on the wise management of national water resources.

"We must be aware that the 2005 IWRM target is the only WSSD short-term goal. It is therefore vital for the credibility of the entire WSSD and MDG follow-up process that countries deliver on this goal."

The GWP network has already proven its value as an established forum for international multistakeholder consultation on IWRM. At the beginning of 2003, the French Government invited the partnership to organise consultations in ten sub-Saharan African countries as part of the African component of the European Union's water initiative on IWRM and transboundary



issues. The results of the consultations were presented at the Third World Water Forum in Kyoto.

IWRM IN CENTRAL AMERICA

GWP in Action 2002 reported how countries in Central America are looking to the GWP to help them organize discussions and accelerate the process of water legislation reform. This year, the partnership provided support for the Ministers of Environment and Agriculture from Costa Rica, El Salvador, Guatemala, Honduras, In China, new policies will help expand agriculture by replacing water-demanding crops such as rice with drought-tolerant wheat in some areas.



Hosted by GWP China, representatives from all major sectors of water users in China met for the first time in February to address integrated approaches to managing their water resources.

Nicaragua and Panama to attend the Third World Water Forum in Kyoto.

"The meeting helped the ministers become more aware of the need for IWRM plans at national and regional level," says Maureen Ballestero, Chair of GWP Central America. "They learned about global trends in water resources management and they began working together to gain a regional perspective on the most relevant issues."

These ministers meet regularly under the auspices of the Council of Ministers of the Environment and Agriculture of Central America. During 2003, they laid the foundations for implementation of IWRM throughout the region. The process began when the GWP and several regional organizations formed a working group with the objective of converting IWRM recommendations into actions.

The group conducted a diagnostic evaluation of water resources in the region. Based on this, they developed a proposal for a new water resources strategy, which sets out the principles of IWRM – adapted to the regional context – and makes provision for specific but differentiated plans of action to be developed for each country.

Many stakeholders, including government ministers, public sector institutes, regional organizations, community and user groups, the private sector, environmental groups and producers will be involved. The proposal also suggests that IWRM plans should make use of the operational tools provided by the IWRM ToolBox. "The strategy should be finalized within the next two years," adds Ballestero. "The ministers have agreed to support the regional IWRM strategy and they have begun negotiations with various regional organizations to secure the resources required."

CHINA'S NEW WATER LAW

Recent water management reforms in China provide an excellent model for other countries just beginning the process of policy change. Although it is a relatively water-rich country, huge regional differences exist in the amount of water available. Rainfall is highest in the south but most of the arable land is in the north, where agriculture depends on irrigation and consumes 80 percent of the region's water.

To support the growing population, irrigation would have to expand by an estimated 50 percent by 2030 using current methods. But watercourses like the Yellow River are already being exploited at dangerously high levels. The impending water crisis provides a strong motivation for decision-makers to change their approach.

In October 2002, the National People's Congress approved a new water law for China that takes a much more holistic approach to water management to meet the demands of agriculture, industry, urban populations and the natural environment. The prior law dated from 1988 and placed great emphasis on development and economic benefits, with little attention given to water-saving initiatives and environmental protection.

The new law adopts an IWRM approach and introduces a river basin management structure for the first time. Water resources management throughout the country will be unified, while decision making will be decentralized, especially in rural areas. The law also establishes a water pricing management system, including calculation and collection methods for water charging and wastewater treatment fees.

MAJOR ROLE IN BREAKTHROUGH

The GWP played an important advisory and facilitating role in the discussions leading up to this major breakthrough. Once again, success came down to having the right people involved. In this case, it was Yang Zhenhuai, the former Minister of Water Resources and honorary Chair of GWP China since 2002, who was the catalyst for the inclusion of IWRM in the new law.

A fundamental shift took place among decision-makers from managing water resources on a project or engineering basis to being much more resource-oriented. This change in focus was encouraged by the current Water Minister who was open to new ideas, especially following the severe floods of 1998.

The GWP facilitated the process by organizing a series of conferences and workshops where high-level policy makers and foreign experts discussed the issues together. A roundtable meeting on water and governance in February 2003 allowed stakeholders from different water sectors and ministries to share their views, resulting in new insights into how to fine-tune, regulate and enforce the new water law, thereby working towards water security in China.

TOWARDS A MORE SUSTAINABLE FUTURE

The question facing many countries is how to change the way they use water and how to reestablish a sustainable relationship with their water resources. The WSSD goals will be effective in focusing attention on the need for change. The GWP will help by sharing ongoing experience from countries like China as new policies take effect.

In China, expansion of agriculture will be achieved by improving water use efficiency, for example, by replacing water-demanding crops like rice with drought-tolerant wheat in some areas. In the Yellow River basin, the newly empowered river basin commission has already restricted access to water in upstream provinces through variable pricing and use of reservoirs.

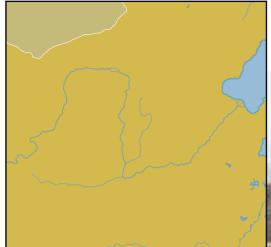
Measures have also been taken to reduce runoff and recharge aquifers through the return of cultivated land to natural forest and grassland. The results have been dramatic and the Yellow River once again flows into the sea.

Other countries like Namibia, Argentina and Peru – and many more – have already begun to address the need for policy change based on the principles of IWRM. The GWP's role is to guide, facilitate and support, building on heightened awareness. But successful implementation of IWRM depends on countries putting in place efficient and effective systems of governance and finance and, as the following section illustrates, these depend on building capacity for change.

PREPARING AN IWRM PLAN: LESSONS FROM BURKINA FASO

The IWRM plan for Burkina Faso was formulated between 1999 and 2002 and became a starting point for substantial improvements in water resources management. Water policy reforms were initiated in 1995 and new policies were adopted in 1998. A more comprehensive IWRM process began in 1999 with a four-year time frame. The lessons learned from the process include the following:

- political will should be established at the highest level at an early stage;
- the IWRM process should be firmly anchored in the responsible ministry and involve all ministry staff;
- the planning process should be supported by a communications strategy for involvement of stakeholders and technical and financial partners;
- institutional reform possibilities should be considered early in the process;
- IWRM principles need to be studied and adapted to the national context;
- stakeholder groups need to be formed to discuss the plan and enough time should be given to get their comments and endorsement;
- decision-makers at many levels should participate in the consultative process
- prioritization of issues needs to be based on rational methodologies; and
- proposals and approaches need pilot testing in a basin where economic, social and environmental stakes are high.



A newly empowered river basin commission for China's Yellow River has already restricted access to water in upstream provinces through variable pricing and the use of reservoirs. The result of these and other measures has been dramatic: The Yellow River once again flows to the sea.



"China's Sorrow"

"WHOEVER CONTROLS the Yellow River controls China," claimed the legendary Emperor Yu, who is said to have founded the Xia dynasty and begun to tame the river for agriculture over 4000 years ago. The Yellow River or Huanghe rises deep in China's interior, looping and twisting through desert wastes, between mountains and across the North China Plain before meeting the sea at the Gulf of Bohai.

From its huge basin sprang the earliest Chinese civilization and generations of farmers have reaped good harvests, thanks to its silt deposits and plentiful water supply. The Yellow River also has a long association with human disaster; it is well known as "China's Sorrow" because of the dramatic floods that have devastated the region at frequent intervals over the centuries.

During the past 40 years, engineering work has strengthened the historic dykes that contain the river and many dams and channels have been constructed, so it can be said that China's Sorrow has finally been tamed. Ironically, lack of water in the downstream region has now become a major issue.

Excessive upstream withdrawals for agricultural, industrial and urban use have even caused the river to dry up for prolonged periods. In 1997, people in Shandong and Henan provinces were able to walk across the dry riverbed for seven months of the year. Water users are increasingly turning to groundwater resources and, in some areas, the water table is steadily dropping, land is beginning to subside and salt water is intruding into freshwater aquifers.

Until a year ago, national water policies paid little attention to issues of sustainability and environmental protection. The focus was very much on economic development and exploitation. But China's new national water law, introduced in October 2002, represents a dramatic change of attitude in which IWRM features highly.

Capacity: The building blocks of development

nadequate technical, institutional and managerial capacity has been identified as a recurring obstacle that prevents the achievement of many development goals. Achieving targets such as alleviating poverty and providing safe drinking water and proper sanitation depends on the capacity of countries, their institutions and their people. "The two main pillars of IWRM are governance and finance and these have to be supported by capacity building," affirms Emilio Gabbrielli, the GWP's Executive Secretary.

Capacity-building networks have therefore been emerging in response to the water sector reforms taking place around the world. These networks provide a valuable forum for the exchange of knowledge and experience, but the real challenge is how to scale up the delivery of capacity-building. The International Network for Capacity Building in IWRM (Cap-Net) is linking the regional and country networks into a global network, and aims to build the locally owned critical mass of expertise that is needed to address the demanding requirements of reform for sustainable management of water resources.

BUILDING A GLOBAL NETWORK

After 18 months of operation, Cap-Net is firmly in place as an international network addressing capacity-building for IWRM. "The rapid development of the network has far exceeded our initial expectations," reports Paul Taylor, Cap-Net Director. "We thought we might be working with three or four networks by this stage, but, in fact, we have links with more than 15! This reflects the importance attached to capacity building and the interest of capacity-building institutions in working together and sharing knowledge of IWRM."

Cap-Net focuses its efforts on the key institutions – universities, training centers, private companies and NGOs – that play pivotal roles in building capacity for water sector reform. Promoting local ownership and control of the capacity-building process and embedding the required knowledge and expertise in local institutions is the only way to ensure a sustainable process of capacity-building.

"Training of trainers" courses are an effective way to begin the process of knowledge dissemination. During 2003 Cap-Net organized courses on IWRM principles and on gender and water at the global level. However, the responsibility for disseminating the knowledge acquired during these courses falls very definitely on the regional networks. "The intention is to get all the followon courses managed, adapted and funded locally," Taylor says. "Our objective is not to run the courses but to provide the means for the local networks to deliver." At least ten regional train-

ing activities are now being planned by capacity building networks drawing on the first global courses.

The Cap-Net website continues to be developed as a focal point for information and communication and is a good source of training materials that can be adapted for local use. The site is now available in English, French

and Spanish and advertises relevant courses provided by institutions all over the world.

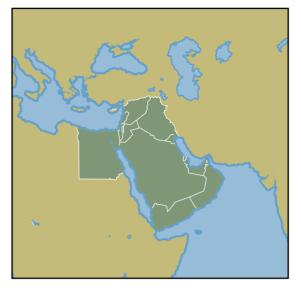
The network member institutions now need to be strengthened so that they can deliver the required level of capacity-building. This means getting more involved in implementing IWRM through developing their own programs to meet local needs, particularly supporting the areas of legal reform and improving institutional arrangements for IWRM implementation.

"We are now collecting and documenting information on what makes a network successful," Taylor adds. "And this information will be of great benefit to both existing and new net-

WHAT IS CAP-NET?

Cap-Net is an international network for capacity building in IWRM. Cap-Net's mission is to enhance human resources development for IWRM by means of establishing or strengthening regional capacity building networks. An Associated Programme of GWP, Cap-Net is also part of the United Nations Development Programme and is funded by the Dutch Ministry of Foreign Affairs. Cap-Net began its operations in 2002.

The members who initially formed the Arab Integrated Water Resources Management Network (AWARENET) quickly mobilized local and international financial support and within 12 months established a framework for improved collaboration in capacitybuilding in the Middle East. Members are drawn from Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, Oman, Palestine, Qatar, Saudi Arabia, Syria, United Arab **Emirates and Yemen.**



works."WaterNet in South Africa is leading the program for improving institutional arrangements while LA-WETnet, based in Latin America, is managing the legal reforms program.

Decentralization is a key future direction, as Taylor explains: "The Cap-Net Secretariat is there to facilitate, not to dictate. And we want to promote more individual membership rather than having mainly institutions as members. We believe this will foster more motivation and help develop more opinion leaders in IWRM."

As the body of available knowledge grows, Cap-Net will improve its training materials and aims to promote more practical courses with a more region-specific focus. The regions themselves will play a key role in developing materials to be more relevant in the regional context.

PROMOTING REGIONAL COOPERATION

The advances made by the Arab Integrated Water Resources Management Network (AWARENET) reinforce Taylor's belief that committed individuals can make a difference. The few members who formed the initial network have been instrumental in building the network quickly into an accepted regional program operating within the United Nations Economic and Social Commission for Western Asia. They have been able to mobilize local and international financial support and within 12 months have established a framework for improved cooperation and collaboration in capacity building in the Middle East.

Network members are drawn from Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, Oman, Palestine, Qatar, Saudi Arabia, Syria, United Arab Emirates and Yemen. All these countries face major capacity building challenges. There is limited awareness about IWRM due to a lack of adequate formal training and education and a general lack of data on water resources. The waterrelated institutional framework is fragmented, there is a lack of comprehensive national water policies, water-related legislation is outdated and patterns of water consumption are unsustainable.

The long-term objective is to improve the implementation of IWRM. This means raising awareness among professionals working in the target institutions and building their technical, institutional and managerial capacity. One of the major advantages of a regional network in the Middle East is that it stimulates international communication and cooperation, a vital objective for ensuring sustainable development in a region prone to conflict.

The Middle East network has been highly successful in getting local funding, a process that has been helped by the endorsement of government ministers. Members are actively translating and adapting the Cap-Net training materials and will hold a regional training of trainers course in January 2004.

BUILDING FLOOD MANAGEMENT CAPACITY

The Latin American Water Education and Training Network (LA-WETnet) has 47 members in 18 countries and is still growing. Members attended the global level training of trainers courses organized by Cap-Net and will hold their own training of trainers for Latin America in Lima, Peru in November 2003.

They have already secured funding and are translating the relevant training materials. Courses on gender and water have been organized in Costa Rica and Brazil and will be conducted in the local languages. The curriculum for graduate students at the Technological University in Panama now includes modules on IWRM, so that water professionals of the future will be better prepared to manage water resources in a sustainable way.

In South America, there is a pressing need for capacity building in IWRM for flood control. In many areas, urban growth is rapid and unplanned, and problems such as excess runoff and wastewater disposal are simply transferred downstream.

The GWP's floods program is addressing the need in three ways: through transboundary projects, by producing educational materials like textbooks, and by holding workshops for decision-makers. For example, decision-makers from Argentina, Brazil, Chile, Colombia and Peru have attended workshops based on flood management case studies.

"Most countries do not have a national flood program," says Carlos Tucci, Chair of GWP South America. "But the workshops have already prompted the Government of Chile to adopt one. Attendance at such events has also spurred the mayors of several prominent cities to adopt urban master plans."

As a follow-up activity, GWP South America is now discussing how it can address the need for short courses on integrated flood management. "The courses will be targeted at water professionals, urban planners and other key decisionmakers," Tucci explains. "We also want them to be self-financing, and this is a reasonable goal, given the current escalating costs of rebuilding infrastructure following flood damage."

The Central American Network of Educational Institutions (REDICA) has been focusing on climate change. In spite of a lack of funds, the members are highly committed and they have been conducting short courses and community-based research on adaptation to climate change. The network manager, Liliana Arrieta, is a lawyer, but she is working mainly with engineers. The progress being made demonstrates the benefits of a multidisciplinary approach when dealing with water issues.

NEW SOUTHEAST ASIA REGIONAL NETWORK

A new capacity-building network for Southeast Asia (SEA-CapNet) was launched in December 2002 during a regional forum. The first task of the members was to present a status review of capacity-building initiatives in IWRM in their respective countries. While some important information was presented, it was agreed that a more detailed national and regional needs assessment should be undertaken.

Initial assessments indicate that different countries are at different stages in adopting the principles of IWRM into their respective national policies, and that awareness among decisionmakers and politicians still needs further development. In addition, the implementation of IWRM requires new knowledge and skills.

Traditional water management training and education institutions therefore need to adjust their curricula. As a first step, the network is preparing a regional training of trainers course on IWRM and river basin management.

In addition to the status review, the forum created an opportunity for the capacity networks



from Indonesia and Malaysia to share their experiences in developing InaCapNet and MyCapNet, and a review of WaterNet, one of the longest-established networks, yielded some interesting lessons.

A meeting of network managers provided a great opportunity for representatives from 19 different networks to exchange experiences, materials, tools and skills and they benefited from sharing lessons on how to make networks more effective (see box). Their challenge now is to turn intentions and agreements into action.

"The main purpose of the national level networks is to co-ordinate the delivery of capacity building services at country level," says Dr Pak Helmi, SEA-CapNet Manager. "Each country needs to tailor its capacity building services to its needs, to take account of local variations in political and administrative systems, the level of The Latin American Water Education and Training Network (LA–WETnet) now has 47 members from 18 countries and is still growing. It is building urgently needed capacity in IWRM for flood control. A new capacity-building network for Southeast Asia (SEA-CapNet) was launched in December 2002 during a regional forum. A capacitybuilding network was also formally launched in Vietnam in June 2003.



advancement of policy reform and language constraints."

The forum also provided an opportunity for capacity building promoters and service providers to present their programs and activities. This served to highlight current capacity building needs, available opportunities and gaps. A training workshop on the IWRM ToolBox helped to familiarize people with its concepts and applications. The participants will form local focal points and will pass their knowledge on to others, translating information into local languages where necessary.

A capacity building network was formally launched in Vietnam (VietCapNet) in June 2003 during a national workshop on capacity building for IWRM organized by the Vietnam National Water Partnership with Cap-Net support. The main reason for forming VietCapNet is to support improved water management in Vietnam.

The network will create a basis for co-operation between volunteer organizations in IWRM, strengthen the internal capacity and co-ordinate the actions of the members, base its activities on demand and develop co-operation with regional and international organisations. The first task of VietCapNet is to complete a detailed study of the requirements of specific target groups, which include government officers, water managers, scientists, water service personnel and civil society groups.

SUSTAINING THE NILE DELTA

Ensuring sustainable use of water resources in the Nile Delta means addressing water issues and conflicts throughout the entire river basin, as far afield as Uganda and Rwanda. The Nile Basin Initiative is a multinational program designed to resolve water management problems by adopting the principles of IWRM, and thereby to alleviate poverty and promote economic development in the region.

In recognition of the importance of capacity building, one of the major projects focuses on applied training. "It is through collaborative programs like this that capacity building can assist in translating water policies into better management," Taylor concludes.

MAKING NETWORKS MORE EFFECTIVE

Cap-Net and WaterNet undertook a review of lessons learned from the southern African network to assist other newly established networks. Experience shows that networks need clear management and operational guidelines for the sake of transparency and decision making. Membership should be open and inclusive and members will benefit most when the network functions by decentralizing operations and decision making to members as much as possible. These and other lessons have been included in the Network Management Guidelines available on the Cap-Net website: **www.cap-net.org.**

Network managers' meeting

The first meeting of SEA-CapNet network managers produced the following guidelines for making networks effective:

- Network structure need to be open and democratic to gain legitimacy and credibility
- Networks should have a proper legal status
- Networks should monitor changes in capacity building demand
- Members should be motivated to participate and effective communication is vital to achieve this
- Strategic planning is vital
- Networks need to secure financial support.



For thousands of years, the plentiful water supply and fertile soil of the Nile and its delta were a source of agricultural wealth. But water quality is deteriorating as a result of urban and industrial effluent and over-use of fertilizers.

Unprecedented demands

LIKE THE YELLOW RIVER in China, the River Nile in Egypt spawned a great ancient civilization. Long before the pharaohs built the pyramids, Egypt was famed for its agricultural wealth – the fertile soil and plentiful water supply of the Nile and its delta providing a lush, green paradise in stark contrast to the surrounding desert.

The ancient Egyptians began constructing irrigation canals around 5000 years ago and water wheels were a common sight by the first century B.C. The lives of the delta inhabitants were regulated by the annual floods, which replenished the soil and kept the delta alive. Today, dams and diversions upstream have stifled the river's natural rhythms, opening more land for delta residents – but at a price.

For the past 30 years, the Aswan High Dam, 900 km south of Cairo, has kept the Nile from flooding and depositing renewing sediment at its mouth. Control of the river provides a ready supply of hydroelectric power and has permitted additional land to be put to agriculture to feed the rapidly growing population.

But demands on the life-giving water are rising all the time. There are now more than 16,000 km of irrigation canals and agriculture has to compete with the needs of an expanding urban population. At the same time, water quality is deteriorating as a result of pollution from urban and industrial effluent and over-use of fertilizers. Without its yearly replenishment of silt, the delta may not continue to withstand the combined assault of coastal erosion and salt water intrusion.

Unprecedented demands on water resources like the Nile are forcing water professionals to adopt a new approach to water management. Traditional sectoral and "top-down" management is being increasingly challenged by other stakeholders who are demanding more integration – between sectors, between water users and, equally importantly, across the different components of the water cycle. Water managers all over the world now need to acquire and develop new skills in management, institutional reform, conflict resolution and communication.

Governance: Learning from the Dialogues

nvaded many times over the centuries, by the Greeks, Romans, Libyans, Persians, Turks, French and British, the Nile Delta has survived many challenges. In the early 1800s Napoleon noted: "Under a good administration the Nile gains on the desert; under a bad one the desert gains on the Nile." This observation is wholly relevant to today's global water crisis, which the Second World Water Forum attributed to "a crisis of governance."

Water governance determines the roles and responsibilities of differing interests – public, civil and private – in water resource management and development. It translates into political systems, laws, regulations, institutions, financial mechanisms, civil society development and consumer rights. Effective governance can overcome fragmentation of effort and resolve conflict between competing water users. Improving governance usually means introducing reform.

"Governance has been a major issue in development for some time but only now are we looking at it from a water perspective," says GWP Chair Margaret Catley-Carlson. "By addressing governance, we are moving our focus

GROWING INTERNATIONAL ATTENTION ON WATER GOVERNANCE

- Second World Water Forum 2000: Making water governance effective became a priority for action
- The Hague Ministerial Declaration 2000: Governing water wisely identified as one of seven challenges for achieving the World Water Vision
- Bonn Conference on Freshwater 2001: Actions in the field of governance was one of three key themes
- World Summit on Sustainable Development 2002: Good governance within each country and at the international level is essential for sustainable development (Article 4 of Introduction to Plan of Implementation).

away from the purely physical aspects of water to the crucial political, social, economic and administrative systems under which we all live and which have such a profound impact on achieving our vision of access to water for all."

ESTABLISHING THE DIALOGUE

While international recognition is important in raising political awareness, governance is mainly an issue to be addressed at the national and local levels. The GWP Dialogue on Effective Water Governance was established to move the debate to the regions and countries where specific action must take place and to raise the political will to change water governance systems for the better.

More than 40 dialogues on water governance took place in the GWP network during 2002–2003, involving more than 30 countries. "The process was driven by the GWP regions themselves with support from the center," explains Alan Hall, a member of the GWP task force on water governance. "This shows the maturity of the regional partnerships and it is the first time global action has been led by them."

Care was taken to invite people from different water sectors and from a diversity of backgrounds – government (national and local), civil society and the private sector. Most dialogues took place over three or four days. There were several electronic dialogues, such as the virtual dialogue in Spanish, which attracted 154 Latin American participants. The results of all this work were brought together into a report entitled, *Effective Water Governance – Learning from the Dialogues*, which was presented at the GWP coordinated 'Theme on effective water governance' at the 3rd World Water Forum in Kyoto.

OUTCOMES OF THE DIALOGUES

This was the first year of the Dialogue and a considerable amount of work focused on raising awareness and establishing links with governments, media and cross-sectoral interest groups to gain a wide understanding of the issue and its importance. "Efforts to improve understanding



Water quality is just one of many issues that can only be addressed by effective water governance.

amongst technical water professionals have been particularly valuable as this group often lacks an appreciation of the importance of governance," Hall states.

The thrust of the dialogues differed according to local governance situations and often served to identify priorities for improvement. For example, dialogue in the Mediterranean region identified a mismatch between central government policies and priorities on the one hand, and people's concerns and aspirations on the other.

The conclusions were that more transparency and accountability is needed with active public participation and better social, environmental and economic links. Follow up actions are planned to take this forward at the country level and a network of parliamentarians has been established to coordinate activities and increase the involvement of elected representatives in water affairs.

The need for participation – bringing in more stakeholders, making their roles effective and get-

ting action through partnerships – underpinned most dialogues. As the Uruguay dialogue stated: "An effort must be made to coordinate the many actors related to water resources, plan harmonizing mechanisms between them and take into consideration that it is unreasonable to have just one organization deciding on water matters."

UPDATING LEGISLATION

Most dialogues recognized that the trend towards "distributed governance" brought with it a need for change. Decentralization commonly results in confusion over the demarcation of responsibilities between and among actors, inadequate co-ordination mechanisms, jurisdictional gaps or overlaps and the failure to match needs, responsibilities, authorities and capacities for action. Updating out-of-date legislation featured strongly in Central America and a multi-stakeholder dialogue in Costa Rica has led to a decision by government to reform its 60-year-old water law through a participatory process. Regulation needs to be complemented by incentives and capacities. Without this, effective, fair and transparent enforcement is in doubt and regulation becomes meaningless or, even worse, counterproductive and arbitrary.

Several dialogues made the point that the "people directly concerned" should be involved in the

WHAT IS THE "DIALOGUE FOR EFFECTIVE WATER GOVERNANCE"?

Water governance refers to the range of political, social, economic and administrative systems that are put in place to regulate the development and management of water resources and the provision of water services at different levels of society. Governance systems have important implications for the management of water resources at all administrative levels and their resolution is a prerequisite for the successful implementation of IWRM.

The Dialogue on Effective Water Governance is supported by GWP, the United Nations Development Programme (UNDP) and the International Council for Local Environmental Initiatives (ICLEI). Its aims are to:

- facilitate communication between politicians and other decision-makers, water managers and users in an effort to address water governance issues;
- highlight good practices and lessons learned in implementing IWRM and use case studies to illustrate progress in improving water governance; and
- demonstrate IWRM as a practical process by using the IWRM ToolBox.

DIALOGUE KEY ACHIEVEMENTS IN 2003

- Raised global awareness of the need for good water governance
- Raised national awareness of the need for reform of governance systems in 32 countries
- Established new and strengthened existing links with political institutions and facilitated discussion of sensitive issues in an informal and non-confrontational way
- Improved understanding of issues of governance amongst a wide group of stakeholders
- Developed a conceptual framework and principles for good water governance.

formulation of new laws – highlighting, once again, the value of participation. However, confusion can arise if the implementing body is not clearly defined.

As one participant in Colombia stated: "We are currently evaluating the transfer of water management responsibilities to the national environmental protection agency. This is a challenge as the organization has traditionally been concerned only with protecting national flora and fauna. People have not been at the center of their work.'

All Central and Eastern European countries stressed the importance of adapting to the European Union's (EU) Water Framework Directive. This important piece of environmental legislation has had a big impact in the region, with EU treaties and directives acting as an impetus for improved water governance.

Lack of funds featured large in many dialogues but the focus was on practical issues, especially on mechanisms for collecting fees and controlling funds, rather than the theories or issues of the need for water charging. An unwillingness to pay for water was often based on a lack of confidence due to poor transparency and accountability in the system, and there was a feeling that better governance arrangements would motivate users to pay, thus increasing revenues.

In Slovakia and Romania, for instance, new systems were discussed that would allow charges to be collected by water agencies rather than by central government. This would make the agencies more financially viable and more accountable to their customers. In Thailand, it was recommended that the business and industrial sectors be involved in discussions on setting pollution charges.

Capacity-building at local government level was seen as a critical aspect of any policy towards decentralization. For example, the Ecuador dialogue recognized a lack of national capacity to resolve water-related conflicts. New approaches that involve multiple stakeholders in water governance therefore bring with them the need to develop new capacities for negotiation.

NEW MANAGEMENT SYSTEMS

Capacity-building also includes creating new management systems and cultures. Cap-Net and the ToolBox were identified as useful supporting mechanisms and the Malaysia Water Partnership, for instance, has been particularly active in using these tools to build capacity for better water governance.

The so-called subsidiarity principle states that water should be managed at the lowest appropriate level. There are many good reasons for this, not least the fact that water management issues at the local level are often different from water and land management issues at the national or regional level. And in many countries, there is a trend towards increasing decentralisation.

However, all too often, responsibilities have been devolved but power retained by the center. This does not promote good governance. For example, in several Eastern European countries, provision of water services has been decentralized to municipal governments but they do not always have the power to raise funds or enforce regulations.

Weak capacity at the local level militates against effective decentralization, and the development of local expertise and introduction of IWRM at district and municipality level, together with mechanisms for local financing, emerged as priorities in many dialogues.

There is also a need to link local water management with water resource planning at river basin or national level. At present, the link between water management at different levels is often disjointed, conflicting or too "top-down."

In response, the dialogue in Chile suggested: "IWRM assumes the river basin is the best management level. However, this is not applied in reality. Often this is because sectoral interests prevail against collective ones." Many dialogue participants also emphasized the need for better knowledge of IWRM at the local level.

River basin management provides a new opportunity for interaction between water stakeholders. In most cases, it is too soon to judge whether it is effective or not and some dialogues stated that systematic learning from experience must continue. Several dialogues made the point that if river basin management is to be effective, the basin organizations need teeth. The Dialogue in Thailand, for example, recommended that basin committees should be responsible for all planning and budgeting and, indeed, Thai river basin organizations are being given greater autonomy (see page 14).

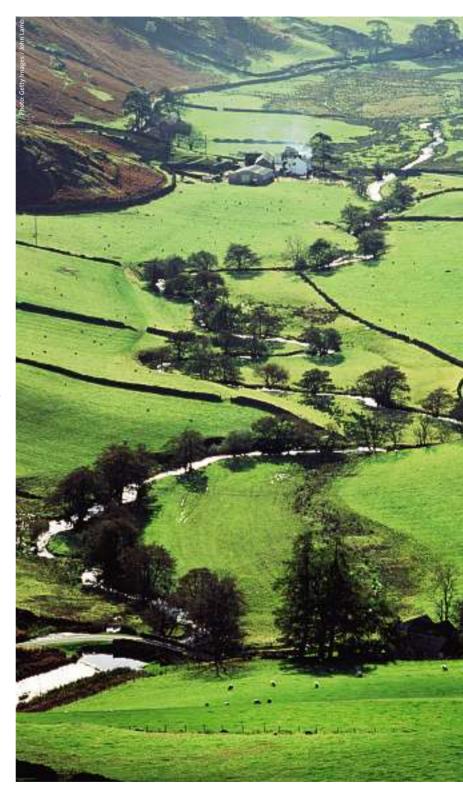
Several dialogues exposed the practical difficulties associated with river basin management. Power lies with sectoral and administrative authorities at central and local level and care is needed when promoting a basin focus. Although it may be technically attractive, managing water on a river basin basis may upset delicate political structures and could weaken water governance systems.

Moreover, it may increase confusion between levels of authority. "This finding needs to be taken seriously," Hall stresses. "Water cannot be seen in isolation and does not have a strong voice in many countries so we should not expect administrative systems to change to suit a technical or hydrological bias. The basin approach can enhance coordination and cohesion but we must also be careful not to move too fast when promoting river basin management."

LEARNING FROM THE PROCESS

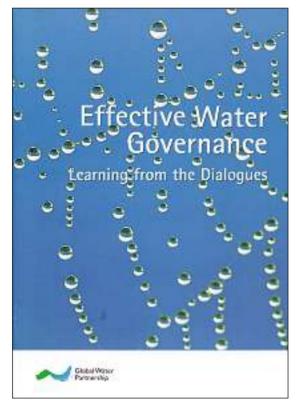
The dialogues have been effective in moving the issue of governance from an abstract concept to a more functional level. They have shown that improved water governance has the potential to create better management and more balanced use of water resources and better delivery of water services. They have made it possible to share and explore best current thinking on effective water governance, rank priority issues and identify implementing mechanisms.

In the process, the dialogues fostered support and commitment among stakeholders. The nature of the dialogues differed; some had a



broad agenda and were exploratory, creating awareness of the need for effective water governance. Others were more specific and businesslike, identifying practical improvements in water governance and launching new initiatives.

In general, the dialogues did not produce specific recommendations. However, the outcomes Although there are significant practical obstacles, river basin management provides a new opportunity for interactions among stakeholders. A synthesis of the Dialogues held throughout the GWP regions was presented at the Third World Water Forum.



should lead to more clear-cut action during proposed follow-up activities during 2004–2005. For example, in Central and Eastern Europe, specific implications were identified for legislation and institutional reforms arising from the EU Water Framework Directive.

In addition, several countries in Southeast Asia put forward proposals for the reform of local institutional arrangements. In Costa Rica, consultations on a new water law have already begun.

"The role of the GWP is to raise awareness, facilitate and promote the process of governance reform. It cannot actually implement any changes," Hall explains. "But by following up on ideas and suggestions that come out of the dialogues we can help to get them applied by others."

WORKING WITH UNDP

At WSSD, the Dialogue on Effective Water Governance was accepted as a Type II partnership to help achieve the United Nations (UN) Plan of Implementation. The GWP is working closely with the UNDP, which has recently strengthened its water governance program in response to the Plan.

International experts, NGOs and academics often paint idealistic or politically correct images that are just not practical in most countries and it is important to avoid promoting ideal or generic solutions. In many dialogues, people felt that the complexity and the time and effort required to implement governance reform was overwhelming. Often reality means that the third or fourth best is all that can be achieved in practice and an iterative approach is needed to bring about change.

On the other hand, significant political or social changes in a country can create opportunities for dramatic improvements in water management. As the Vietnam dialogue observed: "Changes in water governance, such as separation of operational and regulatory functions, had been on the table for a long time, but recent general administrative reform provided the opportunity to turn ideas into reality."

AN ONGOING PROCESS

The Dialogue on Effective Water Governance was designed to be an ongoing process. More dialogues are planned and these will adopt a similar process and style, but with a sharper focus intended to build on the outcomes of this first round of talks. Countries will be encouraged to look more at specifics that will enable them to make recommendations that can then be implemented.

Indeed, this will form part of the process of preparing IWRM plans, in accordance with the WSSD goals. "Putting IWRM into practice is a long-term process that will often require significant changes in the interactions between politics, laws, regulations, institutions, civil society and the water user. The capacity to make these changes depends on establishing better governance systems," adds Catley-Carlson.

The dialogues were set up with a key objective to draw political decision-makers into the water debate beyond the short-term opportunism that is often associated with politics. A large number of political leaders were reached, but more work is required. Future dialogues will therefore continue to brief and encourage politicians, decision-makers and their advisers and confidantes, possibly through networks of parliamentarians, as already established in the Mediterranean region.

"There is clear evidence that political openness and stability and good governance are the most significant factors for reducing poverty, improving equity and attracting investment," Hall concludes. "Just recently, goals and targets for water have been set and the political will to meet these targets is improving. But there is still too little action and too little investment."

Indeed, the issues of governance and finance are closely interwoven, as demonstrated in the following section.

Financing: Water for all

The Indian State of Gujarat has a very dry climate, so visitors might be surprised to see green fields of wheat, mustard, watermelon, cumin, anise and other crops stretching to the horizon. The apparent anomaly is explained by looking inside the small, brick sheds dotted around the fields. They contain electric pumps, which, ten hours a day, pump a steady column of water from deep underground into concrete tanks, from which it flows to the fields.

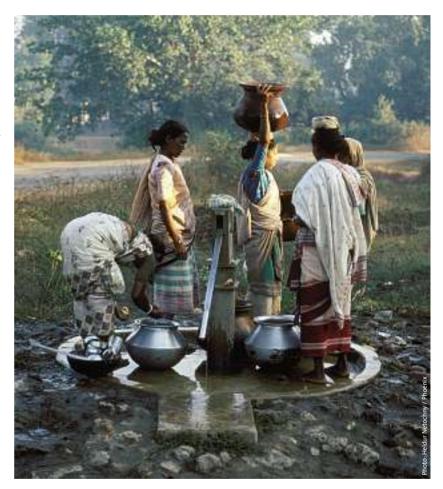
Mohan Patel is one of the farmers who benefit. "This pump is a lifeline for around 50 families," he says proudly. "Rainfall here is scarce and very unreliable. Without the pump, we would be poor and hungry."

Electric pumps such as these have powered India's green revolution. Over the past 40 or 50 years, the country has only been able to feed its rapidly growing population by utilizing groundwater resources. There are about 20 million pumps in operation today and the number is growing by around half a million a year.

But unregulated use means that farmers are extracting water faster than nature can replenish it. Aquifers have been depleted to the point that 25 percent of withdrawals are currently reckoned to be unsustainable, i.e., over and above the water being replaced and almost half of India now faces over-pumping problems such as water shortages or saltwater intrusion into coastal wells.

Many farmers have been forced to abandon their wells and seek work in the cities, or they have to keep drilling deeper. Four years ago, the water table under Patel's fields was at 30 meters, now he must drill down to 150 meters before he hits water. "I am worried," he says. "This water has been collecting for thousands of years. Unless the government introduces some major schemes to recharge the water, there will be none left for my sons and grandsons."

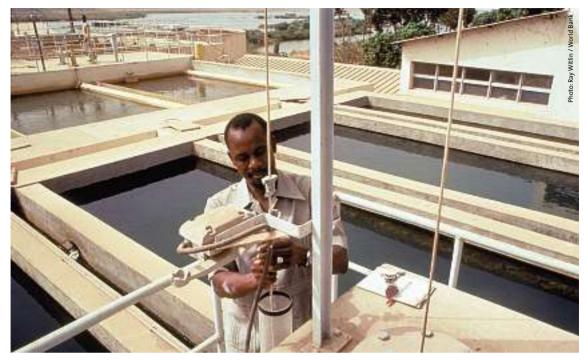
One reason farmers in India have been pumping the quantities of water that they have pumped is that they have paid so little for it. The water itself is free and the government heavily subsidizes the electricity that drives the pumps. Financial



systems like this, that encourage overuse of water, are common in many parts of the world.

Cherity Kityu swallows hard as she pays the water vendor for the water her family needs – payments she is making once again, for the third time this month. School fees are to be paid. And then there's the roof to be fixed.

Cherity lives in a city where water is in theory provided by the municipality; and the water is free. As a result the municipal system is bankrupt. The city loses 50 percent of the water in the pipes to leaks, and breakdowns are common. Everyone would pay less if everyone paid a little bit, and regularly, and the municipality had enough funds to run the utility well. No easy answers: In many places, the water pump is a crucial lifeline, yet overpumping can lead to aquifer depletion or saltwater intrusion in coastal areas. Nature supplies the water but man installs the pipes: Meeting the Millenium and WSSD goals will require a massive investment, yet financing remains controversial.



One of the GWP's key goals is to influence a fundamental shift in the way people think about the value of water. Perceptions are beginning to change at global political level. The Dublin Principles (see page 8) strengthened the views of water sector experts on the need for more cost recovery in water systems, sparked a contentious debate but did not move large parts of the world in any substantial fashion towards introducing better pricing systems.

A continuing paradox exists in that opinion samples reveal consistently that people are more willing to pay than politicians are to charge them. There is a long way to go before appropriate water pricing is widely implemented by political systems

The Millennium and WSSD goals include reducing by half the proportion of people who are hungry and malnourished as well as those without access to safe drinking water and sanitation by 2015. In 2000 an estimated 1.1 billion people lacked access to safe water and 2.4 billion to adequate sanitation. Three-quarters of the world's poor and malnourished live in rural areas and only increasing rural income will move them out of poverty.

Meeting the goals will therefore need a massive investment. So where is the money to come from?

There are only three ways water infrastructure can be paid for: by water users (through their own outlays or through water bills), by governments (via their taxpayers) or by aid donors or private charitable donations. Ongoing costs – maintenance, upkeep, leak fixing and a good deal of system extension in reality comes from only two sources: governments or users.

The situation is really serious: One-third of the world's population lives in states with limited taxing authority, almost no tax base and minimal tax revenues. So government "funding for all" is unrealistic. The trend in public funding and investment is stationary, at best, and international aid and lending for water and sanitation has actually fallen in the past few years.

Moreover, compared to other types of infrastructure, water has long been the least attractive to private investors and banks. For those who wanted to explore the private sector option, there is little joy: and there is now even greater caution and risk aversion amongst private investors and lenders to this sector.

To answer these questions, The "World Panel on Financing Water Infrastructure" was jointly initiated between the GWP, the World Water Council and the Third World Water Forum, and aimed to throw light on how new financial resources might be attracted to the water sector. Chaired by Michel Camdessus (former Executive Director of the IMF and an Honorary Governor of the Bank of France), the Panel included eminent and senior figures from the international financial community and NGOs.

The Panel's report, *Financing Water for All*, which focuses on developing and transitional countries,

was launched in Kyoto. It has been widely noted and discussed, and a number of its proposals are already being considered and adopted.

FINANCING FOR ALL

The Panel devoted most of its efforts to drinking water and sanitation. It very quickly realized that 95 percent of water is managed publicly and that that amount is unlikely to change radically in the short term. Proposals and ideas for new financial viability must therefore in the first instance be valid for public sector utilities that currently serve the major part of the world, and currently exclude about a billion people from the benefits of safe water. The panel made a range of proposals for increasing funding for the water sector.

The proposals had two focus areas: governance and sector reform. Without movement in these areas, water entities, especially the huge majority of these that are public will not create the right environment for attracting finance – and more specific financing proposals to increase financial flows into the water sector.

In fact, in meetings around the world, the Panel was told that many of the water sector's problems originate in its weak organizations and lack of managerial and technical capacity. The Panel suggests that funding for capacity development in water-related institutions should be a high priority for donor aid.

Institutional reform, better administration, transparency and a reduction in corruption should follow. An adequate legal and regulatory framework is a pre-condition for attracting more commercial finance or private investment.

The Panel suggests that central governments give a higher priority to water in their povertyreduction policies. At the same time, decision making regarding water issues should be more decentralized, with more local participation. This means placing more emphasis on the role of "sub-sovereign" entities – local governments or local water authorities. These are almost all in the public sector.

Revenues in the water sector are almost always in local currency, so funds raised and repayable in foreign currencies expose the borrower and investor to a foreign exchange risk. Capital should therefore be sourced locally whenever possible.

Increasing the resources available to improve water supply and sanitation means generating sufficient cash. Thus, costs must be decreased and revenue increased. Full cost recovery from users is the ideal in the long term, but there are many situations where this is not possible. The Panel therefore proposed the concept of sustainable cost recovery, whereby service providers aim to recover their costs, but accept that not all users will pay the same price. A variable tariff system has already been used successfully in South Africa (see "Examples of successful water policies," page 37).

Regarding methods of increasing external financial flows into water, the Panel recommends that developed countries should increase their aid to the water sector and, perhaps more importantly, should introduce measures to improve the efficacy of this money. This can be achieved by better co-ordination of effort to avoid fragmentation and waste. These funds should be used to catalyze other flows and empower other players in the water sector.

PUBLIC OR PRIVATE?

One of the most controversial issues regarding financing is whether the private sector should provide water and sanitation services. Some crit-

ics are against all forms of private sector involvement, believing that, because water falls from the sky, it should be free. But, as the saying goes, "nature supplies the water but man installs the pipes," and there is a long history of private utilities providing water services.

Most state-owned water utilities in America and other developed countries began life as private companies. In the UK, all the public utilities were privatized in 1989, and as is essential for successful private sector participation the industry is subject to rigorous public regulation.

After a decade of considerable interest in water sector investments, private investors are now much less keen to

GENERAL CONCLUSIONS FROM THE WORLD PANEL ON FINANCING WATER INFRASTRUCTURE

- Annual investment in the water sector will need to double if the MDGs and WSSD targets are to be achieved.
- Currently, water revenues rarely contribute enough to funding investment – in the developed or developing worlds.
- Central governments are generally not giving a high enough priority to water.
- Reform of the water sector and managerial and technical capacity building are badly needed.
- Water tariffs will need to rise, but targeted subsidies to the poor can make cost recovery acceptable, affordable and sustainable.
- There is a need for new ways of mitigating risk for international commercial lending for water.
- Private sector involvement will be possible only via new types of public-private partnership and new forms of risk mitigation.
- There is a need to develop local capital markets and funding sources at grass-roots level (i.e., improved access to funds for small producers, community organizations and NGOs).
- There is a need for a "global control tower" to oversee the drive for improvement.



In Buenos Aires, a private contractor was able to cut the city's water tariffs and extend 24-hour service to an additional 3 million people. But a catastrophic devaluation destroyed the economics of the operation. invest in developing countries due to political and regulatory risks, high front-end costs, poor rates of return and a significant foreign exchange risk. In Buenos Aires, a private contractor was successful in cutting the city's water tariffs and extended 24-hour service to an additional 3 million poor, whose piped supplies cost less than 10 percent of the price they had been paying to private water vendors. But Argentina's catastrophic devaluation in early 2002 destroyed the economics of the operation, and led to acrimonious disputes between the various parties involved.

The Panel makes several suggestions for encouraging the private sector, both local and foreign, in developing countries. With some improvements in governance and the right institutional framework, notably effective regulation, private companies are likely to be more enthusiastic about projects in developing countries. In addition, the Panel suggests that the prospect of private sector participation can be a powerful spur to the reform of public water agencies.

A major problem to be faced is that many water tariffs have been too low for too long, so any new contracts, public or private, are likely to lead to unpalatable price rises. The Panel believes that water projects can be financed by combining public funds with private financing in transparent and acceptable ways, and proposes several models of public-private partnership. One is to raise money from local investors through bond issues. Another, aimed at situations such as the Argentina's is to set up a devaluation backstopping facility to provide liquidity in the event of a sudden collapse in exchange rates.

A necessary step to solving water availability is to make it easier for sub-sovereign entities, such as municipalities and large utilities to get access to financing. Again, most of these are publicly owned.

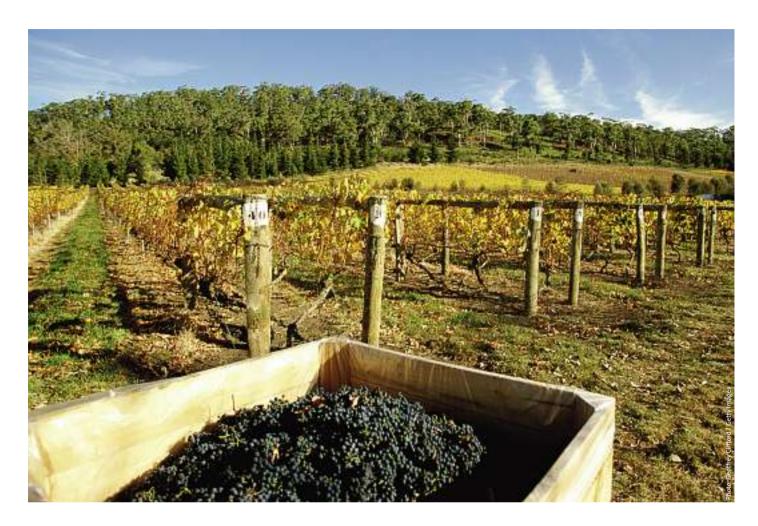
Another possible approach is to develop new kinds of partnerships where the private sector supplies expertise and management skills in conjunction with other bodies such as NGOs. A parallel step in the public sector would be for utilities to create new partnerships with community-based organizations.

THE IMPORTANCE OF GOOD GOVERNANCE

The outcomes of the GWP dialogues on effective water governance make an interesting comparison with the Panel's conclusions. While the governance dialogues involved multiple stakeholders, the finance report was based on the findings and recommendations of a group of financiers. Although the two groups approached the problems of water resource management from

RECOMMENDATIONS OF THE PANEL

- All existing sources of finance for investment must expand if MDGs are to be reached.
- Reform of the water sector is urgently needed, inter alia to attract and generate funds. Improved cost recovery within the sector, and continuing subsidy are both essential.
- No single ideal blueprint or model for the water sector exists. Should private participation be favored, various risk sharing mechanisms will be needed.
- More direct funding should be available to sub-sovereign levels responsible for delivery.
- Local currency generation mechanisms should be developed to backstop local needs and to offset devaluation risks.
- Increased ODA should be targeted, to the achievement of the MDGs, and should be used to leverage other financial contributions.
- All should be held accountable; improved monitoring mechanisms are needed.



different directions, there was a lot of synergy in their conclusions and recommendations.

Financing Water for All has 87 recommendations, half of which relate to governance. A principle conclusion of the Panel was that "serious defects in the governance of the global water sector hamper its ability to generate and attract finance."

Both groups highlighted the trend towards decentralization of governance and pointed to a need to reform existing legislation and build capacity to make this effective. Greater involvement and empowerment of stakeholders, such as river basin organizations, was also mentioned. Institutional reform, including better regulation and enforcement of water-related legislation also featured in both Panel and Dialogue discussions.

SUCCESSFUL WATER POLICIES

Despite widespread problems related to water pricing, there are many examples of success. In South Africa, when the African National Congress took power in 1994, a third of the population had no access to clean water. Now, an additional 9 million people have been connected and the country is aiming for universal coverage (piped water in cities or a standpipe within 200 meters of every village home) by 2008.

Strong government commitment and a new water law, passed in 1998, brought about the change. Previous riparian rights were abolished, water allocations are now temporary and tradable and full costs are charged to all users except the very poor. Water users can take the first 25 liters per day free; if they use more, they pay. In addition, several municipalities have let private contracts.

REFORM IN AUSTRALIA

Australia too, has reformed its water policies during the past ten years. It is the driest inhabited continent on earth and has a huge variation in rainfall. After years of building dams and subsidizing water for farmers, it has now transformed its water policies to put much greater emphasis on pricing, trading and use of the market.

Water rights are now separated from property rights, with users given access rights by the government. Farmers can now trade water between In Australia, a system of water trading means that water can easily be reallocated to the most efficient use, such as for wine grapes, a high-value crop.



Including water finance in the governance agenda is one way towards increased efficiency in the allocation of a vital resource. themselves, and they will soon be able to trade with large cities. The Australian system of water trading allows for use by the environment and means that water can easily be reallocated to the most efficient use. All this has been accomplished within a framework of public sector management.

NEXT STEPS

Since Kyoto, a small follow-up group has been working to stimulate action on the Panel's proposals. The World Bank has committed to address some of the specific recommendations and has convened a meeting of principal water donors. The G8 meeting in Evian, France in June 2003 resulted in a "statement on water" that requested the World Bank to organize discussion among the international financing institutions to look at the Panel's recommendations. At the same time, links have been made with the EU Water Initiative, which is working on ways of meeting the Panel's proposals.

The GWP regions are highly motivated to raise awareness and disseminate the findings of Financing Water for All. Regional partnerships have offered support to organize regional workshops on financing water. In Latin America, the regional partnerships have already established links with the Inter-American Development Bank. GWP Central and Eastern Europe has prepared estimates of financial needs and the members are now looking to develop more detailed activities.

SHARPENED FOCUS

"The GWP work on financing should form part of the overall Dialogue on Effective Water Governance," says Alan Hall, member of the Dialogue task force. "Incorporating the findings of the Panel will help to sharpen the focus of the next phase of the Dialogues."

National governments will be heavily involved in implementation and need to address questions of decentralization, sub-sovereign-level powers, effective municipal government and other relevant proposals. The GWP Dialogues can help to determine which institutions are best placed to implement the Panel's recommendations and will lead to proposals at country level. For example, a recent Governance Dialogue meeting in Malaysia concluded with proposals to reform existing institutional systems and suggested a follow-up meeting on the Panel's findings.

Water is vital: without it, life could not exist. Yet throughout history, especially over the past century, it has been generally ill-governed and hugely under-priced. Its true cost has not been appreciated, and little has been done to raise the finance needed to cover the costs of collection, storage and distribution and of treating wastewater and sewage.

Yet, achieving the goals of universal access to clean water and basic sanitation is eminently possible; most countries have the technology required. Incorporating financial reforms into the governance agenda offers the best hope of achieving "water for all." For more information, contact the GWP secretariat, your nearest regional office or resource center:

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