GLOBAL WATER PARTNERSHIP

Lighthouse Case Study

"Water is now seen as a central plank in the sustainable management of natural resources. It is embedded in all aspects of development; it is an essential part of sustainable economic growth in agriculture, industry and energy generation; and sustains the natural ecosystem on which everything else depends. Water security and green growth are synergistic and mutually reinforcing. Neither can exist without integration."[1]

Dr. Mohamed Ait-Kadi
Chair of the Global Water Partnership
Technical Committee

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Case in Brief

Water is not only crucial to life—without plentiful supplies of water the world's systems of modern agriculture and industrial production would collapse. Growing water scarcity demands new solutions, especially as the complexities of water management increase with population growth, increased urbanization and climate change. The Global Water Partnership (GWP), a multi-stakeholder governance network based in Stockholm, is responding to the need for global leadership with respect to integrated and sustainable water resources management. Although the regulation and control of water systems remains firmly within the control of sovereign states, the GWP aids sustainable governance by brokering partnerships, guiding national and international policy development and providing data, tools and advice about how to sustainably manage water resources in 169 countries in all regions of the world.

To deliver its vision of a water-secure world by 2020, the GWP's three strategic goals are:

1. Catalyze changes in water management policies and practices,
2. Generate and communicate knowledge including managing a definitive library of best practices,
3. Strengthen partnerships with its more than 2,800 collaborating organizations.

The GWP example highlights a number of key implications for network leaders, including: the value of positioning a network as a neutral player in setting policy and resolving disputes; the importance of working across organizational and departmental silos as well as between governments and agencies from different countries; and the importance of maintaining the legitimacy of a governance network by maximizing transparency around operations, financing and decision making processes.

Managing Water in the 21st Century: The Need for Multi-stakeholder Governance

Water is an indispensable resource for agriculture, modern industrial production and much more. This indispensable quality makes the world's growing scarcity of fresh water a potential catastrophe for humanity. Almost three billion people (or 44% of the world's population) live in regions where

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> *"Almost three billion people (or 44% of the world's population) live in regions where fresh water resources are under severe stress. This troubling figure is set to rise to 3.9 billion by 2030."*

fresh water resources are under severe stress. This troubling figure is set to rise to 3.9 billion by 2030.[2] As yet, nobody has determined exactly how the world's long-term need for fresh water will be met, which makes multi-stakeholder networks like the Global Water Partnership (GWP) vital players in establishing new models of governance and water management based on key principles like equity, conservation and sustainability.

Established in Stockholm, Sweden in 1996, the GWP helps nations plan water usage in a systematic and sustainable fashion. It was originally founded through grants and leadership from the United Nations Development Programme and the World Bank. A governance network according to the GSN taxonomy of the 10 network types, the GWP has grown consistently. By 2006 more than 1,000 partner organizations in 50 countries had joined the network. Today, it consists of more than 2,800 partner organizations in 169 countries. The GWP hosts eighty-four Country Water Partnerships and thirteen Regional Water Partnerships. At the core of the GWP's mission are the following roles:[3]

- **Advocating, facilitating and supporting change processes** for the sustainable management of water resources;
- **Brokering partnerships** between government agencies, public institutions, private companies, professional organizations, multilateral development agencies and others concerned with water issues;
- **Coordinating collective action** and adding value to the work of many other development partners;
- **Providing a neutral platform for multi-stakeholder dialogue** at global, national and local levels that connects water resources planning and operations at different scales—trans-boundary, sustainable action;
- **Contributing technical knowledge** and building capacity for improving water management.

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> *With no other network in the world currently able to match its breadth of knowledge, services and capabilities, the GWP still occupies a central role in the international efforts to manage water resources sustainably even though it does not possess—and is not seeking—the power to regulate and enforce water usage.*

Fig. 1 The Global Water Partnership's vision is for a water secure world.[4]

Despite the multi-faceted nature of the GWP mandate, its ability to govern water resources directly is circumscribed by the current state of geopolitics. Nation-states maintain sovereign control of the water resources within their national boundaries, which limits the scope of the GWP's power and authority in governing water resources. As this geopolitical fact is unlikely to change in the near future, the GWP could be described as a "soft governance network" whereby it informs, influences, shapes and enables effective water governance without actually asserting control over water resources. And yet, the importance of soft governance should not be understated. With no other network in the world currently able to match its breadth of knowledge, services and capabilities, the GWP still occupies a central role in the international efforts to manage water resources sustainably even though it does not possess—and is not seeking—the power to regulate and enforce water usage.

Its lack of regulatory power aside, the GWP acts as a governance network in all other respects. It operates globally and welcomes participation from government institutions, banks, NGOs, research associations, universities and private companies. It leverages technology to disseminate water management insights and facilitate multi-stakeholder dialogues. Its legitimacy as a central player in water management is derived from its worldwide scope, the high quality of its research deliverables and the status of its main funders and benefactors (including the World Bank and the United Nations Development Program). And, it endeavors to place water "at the heart of the global sustainability agenda" through active participation at events such as the 2012 Earth Summit which was attended by fifty-seven heads of state and thirty-one heads of government (as well as attendees from 192 countries).[5]

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"The water challenges facing developing countries are further magnified by an unfortunate paradox. As countries develop, citizen expectations for clean water increase. At the same time, increased economic development and population growth are placing ever greater demands on water infrastructure."

The Challenge of Sustainable Water Management

Clean, accessible water is essential for human health and reliable water supply is required for economic development; in fact, liquid water is a necessary condition for life. It is an economic, social and environmental good which can be both an essential natural resource and a potentially devastating natural force when dams break or rivers or waterways flood their banks. Unfortunately, water is also a finite and highly vulnerable resource and there is a growing list of challenges tied to economic development, pollution and population growth—all making sustainable water management increasingly difficult in the 21st Century.

The poorest billion people in the world, for example, continue to face the ever-present risk of water-related diseases like typhoid, cholera and diarrhea.[6] Meanwhile, public utilities in the developing world suffer from budget shortages and are often required to operate water facilities long beyond their intended life spans. Uncoordinated urban planning exacerbates the problem, resulting in new networks built on outdated infrastructure.[7]

The water challenges facing developing countries are further magnified by an unfortunate paradox. As countries develop, citizen expectations for clean water increase. At the same time, increased economic development and population growth are placing ever greater demands on water infrastructure.

Such tension can be managed with long-term planning. In the case of new urban developments, for example, hydro infrastructure is more effectively deployed when conceived in the urban planning stage as opposed to when it is retrofitted into an existing system.

Other challenges arise due to the fact that water resources are frequently shared by multiple jurisdictions, which complicates the planning and managing process and creates the potential for disputes over water usage and pollution. When many countries are co-located on a particular river system, for example, diplomacy, communication, and negotiations are required to ensure that water is used in a sustainable fashion and that pollution's effect on downstream neighbors is managed. These issues are always in flux; not only is the physical hydrosphere constantly changing, factors such as economic cycles and political regimes impact goals and priorities. For example, the thirty million people who live in the Zambezi River basin could be residents of Angola, Namibia, Botswana, Zimbabwe, Zambia, Tanzania, Malawi, the Democratic Republic of the Congo or Mozambique. Warfare, poverty, and regime change have been commonplace in many of these countries and water rights cooperation has not received adequate prioritization.

In addition, coastal cities, which account for three-quarters of all large cities and half the world's population, often pollute local waters, salinize aquifers

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and destroy ecosystems (such as mangroves) that serve as barriers to erosion, storm surges and tsunamis.[8] As these problems accumulate, they make cities more vulnerable to water-related crises in the future.

The Role of the Global Water Partnership in Sustainable Water Management

The GWP assists with all of the issues described above by playing four complementary roles in the global water governance equation:

1. Brokering partnerships and mediating between various stakeholders
2. Guiding national and international policy development
3. Funding and curating water management knowledge
4. Building the capacity for effective integrated water resources management (IWRM)

Some of the specific roles played by the GWP are described below.

Brokering partnerships and providing a neutral platform for multi-stakeholder dialogue

The GWP operates as a partnership facilitator, matching the needs of one partner with the resources of another, while at the same time operating as a neutral platform for multi-stakeholder dialogue. Indeed, it is this role as a neutral platform for multi-stakeholder dialogue and partnership brokering that positions the GWP to play a vital role in averting costly political conflicts over scarce water resources in the future.

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Fig. 2 The annual GWP Consulting Partners Meeting was held in Stockholm on 1 September 2013. The main purpose of the Consulting Partners meeting is to monitor the strategic direction of the Network, as set out in the GWP 2009-2013 Strategy, as well as to receive and comment on the annual activity and financial reports of the Steering Committee.[9]

The potential for conflict is most evident in cases where bodies of water transverse or are contiguous to multiple states. In such cases, governance becomes complicated as the policies of one state affect all the others that share access to the water. For example, the Ganges Delta is inhabited by more than half a billion people. (Although the delta lies mostly in Bangladesh and India, it is also fed by rivers in Bhutan, China, and Nepal.) Similarly, the Danube travels through fifteen European States (and since it drains into the Black Sea, impacts many more) including countries that foster long-simmering political conflicts. There is potential for conflict within states too. For example, there can be disagreements when farmers' associations, environmental groups and industry all have different goals and ambitions for the water.

In 2013, the GWP hosted events in Botswana for the Southern African region and Bogota for the Latin American region to promote cooperation and conflict prevention with respect to trans-boundary water resources.[10] The GWP has also supported water management efforts in the Komadugu Yobe Basin, upstream of Lake Chad in Nigeria (see Figure 3). In collaboration with the Nigerian Federal Ministry of Water Affairs and NGOs such as the Water and Nature Initiative (WANI) and the Nigeria Conservation Foundation, GWP developed a comprehensive knowledge base for the basin and established a process whereby different stakeholder groups could come together to coordinate policy. The deliverables included a water charter to guide efficient and sustainable water utilization techniques and improve the overall approach to sustainable development in the river basin.[11] Open

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communications in forums like these are crucial to flesh out conflicts between various stakeholder groups especially when objectives are at odds.

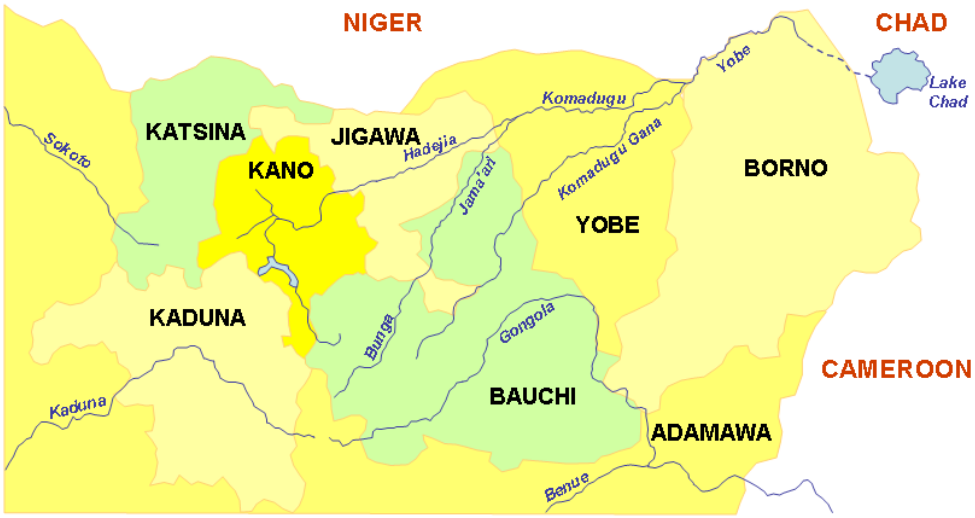

Fig. 3 Map of the Komadugu Yobe Basin (KYB)[12]

In these instances, the GWP positions itself as an objective, non-biased provider of accurate information and facilitates communication between various states and organizations. The perception of neutrality is generally shared by most of the stakeholders in the water planning community, although some objections and dissenting opinions are discussed in greater detail below. The network strives to avoid future conflicts by providing information and best practices about water use in advance.

Guiding water management policies in national and international forums

The GWP regularly participates in international meetings and workshops where its expertise on sustainable water management helps guide policy development and international development projects. For example, the GWP recently intervened in the United Nations Economic Commission for Europe (UNECE) workshop on trans-boundary water cooperation,[13] which focused on developing legal and institutional arrangements, procedures and working methods to guide water management efforts in the basins and aquifers not already covered by international agreements and joint institutions.[14] The GWP also helps states prepare to update international treaties (currently, more than four hundred treaties apply to various aspects or forms of trans-boundary water resources).[15]

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Building capacity for integrated water resources management

Hosting a neutral platform for dialogue serves a vital role in reducing conflict, but the GWP's core strength is in building "on-the-ground" technical capabilities to manage water resources sustainably, an approach that the GWP calls integrated water resources management (IWRM). According to the GWP, IWRM is a process that promotes 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 ecosystems and the environment. Danka Thalmeinerova, Senior Knowledge Management Officer at the GWP says that IWRM is emerging as an accepted alternative to the sector-by-sector, top-down management style that has dominated in the past and furthermore argues that the integration of policy and management approaches across borders and sectors is a necessary reflection of the fundamentally interconnected nature of hydrological resources.

To put IWRM into practice, Thalmeinerova explains that the GWP "coordinate our knowledge partners to identify tools and instruments related to water governance. We develop white and technical briefs that we disseminate and share with our audience."[16] She continues, "We do not focus on conflicts most of which are caused by lack of trust between States based on religious or philosophical differences. Instead we focus on educating people on the benefits of water management."[17]

Thalmeinerova explains that IWRM is complicated by the fact that many, many players impact the hydrosphere, and most of these players lack the knowledge and capacity to implement sound and sustainable water management principles. Drawing these diverse players into the GWP's work has become an integral, but difficult aspect of fulfilling its mission. "We believe that water problems are not caused by dedicated managers but by people outside of the water sector so we need to proactively invite them to speak with us," says Thalmeinerova. "This approach works best when their mandate is closely related to ours, for example, agriculture and poverty reduction both benefit from sound water management principles."[18] Jeroen van der Sommen, founder of the Netherlands Water Partnership and partnership manager at Akvo FLOW[19] agrees, stating, "Practical knowledge is easily lost in the water sector and development sector. We are good at reinventing the wheel over and over again."[20]

As an example of building capacity, one part of the GWP, the International Network of Basin Organizations (INBO), supports organizational initiatives for IWRM at the river basins/lake basins/aquifer level, focusing on the following four outputs:

1. Direct cooperation established between existing, future or pilot water basin organizations through twinning agreements

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2. Mobilization within existing basin organizations of professional support capacities to facilitate the development of new basin organizations and the debate on their management options
3. A synthesis of available knowledge and know-how, of best practices, preparation of recommendations or guidelines and drawing-up of training modules
4. The networking of water documentation systems to share and provide access to useful institutional, legal, economic and technical information at the international level

The GWP also studies water security (e.g. risk of terrorist attacks on water supply or acts of war targeted at water facilities).[21] Specifically, how much is an improvement in water security worth (compared to other pressing needs)? And what is it worth to reduce the risks associated with poorly managed water resource systems?[22] Because water affects so many aspects of human lives as it moves through the hydrological cycle, improved management of water resources can increase not only water security, but also food security, financial security, social security and national security.[23]

Responding to criticism of GWP's Integrated Water Resources Management approach

Although the GWP makes the case that IWRM is emerging as an accepted water management paradigm, the concept is not without its critics. Timothy Moss, Deputy Director of the Leibniz Institute for Regional Development and Structural Planning (IRS), for example, pointed out during a 2010 conference some of the potential weaknesses of the GWP and its focus on promoting integrated water resources management:[24]

- Concept is too vague
- Overplays win-win situations ("integration") and downplays trade-offs
- Based on normative claims rather than sound science
- Process-oriented, but lacks measurable targets for goals
- Designed primarily for developed country contexts
- Enables tension between the integrative approach around river basins and a participatory approach around local communities
- River basins are not always the most suitable units for water management

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> *"...taking shots at IWRM is like attacking democracy. There are many countries that have problems applying democratic principles (for many of the same reasons they have problems applying IWRM). But the conclusion isn't that 'democracy doesn't work'. It is that certain conditions and processes have to be in place before democratic principles can succeed."*

Other critics point out that IWRM principles make sense as guidelines, but are not always pragmatic. For example, Mark Giordano, Principal Researcher at the International Water Management Institute says, "The IWRM concept is very nice but it's basically been turned into a dogma or a condition for international bank lending in developing countries... It's forcing reasonable first ideas into law."[25] In a keynote that he presented to the 6th Botin Foundation Water Workshop, he spoke of an example where an IWRM process was "inflicted" on Sri Lanka in the 1990s which culminated in a sophisticated draft water policy and law including tradable water rights and the reorganization of water administration. Even though the process included more than one hundred meetings and discussions and included input from diverse stakeholders, it was still criticized as being non-transparent and pandering to donor demands while ignoring local cultural norms. As a result, Sri Lanka still does not have a coordinated water strategy even though the region has been subject to droughts and floods. According to Giordano, "Not only was (IWRM) not useful, the way implementation was done set back real reform."[26]

Giordano also discussed how in Gujarat, India, over-subsidization of electricity to the agricultural sector lead to the tragedy of the common situation of over-pumping which affected not only the water supply but the power grid. Since the traditional IWRM solution of pricing electricity and groundwater at cost would be politically untenable especially to the local farmers, he suggested a more pragmatic approach of keeping strategic subsidies and re-routing power for irrigation so that it provided uninterrupted electricity but only for specific times. This strategy proved to be more effective and has been adopted in other regions.[27]

Thalmeinerova and Steven Downey, GWP Head of Communications, point out that IWRM is an iterative process and that "...taking shots at IWRM is like attacking democracy. There are many countries that have problems applying democratic principles (for many of the same reasons they have problems applying IWRM). But the conclusion isn't that 'democracy doesn't work'. It is that certain conditions and processes have to be in place before democratic principles can succeed."[28] They believe that the failure in Sri Lanka was attributable to "a failure of politics; or of some stakeholders hijacking the process" and that the GWP's role should be to support an integrated approach—balancing the interests of water managers with other sector managers while building overall organizational capacity.

The World Bank via its Independent Evaluation Group conducted a full audit of GWP in July 2010 to assess, amongst other factors, the success of the organization and the effectiveness of the Bank as patron. Generally, the report was positive; the auditors specifically lauded the GWP's work in promoting the need for integrated water resource management, partnerships and cooperation with stakeholders, and increasing its relationships and global footprint. Opportunity areas included a bias towards global efforts rather than policies aimed at regional and country partners (especially those not heavily represented by major sponsors), making the data actionable, showing direct responsibility for improved water resources and achieving goals in a more efficient manner.

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The main lessons presented by the World Bank report are as follows:[29]

The evaluation of global programs needs to be transparently independent. The governing body should choose partners in a competitive manner and evaluate progress based on a formal review.

Weaknesses in GWP governance and management during the 2004-2008 period raised issues of transparency and efficiency. The GWP tried to tackle too much material and too many topics at meetings, budgets were not adequately discussed and all regions and countries did not have equivalent impact.

The credibility of a global partnership program can be adversely affected by the politicizing of office-holders and use of resources at the regional and country level. Some countries' water partnerships (CWPs) are too politicized. The GWP needs to increase the Network's governance and review the legal status and activities of the CWPs.

Global partnership programs should have transparent processes in place to ensure the allocation of financial and human resources to where they are most needed. The GWP needs to be more selective with regards to which country-level efforts to support and which methods are most appropriate for that region.

Good communication is the lifeblood of networking. Sharing progress as well as challenges is vital for a global network to succeed. This communication needs to happen openly and regularly and not just at conferences.

Better monitoring and evaluation is essential to generate both global knowledge and self-knowledge. The report suggests that the GWP had completed a significant body of work but had not gathered that knowledge in a centralized, organized fashion. During the time since the report, however, the GWP has improved in this area and now offers a well-organized archive of white papers, data, and case studies.

While the GWP response may not satisfy its critics, the fact that it published the World Bank report on its website and openly responded to criticism is a positive step towards transparency. To encourage conversations like this, the GWP invites input from all stakeholders to contribute to its strategic plans including those who have been vocal critics. Also, it has adjusted the *GWP Strategy: 2014-2019 Towards 2020* document to specifically address the World Bank report.

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Key Metrics: Assessing the Effectiveness of the GWP

Since water management has a direct effect on many aspects of life, health and society, the GWP observes metrics in several different categories (see below). In addition, water management priorities change as countries evolve from low-growth to high-growth economies. Overall society improves via proper water management; for example, piped water improves health, reliable water flow improves the efficiency of small businesses, time savings result from not having to go outside the home to collect water.[30] The impact of water collection on girls (who are typically assigned the task) is even more profound as the time required often reduces school attendance and hence, educational attainment.[31]

Metrics	Impacts
Organizational	• Impact and reach of the organization (e.g. membership, attendance at conferences, global membership, toolbox access) • Effectiveness of media campaigns (e.g. total impressions, aided and unaided recall)
Water Management	• Percentage of citizens with access to clean water • Reduction in water-borne illness (plus related metrics such as reduced infant mortality) • Efficiency rating for water use in agriculture (most crop for the drop) • Cleanliness of water (pollutants parts per million) • Piped water coverage vs. gross domestic product (per country)
Societal	• Decrease in economic and social impact of flooding and droughts • Use of water balance modelling to design a system that minimizes demand on imported water and maximizes water reuse • Increased school attendance (particularly amongst females)

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How Technology Assists the GWP's Mandate

The GWP toolbox includes a free online database that provides access to white papers, briefing documents and case studies related to water management. The database is frequently updated and documents are available in multiple languages. For each of the main topic areas, the website highlights relevant case studies. In addition, information is shared in multiple formats including video, webinar and in-person workshops.

The toolbox hosts an interactive forum for all stakeholders to discuss water-based issues and share best practices such as green infrastructure, rainwater harvesting and desalination. Also featured are new innovative technologies such as membrane filtration systems (including membrane bioreactors), microbial fuel cells and source separation of different waste systems (ideally recycling waste into usable energy).[32] The GWP has occasionally played a leadership role in technology development by working with governments to ensure that intellectual property rights strike the right balance between the incentives required to develop technology and the potential benefits that could be reaped by sharing them.

The GWP actively collects and internalizes feedback from its stakeholders, but remains relatively primitive in its use of technology as a platform for collaboration. For example, the *Towards 2020* document was created over a nine month period by the GWP Steering Committee and included input from all thirteen regions including in-person consultations in the Philippines, Panama, Ukraine and Kenya. The document and strategy diagram has been widely emailed to stakeholders within the water management community for their feedback. While this method is straightforward and seamless, due to the nature of email, it is asynchronous and requires a single return point to review ideas. The GWP should collect data from its online forums and consider adding more advanced and collaborative solutions such as wiki drafting and digital brainstorming.

Challenges and Changing Conditions

Unfortunately, due to population growth and climate change (which exacerbates water management challenges by affecting precipitation patterns, the flow of rivers, the volume of run-off, erosion rates and state of groundwater tables),[33] water management conflicts will increase. Proper water management is crucial for supporting climate resilience

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> *"The GWP has the challenge of convincing citizens who are lucky enough to have bountiful access to clean water (or view it as a gift from nature) that it is their duty to be responsible with respect to water use and to preserve water resources for future generations. People living in developed countries especially (and the one billion people who enjoy water-secure access today) also need to be persuaded that others need help."*

including reducing the impact of flooding, rising coastlines, famine and natural disasters.

Urbanization is also increasing; by 2025 an additional two billion people will live in cities (bringing the total to five billion).[34] Since 95% of this increase will occur in developing countries and many of these people will end up living in slums, the impact on water management will be monumental.

The GWP has the challenge of convincing citizens who are lucky enough to have bountiful access to clean water (or view it as a gift from nature) that it is their duty to be responsible with respect to water use and to preserve water resources for future generations. People living in developed countries especially (and the one billion people[35] who enjoy water-secure access today) also need to be persuaded that others need help.

As these challenges accumulate, networks like the GWP can help by providing new tools for water management and by building the local capacity required to implement them. For example, the same unit of water will have different economic value based on its use (e.g., commercial versus agricultural) and proper cost management will more optimally allocate clean water and grey water for the most effective use.[36] Also, taxes and tariffs should be in place to manage negative externalities such as storm runoff, waste water and overall resource degradation.[37] In addition, improved billing collection methods can result in the same impact as raised tariffs with an overall enhancement to societal equity—but needs to be implemented in a way that is equitable and culturally astute.

Nevertheless, the GWP maintains a strong neutral stance with respect to issues such as managing the flow and access to rivers (e.g. policy with respect to dams, including development, operation, monitoring and decommissioning) and does not aspire to adopt rule-making responsibilities. Since these decisions will have incongruent impacts on people living in different states, the GWP prefers to make the information available for everyone so that countries can make informed decisions and at least start negotiating from a good faith, informed position.

The Future

As the GWP contemplates its evolving role in 21st Century water management, Thalmeinerova argues that it is important to stay close to the mandate set out in the 2015-19 goal-setting document. She states, "We are a small organization and should not spread our limited human resources too thin . . . [or] change just to be fashionable. Some people think we need to pursue new terms, vocabulary. It's not true—we need to keep focused on our core issues."[38] Indeed, the GWP's accomplishments are impressive given the size of the resources to which it has access. Its 2012 income was under ten million euros with a full-time head-count of 18 people.[39]

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> *"Regular data updated to the cloud makes it available to anyone with Internet access. Doing so creates a new dynamic that we haven't seen before that is very powerful. People can combine datasets in useful ways such as combining water point data with information about health of a population or school attendance."*

One of the greatest strengths of the GWP is that it publishes detailed, well-researched resources for the water management community, including technical briefs, white papers and field guides. Although these are impressive pieces of work, the downside is that they take a long time to prepare, are static, and the underlying data is not available for others to access and put to use for other means. The GWP would benefit by encouraging members to share information (such as data from sensors about the extraction of groundwater by individual farmers) that can then be made available for all users. Other examples include sharing data about degrees of grey water safe for different uses, engineering approaches to mitigate flooding and treating domestic water through manufactured wetlands.

Founder of the Netherlands Water Partnership Jeroen van der Sommen believes that all NGOs in the water theatre should share data as it is collected. He says that, "Regular data updated to the cloud makes it available to anyone with Internet access. Doing so creates a new dynamic that we haven't seen before that is very powerful. People can combine datasets in useful ways such as combining water point data with information about health of a population or school attendance."[40] The GWP, although transparent and collaborative, would do well to participate more actively in data collaboration, for example by contributing material to Akvopedia, an online wiki-style database dedicated to Water, Sanitation and Hygiene (WASH) knowledge.

While the GWP has done a credible job compiling its body of work, it still has significant opportunity to implement the findings. According to Patricia Wouters, Director of the International Water Law Research Institute at the University of Dundee, the most pressing issue for IWRM is to impress on governments the importance of cooperating with international law, noting that many governments including Brazil, China, Russia and India have not fully adopted agreements relating to transboundary water management. Wouters observes that building trust, as it relates to observing the rule of law, and fostering regional cooperation are most important, and challenges her constituency to provide leadership. "Lawyers around the world have a lot more to bring to the table; I would like them to step to the plate and help us to reinforce cooperation and do so through the GWP, our country networks, our 2600 partners, and even through the technology."[41]

Implications for Network Leaders

In a relatively short period of time, the GWP became a trusted leader in the water management community, sponsoring and curating insightful knowledge resources and hosting conversations amongst the leading thinkers and practitioners in the field. The most important takeaways for network leaders are:

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Common-pool resources like water require new models of multi-stakeholder governance. The finite and transboundary nature of many water resources render traditional regulatory models based on the nation-state inappropriate. Managing the preservation, maintenance and consumption of water not only requires a regional, and even international, approach; it requires participation from the diverse stakeholders who impact the hydrological cycle. Governance networks like the GWP are a step towards such an approach. Similar multi-stakeholder management regimes can be applied to forests, the atmosphere and even problems like traffic congestion.

Soft governance stops short of rulemaking, but has a vital role to play in addressing global issues. Managing critical resources like river basins, lakes and oceans entails, at some point, the need to set and enforce laws and regulations, capabilities that are currently reserved for governments. Multi-stakeholder governance networks such as the GWP may not engage in rulemaking directly, but they can play other vital governance roles that both support and complement the activities of governments. The GWP succeeds by raising awareness, promoting dialogue and sharing best practices across the water management community but does not, in most cases, have the resources or the authority to establish regulations or to implement its programs or recommendations at ground level. Responsibility for implementation falls to national and sub-national authorities and partners.

Make mandates clear, including limits. The inability to impose regulatory solutions or implement its findings has been frustrating for some stakeholders that would like to see the GWP play a more active role in governing water resources, especially where local authorities lack the capacity to do so sustainably. But such legal powers will remain out of reach for as long as nation-states retain sovereign control over the water bodies that reside in or flow through their territories. It is unrealistic to imagine that this will change anytime soon. Accordingly, the GWP makes its focus (improving the capacity for sustainable water management) very evident and is also unambiguous about its role as a coordinator, convenor and broker in working with local government and international institutions and in building capacity across multiple disciplines and sector interest groups.

Foster an open community and encourage debate among diverse stakeholders. Transparency of information and openness to participation from diverse stakeholders are paramount in order to foster a vibrant community. The GWP welcomes research papers and other forms of participation from various industries, stakeholders and geographic regions, even if their viewpoints differ. It also welcomes debate—for example, prominently re-posting Mark Giordano's critique on the website and responding in a compelling, but respectful manner.

Effective governance of shared global resources requires a truly global outlook. The GWP operates all across the globe including 2800 partnerships in every region of the world. Representatives from all regions are encouraged to attend conferences; in addition, the GWP publishes research and case studies from all over the world. Its water management Toolkit is available in French, Chinese, Portuguese, Russian and Spanish. The South-East Asian

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region developed country-specific versions for Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam. In addition, all website material is made available in dozens of languages via Microsoft Translator.

While all major geographic areas are nominally represented, the World Bank and others have questioned whether all regions receive equitable treatment. The GWP plans to address this going forward by devoting additional resources to helping country-level partners adapt its body of work to the local physical, social, economic, political and environmental circumstances.[42]

Manage scale by adopting and nurturing effective partnerships. Given the breadth of its mandate and the required geographic reach, the GWP's partnership strategy must be rigorous and effective. This goal is central in the Towards 2020 planning document, including the following passage:

> Partnerships are the very essence of GWP. They operate at all levels and across many geographical areas of the world and are the interface between GWP's strategic framework and implementation. The challenge for GWP is to go beyond its stronghold of advocacy to begin providing support for putting IRWM into practice. This will mean more effective engagement with partners and with others outside the water sector, leading by example, and providing practical demonstrations.[43]

Provide consistent, but neutral leadership designed to address multiple jurisdictions. While water quality, water consumption, water waste treatment and the overall ecosystem are fundamentally inter-connected, public policy too often addresses them as separate issues. Providing improved transparency and cooperation helps remove silos, especially where multiple jurisdictions are involved. The GWP's stance as a neutral and objective body underpins its legitimacy and authority in situations where its finds itself mediating interests across multiple jurisdictions.

by Mike Dover for Global Solution Networks

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Global Water Partnership Papers Significant to this Case:

All papers are available at gwp.org.

"The Economic Value of Moving Toward a More Water Secure World, Global Water Partnership Technical Committee (TEC)"

"International Law—Facilitating Trans-boundary Water Cooperation"

"Integrated Urban Water Management"

"Social Equity and Integrated Water Resources Management"

"Water Management, Water Security and Climate Change Adaptation: Early Impacts and Essential Responses"

"Managing the other side of the water cycle: Making wastewater an asset"

"Water Financing and Governance"

"Urban Water and Sanitation Services; An IWRM Approach"

"IWRM and Water Efficiency Plans by 2005: Why, What and How?"

"Water Management and Eco-Systems: Living with Change"

"Poverty reduction and IWRM"

"Effective Water Governance"

"Risk and Integrated Water Management"

"Integrated Water Resources Management"

"The Dublin Principles for Water as reflected in a Comparative Assessment of Institutional and Legal Arrangements for IWRM"

"Water as a Social and Economic Good: How to put the principle into practice"

"Regulation and Private Participation in the water and sanitation sector"

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Endnotes

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[19] Akvo builds open sourceInternet and mobile software which is used to make international development cooperation and aid activity more

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effective and transparent and is discussed in a separate case study in this series.

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