2017 ANNUAL REPORT

SCALING UP FOR IMPACT

WATER SECURITY PARTNERSHIPS FOR PEOPLE, GROWTH, AND THE ENVIRONMENT

2030 Water Resources Group

2017 Highlights

642

partners (293 private sector, 131 government, 218 civil society organizations) participating in

46

working groups in

14

countries/states

Together, these partnerships have:

- Decided on72 areas of priority for their work
- Developed 83 concept notes to concretize those areas
- Used these concept notes to create 67 final proposals
- Set up preparatory arrangements for 58 of these proposals
- Fully implemented 53 of these programs

CONTENTS

MESSAGE FROM THE CO-CHAIR

Scaling up for impact

The beginning of the new year marked a number of significant changes for the 2030 Water Resources Group (2030 WRG). The Strategic Plan for the next phase (2018 – 2023) was approved by the 2030 WRG Governing Council at its extraordinary meeting in June 2017. This plan will allow the Group to expand and scale up its efforts, by building on and deepening its current approach, to reach an ambitious goal of 25 country engagements by 2023.

Another important milestone is the official host organization change from IFC to the World Bank Water Global Practice at the start of 2018. This can be considered a turning point for the program as the transition allows 2030 WRG to scale up its work, deepen existing partnerships, and reach out to new countries and partners. Under the new hosting arrangement, the program has an opportunity to leverage the World Bank Group's extensive network and resources, whilst retaining its multi-stakeholder partnership model.

A recent case study by the Corporate Responsibility Initiative at the Harvard Kennedy School, launched in Davos in January 2018 on the occasion of the 2030 Governing Council meeting, also provided suggestions for further opportunities for scale and transformational change.

It is recognized that business-as-usual in the water sector is no longer an option for most countries. The beginnings of change are under way and water will be an important investment theme for public, multilateral and private financial institutions in the coming decades. As the new Co-Chair of the 2030 Water Resources Group, I will continue to advocate and spearhead the work of this platform as my predecessor, Peter Brabeck-Letmathe, has done so successfully. I also commend IFC, as former host organization, for having given 2030 WRG the space to mature and become the platform it is today.

Now, more than ever, governments, businesses, civil society organizations and citizens around the world are waking up to the immense water challenges, and are beginning to take action. Although affordable solutions are in principle available to close the projected gaps between water supply and demand, for most countries and regions institutional barriers, lack of awareness, and misaligned incentives across both the private and public sectors may stand in the way of implementation. Overcoming these barriers requires persistent action and, in many cases, an integrated agenda of water sector transformation and concrete programs that can make a real difference on the ground.

Paul Bulcke
Co-Chair, 2030 Water Resources Group
Chairman of the Board of Directors,
Nestlé

MESSAGE FROM THE CO-CHAIR

Collaboration is possible and is now more urgent than ever

Water scarcity is a severe threat to global prosperity. If the world doesn't improve its water-management policies and use water more efficiently, 45 percent of projected global economic growth in 2050 will be at risk. The diminishing supply of water—coupled with poor policy choices—will slow growth and exacerbate the impact of climate change.

That's why the 2030 Water Resources Group's work—to promote innovative solutions to the challenges posed by water resources—is critically important. Since joining IFC in 2012, the program has created 14 government partnerships devoted to water issues. Last year, 2030 WRG supported $43.5 million in investments in water-related infrastructure and technology. The program helped reduce 2.23 billion cubic meters annual discharge of untreated waste water and cut the loss of fresh water from the ground by 71.9 million cubic meters.

Working in Bangladesh, India, Kenya, Mexico, Mongolia, and Peru, 2030 WRG is collaborating with IFC and the World Bank's Water Global Practice on initiatives to increase water storage capacity, reduce water loss, improve water productivity in agriculture, and lower emissions of untreated wastewater. 2030 WRG also supports improved water resources management, which includes new policies and regulations, improved management or governance systems for water resources, and new economic incentives for better water management and increased investment in the sector.

The World Bank Group works to maximize financing for development by leveraging the private sector and optimizing the use of scarce public resources. This new paradigm requires more collaboration across sectors and between public- and private-sector partners to solve complex challenges. In the water sector, where challenges affect urban, agricultural and industrial interests, cooperation is essential. Rarely, however, do partnerships in water effectively unify government actors, the private sector, and civil society. It is more urgent than ever that these parties come together, and 2030 WRG has shown that collaboration is possible.

The partners of 2030 WRG are expanding from 14 countries and states to as many as 25 by 2023, growth that is necessary to support the Sustainable Development Goals on water resource management (Goal 6) and in the provision of innovative global public-private-civil society partnerships (Goal 17).

While my duties as co-chair of 2030 WRG Governing Council are ending as the program transitions to the World Bank Water Global Practice, IFC remains a committed partner to this cause. Helping the private sector engage in strategic dialogues related to water resource management is a priority for IFC, and I look forward to continued partnership with 2030 WRG.

Philippe Le Houérou
Co-Chair, 2030 Water Resources Group Governing Council
CEO of IFC, World Bank Group

2017

In 2017, 2030 WRG continued to work with water-stressed countries, at their invitation, to help the public sector work with the private sector and civil society to find solutions to the water crisis and responsibly manage this precious resource.

EXECUTIVE SUMMARY

Scaling up: Transition and transformation

From January 2018, the 2030 Water Resources Group (2030 WRG) will be hosted by the World Bank Water Global Practice. For the past six years, 2030 WRG has grown under the guidance of the International Finance Corporation (IFC) and forged strong partnerships with countries across the globe.

Now, it has reached a turning point, becoming a different but important program in the World Bank Group's collective action on water resources. This will allow us to scale up our work, deepen existing partnerships, and reach out to new countries and partners, leveraging Water Global Practice's extensive network and resources.

As part of 2030 WRG's commitment to inclusivity, it continued to prioritize gender equality during the year. This commitment is expressed in our work with all our partner countries. Peru in particular has made progress in this regard (see page 25). In Maharashtra, 2030 WRG is exploring the relationship between gender and water management in irrigated agriculture.

As such, we support Sustainable Development Goal (SDG) 5 (achieve gender equality and empower all women and girls). In fact, 2030 WRG's work is aligned with all of the SDGs in different ways. While SDG 6 (clean water and sanitation) has the clearest link, none of the development goals set out by the United Nations can be achieved without water. For more information on how we contribute to the global agenda, see page 21.

2017 Highlights

In 2017, 2030 WRG continued to work with water-stressed countries, at their invitation, to help the public sector work with the private sector and civil society to find solutions to the water crisis and responsibly manage this precious resource.

During the year, 2030 WRG worked with 642 partners from across the public, private, and civil society sectors. These partners participated in 46 working groups in 14 countries/states. We play an important role in breaking down silos in countries and encouraging open discussion and collaboration across a range of stakeholders.

The working groups identified their priorities and developed 83 concept notes in total, which were used to create 67 proposals during the year. Of these, 58 are being prepared for implementation and 53 have been fully implemented. 2030 WRG and its partners are focused on concrete programs that can make a real difference, and their efforts are seeing results.

Establishing drip-irrigation market linkages in Karnataka

In the Indian state of Karnataka, 2030 WRG worked with the water resources, agriculture, and horticulture departments of the state government to conceptualize a Drip-to-Market Agro Corridor. The corridor establishes market linkages in drip-irrigated areas, facilitating agreements between government departments and private companies. The first drip irrigation project covers 24,000 hectares, which 2030 WRG helped develop in 2012–13. The project has reduced the use of freshwater by 24 million cubic meters per year through drip irrigation. Fourteen private companies have already signed the memorandum of understanding for market linkages under the program, with additional partnerships expected through a project implementation unit to be established by the government.

New partnership for water security in São Paulo

In July 2017, 2030 WRG signed a memorandum of understanding with the São Paulo Water and Sanitation Secretariat. Four working groups have been established to foster dialogue and transparency in seeking solutions for water security challenges, with a focus on environmental and sanitary regulation of industrial reuse, the viability of new production and commercialization units for sewage treatment stations, the technical and financial feasibility of retrofitting stormwater reservoirs, and the financial sustainability of sanitation for small municipalities.

Multi-stakeholder solutions in Maharashtra

The Maharashtra Cotton Water Platform was launched in 2015 in partnership with the government to deliver coordinated, multi-stakeholder solutions for cotton farmers in drought-prone areas. Building on one of the platform's decisions, 2030 WRG is helping to develop a project proposal on behalf of the Department of Agriculture for grant funding of $270 million from the Green Climate Fund. The project focuses on the rain-fed regions of Marathwada and Vidarbha, alongside a project on climate-resilient agriculture with proposed finance from the World Bank. The two projects represent a combined total of $1 billion in investment to drought-proof Maharashtra's rain-fed agriculture, including contributions from the government of Maharashtra, the private sector, and financial markets.

Responsible industrial water management in Kenya

In collaboration with other partners, the 2030 WRG Kenya partnership is working with the Nairobi City Water and Sewerage Company to develop a mechanism that will improve effluent waste management and enhance recycling by promoting wastewater treatment and compliance with effluent discharge regulations.

A market research study commissioned by the Kenya 2030 WRG Partnership revealed lack of knowledge and awareness as one of the significant impediments to increased water efficiency. To address this, the Kenya Industrial Water Alliance organized three peer-to-peer learning events, a knowledge exchange workshop, a visit to Nairobi Bottlers, a Coca-Cola subsidiary, and Redlands Roses to learn about best practices in industrial water management. These events collectively brought together 100 industry experts across government, private sector and the civil society.

Exploring opportunities in Vietnam

Following initial stakeholder consultations in Vietnam, 2030 WRG undertook an assessment of interventions with the most potential to address Vietnam's water resources challenges, balancing environmental, economic, and social considerations.

In September 2017, 2030 WRG held an advisory group meeting in Hanoi to discuss the analysis. Members from the government, donors, water-user associations, research institutions, non-governmental organizations, and the private sector talked about the report findings and actions to be taken.

For more information on 2030 WRG's work with specific country partners, see the deep-dive stories from page 32 and the country updates from page 46.

Looking ahead

In 2017, 2030 WRG was the subject of a case study by the Corporate Responsibility Initiative at the Harvard Kennedy School (see page 16). This is the first time our work has been reviewed academically. In line with the case study's recommendations, 2030 WRG will continue to focus on increasing local ownership and inclusion at the country level, articulating and demonstrating the role of the private sector in achieving water security, and ensuring that projects translate into transformational change.

2030 WRG Timeline

Ideation & Preparation (2008–2009) | **Incubation (January 2010–June 2012)**

January 2008
Creation of 2030 WRG at the World Economic Forum

2030 Water Resources Group

October 2009
Launch of the *Charting our Water Future* report

2009
First Hydro-Economic Analysis in **South Africa**

2010
National level Hydro-Economic Analysis in **India**

2011
2030 WRG developed an analysis that was used in developing **Jordan's** national water strategy and in shaping a plan for implementation of that strategy

May 2011
Partnership between 2030 WRG and **South Africa**

2012
2030 WRG transitions from the World Economic Forum to its demonstration phase at the International Finance Corporation (IFC) within the World Bank Group

2013
SWPN generated its first wave of National Impact Projects for each work stream

April 2013
2030 WRG signed an MoU with the Government of **Peru**

August 2013
Managing Water Use in Scarce Environments: A Catalogue of Case Studies

2008

Achievements and Highlights

November 2011
Inaugural meeting of the Strategic Water Partners Network (**SWPN**)–the name of our South Africa partnership.

2011
Declaration of Partnership between the 2030 WRG and **Mongolia**

Hydro-Economic Analysis in **Mongolia**

2012
First Hydro-Economic Analysis in **Mexico**

Hydro-Economic Analysis in **Jordan**

First Hydro-Economic Analysis completed for agriculture in **Indian State of Karnataka**

September 2013
MoU signed with the government of **Mongolia**

MoU signed with **Tanzania**

November 2013
2030 WRG Kick Off Workshop in **Tanzania**

Demonstration
(July 2012 – End 2017)

Getting to Scale
2018–June 2023)

2014
First Hydro-Economic Analysis in **Peru**

2014
Second Hydro-Economic Analysis in **Indian State of Karnataka** on Urban and Industry

2014
Tanzania 2030 WRG Partnership established

March 2014
Targeted Analysis on Water Resources Management Issues in **Mongolia**

June 2014
Tanzania: Hydro-Economic Overview: An Initial Analysis

June 2014
Tanzania Analysis: Prioritizing Water Basins for Interventions

September 2014
Creation of multi-stakeholder platform and first Steering Board meeting in **Mongolia**

October 2014
High level dialogue in **Bangladesh**

December 2014
First Hydro-Economic Analysis in **Indian State of Maharashtra**

January 2015
Hydro-Economic Analysis and prioritization of Water Resource Initiatives in **Peru**

May 2015
First 2030 WRG Hydro-Economic Analysis in **Kenya**

An Analysis of Industrial Water Use in **Bangladesh** with a focus on the textile and leather industries

May 2015
Relaunch Catalogue of Good Practice in Water Use Efficiency on new website with 40 new case studies added (www.waterscarcitysolutions.org)

June 2015
Hydro-Economic Analysis of Opportunities to Improve Water Use in the Agriculture Sector in **Maharashtra**

2030 WRG, Government of Bangladesh, Government of the Netherlands, and the World Bank Group signed an MoU for the planning and implementation of the **Bangladesh Delta Plan 2100**

July 2015
Cooperation agreement signed with CONAGUA in **Mexico**

BRAC joins 2030 WRG as global partner

August 2015
Joint 3GF/2030 WRG Case Study: Perspectives on Green Growth Partnerships: Strategic Water Partners Network (SWPN) **South Africa**

October 2015
Kenya 2030 WRG Partnership launched

November 2015
Consolidation and Analysis of Information on Water Resources Management in **Bangladesh**

January 2016
Grundfos, DOW Chemical, the Hungarian Government and IUCN join 2030 WRG as global partners

February 2016
Strengthening the CONAGUA Investment Prioritization System Technical Report in **Mexico**

MoU signed with Consejo Consultivo del Agua in collaboration with CONAGUA, **Mexico**

March 2016
First 2030 WRG International Knowledge Exchange in **South Africa**

Multi-Stakeholder Partnership formalized in **Bangladesh**

June 2016
Hydro-Economic Analysis on the Coal Mining Regions in **Mongolia's** Gobi Desert

August 2016
Hydro-Economic Analysis on Cost-Effective Solutions to Close **Ulaanbaatar's** Future Water Gap

September 2016
CONAGUA **(Mexico)** and 2030 WRG launched Sustainable Agri-Water Initiative

November 2016
First 2030 WRG Introductory Workshop in São Paulo, **Brazil**

April 2017
Second International Knowledge Exchange: Peru-Mongolia Water and Mining Exchange

July 2017
MoU signed with **State of Sao Paulo**, Brazil

August 2017
Hydro-Economic Framework for Assessing Water Sector Challenges in **Vietnam**

Formal 2030 WRG Multi-Stakeholder Platforms launched with Indian governments of **Karnataka**, **Maharashtra**, **Hindon/ Uttar Pradesh**

MoU signed with Ministry of Water Resources, River Development and Ganga Rejuvenation at the national level in **India**.

December 2017
83 concept notes approved, 67 full proposals approved by 11 MSPs, 58 projects in preparatory stage, 19 projects under implementation.

January 2018
2030 WRG transitions from the IFC to the World Bank Water Global Practice. Partners include (alphabetical order): AB InBev, AfDB, BRAC, Coca Cola, Dow Chemical, GGGI, Grundfos, GWP, Government of Hungary, IDB, IFC, IUCN, Nestle, PepsiCo, SDC, Sida, UNDP, World Economic Forum, World Bank Group

2018

CHAPTER ONE

Water Security—— The 2030 WRG Approach

Looking ahead

During an extraordinary meeting of the WRG Governing Council in June 2017, two important decisions were made: firstly, the approval of the new ambitious Strategic Plan for the period 2018 – 2023 and secondly it was decided that 2030 WRG will be hosted within the Water Global Practice of the World Bank Group from January 2018.

This move is an appropriate next step for the organization, reflecting its journey from being a "positively disruptive" pilot project within the IFC to a different but important public-private-civil society program leveraging the wider World Bank Group's reach and retaining its innovative multi-stakeholder model. IFC will remain a committed partner to 2030 WRG, helping the private sector engage in strategic dialogues on water resources management.

The new Strategic Plan, which builds on and deepens the current approach of 2030 WRG over the last years, sets out the ambition to reach in total about 25 countries by 2023 and identifies various opportunities for funding of this work. Furthermore it emphasizes certain areas of work, described in "Thematic Areas of Work" later in this Chapter, and emphasizes the importance to address the challenges of climate change as related to water resources. It also underscores the importance of establishing truly inclusive and transparent multistakeholder platforms, where also the voices of disadvantaged and vulnerable groups of the society are listened to.

The new Strategic Plan, which builds on and deepens the current approach of 2030 WRG sets out to reach

25 *countries by 2023*

and identifies various opportunities for funding of this work.

The Water Global Practice lending program stands at about $24.5 billion—11 percent of total World Bank lending. The program has recently developed a new delivery structure with its donors and clients for 2018 to 2022. Its key business lines to meet the global water challenge are:

- **Water supply and sanitation**
- **Water in agriculture**
- **Water security and water resources management**
- **Water, poverty, and the economy**
- **Hydropower and dams.**

Thematically, the Water Global Practice is guided by the five key themes of sustainability, inclusion, financing, institutions, and resilience. These themes also form the key drivers of the Water Global Practice's results framework, reflected in its partnership with external stakeholders in the Global Water Security and Sanitation Partnership.

The partnership between the World Bank Group and 2030 WRG will bring opportunities to both parties. 2030 WRG's deep and constructive engagement with country multi-stakeholder platforms and the Water Global Practice's existing relationships with countries and water-related stakeholders will be mutually enriching. In addition, this partnership will benefit from potential links with World Bank financing sources, opening up possibilities for each country program. Improved links with the private sector, the World Economic Forum, and additional multi-stakeholder platforms will support policy dialogue and stakeholder engagement.

The Water Global Practice's large and diverse portfolio in lending and knowledge exchange will provide 2030 WRG with an opportunity to develop its operational expertise and technical knowledge. The required compliance with World Bank policies, procedures, and quality assurance will expand 2030 WRG's capacity to predict and manage any environmental, social, or financial risks. The Water Global Practice will provide supervision and guidance throughout the transition.

The World Bank Group, and the Global Water Practice in particular, will benefit from 2030 WRG's expertise in recognizing and mobilizing the private sector as a critical constituency. This will help the Water Global Practice deepen its understanding of and experience in shaping the political economy of water sector reforms, and strengthen its relationships with influential water users who can innovate and demonstrate new models of water security.

The Water Global Practice lending program stands at about

$24.5B

To meet the global water challenge a new delivery structure was developed with its donors and clients for 2018 to 2022.

Key business lines to meet the global water challenge:

New case study on 2030 WRG

This year, 2030 WRG was the subject of a case study by the Corporate Responsibility Initiative at the Harvard Kennedy School–the first academic look at our work.

Since 2003, the Corporate Responsibility Initiative has worked to understand different models of engagement among companies and other key actors to tackle complex development challenges, with a focus on what is needed to effect change that is truly systemic—and that brings sustainable impact at scale.

This case study, "2030 Water Resources Group: Collaboration and Country Leadership to Strengthen Water Security," captures our multi-stakeholder institutional model and five early lessons relevant for leaders working on water security and other complex, systemic challenges.

The study recommends that 2030 WRG focus on three areas as we work to mainstream our approach to water security:

- Continuing to increase local ownership and inclusion at the country level—becoming more effective in our approach.
- Articulating and demonstrating the role of the private sector alongside government and civil society in achieving water security.
- Ensuring that projects translate into transformational change in existing partner countries, while expanding into new ones.

To read the case study, please visit https://www.2030wrg.org/team/case-study

1. Government in the lead.

Recognizing the central role and ultimate responsibility of government in managing water resources, 2030 WRG's approach is designed to help fill capacity gaps and overcome the political constraints governments face in this area.

2. Local ownership and collaboration from business and civil society.

2030 WRG cultivates multi-stakeholder platforms that bring stakeholders together across sectors to understand the water challenges they face, develop shared priorities, and work in groups to pilot cost-effective solutions. They find new ways of implementing existing policy and informing policy change. And, in the process, they build the political capital that change requires. In this way, multi-stakeholder platforms enable governments to make the tough policy choices needed to achieve water security in an inclusive and transparent way.

3. A combined focus on data and analysis, stakeholder dynamics, and the political economy of change.

2030 WRG has learned to balance a technical and economic understanding of water challenges with a deep appreciation of the institutional and political context. The group funds rigorous analysis to convey scale and urgency, create demand for collective action, and help stakeholders build a shared understanding and prioritize their responses. It focuses on engaging with these stakeholders before entering a country.

4. Strong backbone support.

Just as important as water expertise is the ability to catalyze, coordinate, and support dialogue and collaboration among diverse stakeholders who may not know or trust each other before they engage with 2030 WRG.

2030 WRG cultivates multi-stakeholder platforms that bring stakeholders together across sectors to understand the water challenges they face, develop shared priorities, and work in groups to pilot cost-effective solutions.

5. Vital roles for individual champions.

Individual leaders at the global, national, and state levels—in business, government, and civil society—have been critical to the progress 2030 WRG and its multi-stakeholder platforms have made to date.

Context and Background: Water scarcity and the economy

The World Economic Forum has ranked water crises as one of the top three global risks for the past five years. This ranking is based on the views of a thousand leaders from business, academia, international organizations, and civil society outside of the traditional water sector. The world is starting to realize the critical role water plays in our development, our economies, and for the ecosystems on which we all depend.

Over the past 50 years, the world's population has doubled and global gross domestic product (GDP) has grown tenfold. Agricultural and industrial outputs have boomed, with more than 70 percent of global water abstraction occurring in the food value chain, and cities have grown exponentially. These trends have put water resources under increasing strain, with dire consequences for the world's population. Water scarcity affects more than 40 percent of the global population and is projected to rise. More than 1.7 billion people live in river basins where water use exceeds recharge. Over 80 percent of wastewater resulting from human activities is discharged—untreated—into our rivers and oceans.

Governments in water-stressed regions seeking to grow their economies will need to decide how to manage competing demands for water. At the same time, increased climate variability and demographic pressures such as urbanization are placing more stress on the system.

In 2009, 2030 WRG published the report *Charting Our Water Future—Economic Frameworks to Inform Decision-making*. It was one of the first attempts to present the relationship between water and the economy at a global scale in a compelling way to an audience outside of the traditional water sector.

In 2015, the report *Securing Water, Sustaining Growth* (Sadoff et al.) was published on behalf of the Global Water Partnership and the Organisation for Economic Co-operation and Development (OECD) Task Force on Water Security and Sustainable Growth. In addition to providing evidence that linked water and economic development, the report also presented recommendations for increased investments in the water sector.

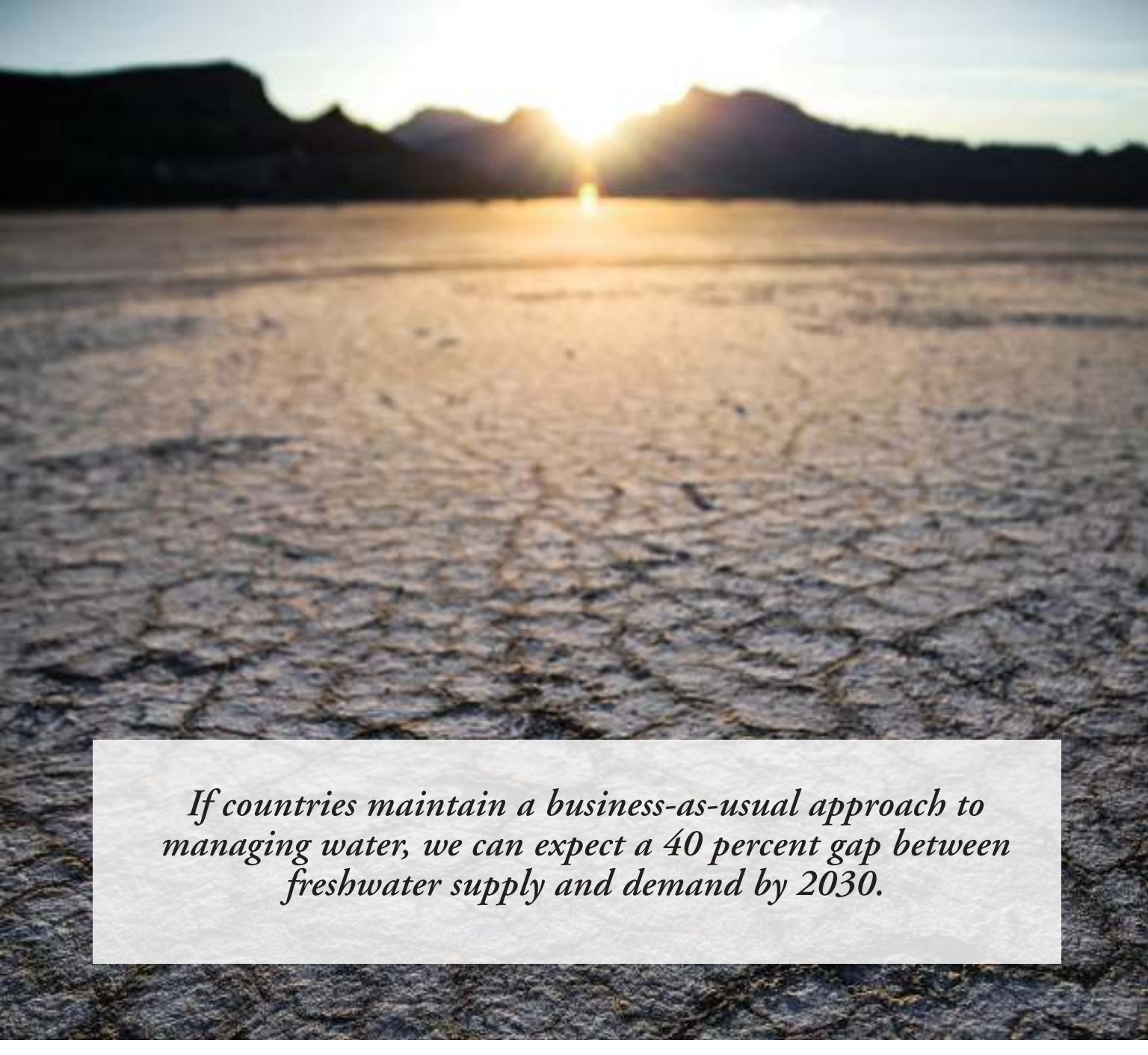
Water scaricity affects more than

40%

of the global population and is projected to rise.

More recently, in 2017, the World Bank presented the report *Uncharted Waters—The New Economics of Water Scarcity and Variability* (Damania et al.), which provides analysis and case studies on how water effects economies, agriculture, cities and their industries, and communities.

If countries maintain a business-as-usual approach to managing water, we can expect a 40 percent gap between freshwater supply and demand by 2030. This gap cannot be closed by one community, company, or country. We all need water and we all need to act to preserve it.



If countries maintain a business-as-usual approach to managing water, we can expect a 40 percent gap between freshwater supply and demand by 2030.

Our Vision and Mission

Why we do what we do

We envision a world with enough safe water to support the needs of people, ecosystems, and the economy.

The 2030 WRG aims to contribute to the United Nations' SDGs of ending extreme poverty; growing strong, inclusive, and transformative economies; and protecting our ecosystems. These goals cannot be achieved without water, nor can they be achieved alone. By working together to develop and implement the right strategies, policies, plans, and programs, much more can be achieved and sustained.

What we need to do

Our mission is to help countries achieve water security by 2030 by facilitating collective action on water between government, the private sector, and civil society.

How we do it

2030 WRG brings together public, private, and civil society stakeholders to have open discussions about water management and to develop concrete proposals that can help improve the management of water resources.

We only work with countries at the request of the government —our impact depends on a strong government commitment to work with partners through a constructive, transparent, and sustained dialogue. We tailor our level of involvement and approach to each country's water challenges. 2030 WRG creates a convening platform, which is a neutral place where stakeholders can collectively identify and agree on priorities and activities to improve water resources management in their countries.

Our foundation

2030 WRG is a new kind of partnership designed to unite diverse groups with a common interest in the sustainable management of water resources.

It was launched in 2010 through an informal collaboration between the International Finance Corporation (IFC), the World Economic Forum (the initial host), multilateral and bilateral agencies (the Swiss Agency for Development and Cooperation), private companies (Nestlé, PepsiCo, and The Coca-Cola Company), and other organizations such as the World Wildlife Fund.

In 2011, IFC and various partners agreed to develop a more formal structure. 2030 WRG started its second phase, during which time it was hosted by IFC from July 2012 to December 2017.

January 1st, 2018 marks the start of the third phase, in which 2030 WRG will be hosted by the World Bank Water Global Practice to accommodate plans for scaling up and creating more impact.

Contributing to the global agenda

2030 WRG is committed to contributing to the recently adopted SDGs. This commitment is not just to the goals that specifically target water, but also to those that depend on water. Much of the work that 2030 WRG and its partners are planning or already implementing is also related to adapting to the effects of climate change.

Our work contributes in various ways to the goals to end poverty and hunger and ensure good health. Our programs also contribute to building sustainable cities and protecting the marine environment and terrestrial ecosystems as we focus on producing more food with less water, cleaning up rivers, and improving the treatment of wastewater and industrial effluents.

The SDGs include a strong call for various kinds of partnerships to contribute to their implementation, particularly between governments, the private sector, and civil society. 2030 WRG is an example of such a partnership, and our approach and role fits well in the ongoing efforts to implement these international commitments.

Our Approach and Guiding Principles

The 2030 WRG's core values of inclusivity, transparency, accountability, and integrity are central to achieving its mission.

Inclusivity

We aim to ensure that our multi-stakeholder platforms give everyone an equal say and that all voices are heard, particularly those representing minorities, and vulnerable and disadvantaged groups. To establish the credibility and legitimacy of these platforms, we want to involve all relevant actors in the countries in which we work and identify legitimate stakeholders, ensuring that their interests are represented fairly and transparently. During the reporting period, 2030 WRG continued to improve the inclusivity of its programs in all of its partner countries. Recognizing the role women play in managing water resources, we ensure our multi-stakeholder platforms include women, and that our work is guided by how they are affected by water challenges. See page 24 for more detail on our gender strategy.

Transparency

We believe that people perform more effectively if they know that their words will be heard and their actions will be seen. 2030 WRG aims to ensure that its work remains transparent.

Access to information promotes a broader understanding of global issues and allows policymakers and advocacy groups to make informed decisions. 2030 WRG adheres to the CEO Water Mandate's Guidelines for Responsible Business Engagement in Water Policy and encourages its partners to do the same. We also provide clear and accessible ways for our stakeholders and the general public to view and download any of our material from our website. This includes documents on the work of the multi-stakeholder platforms in the countries in which we operate.

Accountability

Accountability for water security rests on many shoulders. The 2030 WRG Code of Conduct governs the Secretariat, multi-stakeholder platform chairs, personnel on temporary assignment, and corporate and non-corporate members. These 2030 WRG actors share the code with everyone they engage with in the countries in which they operate. This way, we can share the principles and rules governing our actions and encourage similar behavior in our partners.

Integrity

We hold ourselves to the highest standards of integrity, ethical behavior, and good business practices and we expect our partners to meet these standards. 2030 WRG identifies, examines, and evaluates integrity risks. It reports suspected fraud or corruption to its World Bank Group partners (800-831-0463 or investigations_hotline@worldbank.org).

Strengthening the voices of women in water management

Women are increasingly recognized as central in managing and safeguarding water resources, but cultural and structural barriers still hinder their participation in managing this resource. 2030 WRG is committed to SDG 5 (achieve gender equality and empower all women and girls) and will continue to promote inclusive multi-stakeholder platforms that represent the interests of all individuals—women and men alike—who rely on this shared resource.

We promote inclusion in water management by:

- **Using a gender perspective to guide our initial analysis in new countries**. This includes engaging with stakeholders to identify water resources challenges that may affect women in particular and developing solutions to address these effectively.

- **Ensuring representation in the 2030 WRG's multi-stakeholder platforms is inclusive and gives voice to both men and women.** We engage key actors in each partner country to ensure a more inclusive process that incorporates women's views and encourages equal opportunities for leadership, irrespective of gender. For example, in Peru, the Minister of Women and Vulnerable Populations is a member of 2030 WRG's Steering Board.

- **Taking a gender-inclusive approach to implementing programs.** We design our programs to reduce the risk of unfair biases. For example, by ensuring single-women households have access to financial instruments for efficient irrigation.

By addressing these three focus areas, 2030 WRG will contribute to a better understanding of gender dynamics in water management, ensure women's voices are heard, and ensure women benefit from its work.

Recognizing that gender dynamics and water needs differ by country, 2030 WRG's approach to developing targeted in-country activities is tailored to each country and follows a step-by-step approach, with specific activities targeting areas that significantly affect women. Each new country will have a gender strategy and a system to monitor gender indicators. We will also encourage women's participation in the multi-stakeholder platforms in existing country partnerships and ensure that equal access to key water solutions guides the implementation of country initiatives.

Championing women's participation in water solutions in Peru

Gender was a key focus for 2030 WRG when it established a multi-stakeholder platform in Peru. The steering board, working groups, and steering committee consist of representatives from the public, private, and civil society sector who also work to advance women's rights.

Representatives include:

- Dr. Beatriz Merino, the first female Prime Minister of Peru, who champions the advancement of women and the underserved population.
- Albina Ruiz, President of Ciudad Saludable, who advances the rights of the poor through sustainable development projects, mostly in solid waste management recycling.
- Elsa Galarza, Minister of the Environment, who promotes the rights of the vulnerable through extensive campaigns for recycling, clean water, and an increased role for women in leading those changes.
- The platform also has representatives from the ministries of women and vulnerable populations, and inclusion and social development.
- Mercedes Castro, a leader in promoting water rights for disadvantaged and vulnerable communities.
- Veronica Bonifaz, leader of Corporate Affairs in Arca Continental—a Coca-Cola bottling company in Peru.
- Julia Torreblanca, one of the leading executives in the mining sector in Peru.

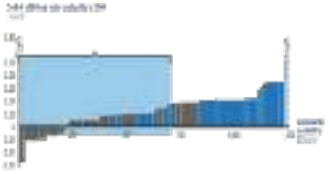
58%
of steering board members are women leaders in Peru

30%
of working group chairs are women

3 of 5
cabinet members represented on the board are women

The Need to ACT

Our work in each country is based on the need to ACT: Analyze, convene, and transform. 2030 WRG raises awareness through analysis, triggers momentum by convening initiatives, and enables transformation. After applying this model in our country engagements across Africa, Asia, and Latin America, this framework is still flexible, allowing us to tailor our engagements to meet the needs of each country.



Analyze

2030 WRG works with partners to analyze and build on existing water information, enhancing understanding of the scale and urgency of the water challenge to support better decision making. The analysis is tailored to the needs of the country and is used to underpin multi-stakeholder discussions.

We aim to use the information produced to encourage major water users and the private sector to get involved and take action. 2030 WRG works closely with country stakeholders to ensure that local ownership of the initiatives takes root.

Convene

We bring together public, private, and civil society stakeholders to help create broader awareness, trigger action, and build momentum. During these discussions, stakeholders identify and agree on priorities and activities, and forge partnerships based on trust and a shared commitment to transforming the water sector.

Transform

2030 WRG helps multi-stakeholder platforms in countries draft concrete proposals, develop new policies to improve water-use efficiency and reduce pollution, prioritize various investment opportunities, and identify innovative financial solutions for investments. Each country has its own challenges and needs, so the solutions need to be tailored to the local situation.

Thematic Areas of our Work

2030 WRG partners with the public sector, private sector, civil society, academia, research organizations, and international agencies to develop sustainable water solutions and ensure social development and economic growth in water-stressed countries.

Through targeted analysis, we work with countries to identify water challenges, and engage with stakeholders to develop best-practice solutions and replicable partnership models for water management.

In some countries, 2030 WRG focuses on sectoral water in the agricultural, industrial, and urban sectors. In others, the focus is on thematic issues, such as strengthening governance for better water resources management. In every case, the country's main stakeholders decide on their areas of focus, some of which are highlighted below.

Innovative financial mechanisms in the agricultural sector

Based on the request of stakeholders in various countries, 2030 WRG works to consolidate innovative financial mechanisms and bring new funding into the water sector. We focus on building knowledge on innovative financing models to implement water-efficient technologies in agriculture—a particularly important sector for water management. 2030 WRG commissioned an assessment of the challenges of and opportunities for using public, private, and blended finance for water-saving technologies in agriculture. The study developed business cases on cost-effective tools and mechanisms and institutional frameworks that use public-private partnerships (PPPs) to implement water-efficient technologies. The findings from this global study have informed 2030 WRG's work in several countries. Earlier, 2030 WRG led a study on innovative financing related to the treatment and reuse of wastewater. Download the Urban Waste Water PPPs White Paper on our website: https://www.2030wrg.org/publications.

Water governance and economic incentives

In some countries, 2030 WRG works with key stakeholders across sectors to improve water governance. We focus on strengthening institutions and creating economic incentives for better water resources management, in particular to reduce water abstraction and wastewater emissions.

Agricultural water efficiency

2030 WRG works on improving agricultural water-use efficiency in most of its partner countries. We help develop public-private partnerships to enhance the productive use of agri-water, [1] increasing agricultural water savings, reducing run-off pollution, and increasing farm productivity and income. 2030 WRG's programs include a combination of water-efficiency solutions, infrastructure development, local water governance, good agricultural and sustainability practices, and market linkages, supported by an enabling policy and regulatory environment.

[1] "Agri-water use" refers to water consumption in agriculture through evapo-transpiration and lost return flows.

2030 WRG's programs include a combination of water-efficiency solutions, infrastructure development, local water governance, good agricultural and sustainability practices, and market linkages, supported by an enabling policy and regulatory environment.

Urban water management

2030 WRG convenes stakeholders to assess the status of municipalities' water usage and incentivize them to reduce leakages. We also support private sector participation to improve municipalities' performance in managing their wastewater, including identifying opportunities for reusing and recycling it.

Industrial water management

2030 WRG identifies public–private partnership opportunities in industrial sectors, bringing in best-practice technological solutions and financing models, and implementing demand-side efficiency measures through wastewater treatment and reuse. We also work with governments, the private sector, and civil society to develop tariff structures for industrial water use.

Measuring our Impact with Concrete Indicators

It is important that we build strong partnerships and understand how decisions are made in the countries in which we operate. To this end, 2030 WRG has used its experience of working in various countries to develop a theory of change.

Based on this theory, we have developed a results metric to chart the steps that we need to take in each country. We use these inputs to determine the desired outputs, outcomes, and eventual impact. Clear indicators are associated with each step, focusing on concrete, measurable results.

Our mission is to help countries close the gap between water demand and supply by 2030. Water gaps can refer to both water quality and quantity. Our indicators track water storage capacity, abstraction from ground and surface water, water productivity in agriculture, emissions of untreated wastewater, and water pollution. We also measure improved water resources management, which includes new policies and regulations, improved management or governance systems for water resources, or new economic incentives and mechanisms that will lead to better water management or more investment in the sector.

As shown in the example of Bangladesh, on page 52, the arrow represents a subset of the key indicators we use in our results metric. It is used to show how a multi-stakeholder platform is established in a country, and how programs are developed by that platform. 2030 WRG does not implement any such programs or policies itself. They are always implemented by other partners in the country. We do, however, continue to measure the impact of such programs.

Our output indicators cover the following areas:

- Measuring initial steps
- Number of hydro economic analyses
- Establishment of multi-stakeholder platforms
- Inclusiveness and effectiveness of the multi-stateholder platform
- Number of priority areas agreed
- Number of concept notes approved
- Number of full proposals developed

The outcome indicators focus on:

- Stakeholders' attitudes on water
- Preparatory arrangements for the implementation of programs and policies
- Funding allocated
- Investments generated
- Programs under implementation
- Stakeholders' involvement
- Investors' confidence in water management regimes

The impact indicators are based on real changes on the ground:

- Improved water resources management policies and governance
- Reduced fresh water abstraction (increased water efficiency)
- Reduced discharge of untreated/polluted wastewater
- Increased agricultural water productivity
- Increased cost-effective water storage

The impact of our multi-stakeholder platforms

2030 WRG recently conducted stakeholder surveys on the impact of its multi-stakeholder partnerships to track improvements in water governance mechanisms. The results monitored increasing awareness, coordination and collaborative action among stakeholders, and the effectiveness of the platform in addressing water challenges. A pilot of this survey was conducted in Mongolia and Bangladesh.

94%

of Mongolian stakeholders and

86%

of Bangladesh stakeholders reported increased awareness of the water challenges and the need to act on them

95%

of stakeholders in Mongolia and

84%

in Bangladesh felt that collaborative and coordinated action had improved as a result of 2030 WRG's work in the country

84%

of Mongolian stakeholders and

68%

of Bangladesh stakeholders reported that the multi-stakeholder platform was effectively resolving water issues

CHAPTER TWO

Stories from the Field

In the following chapter, we have outlined four in-depth stories from the field. They showcase different types of engagement, in different regions around the world where we are working in several different sectors. The stories feature some of our valued stakeholders on the ground.

Peru: Recognizing responsible water-using companies

Since 2016, the 2030 WRG Peru partnership has been working closely with the National Water Authority to encourage companies in the private sector to assess the water footprint of their processes and become responsible water users. Through this process, they can determine how much water they consume, understand the effect this consumption has, and take action to reduce their footprint.

An important part of 2030 WRG's work in Peru is supporting and promoting the Blue Certificate. It created this award with the National Water Authority at the end of 2015 as a tool for government to recognize and encourage companies to implement water-saving measures and develop shared value strategies with the communities in which they operate. This initiative closely connects the state and the private sector with sustainable water management.

Companies are awarded a Blue Certificate if they:

- Develop a water footprint assessment (following ISO 14046)
- Commit to and accomplish a water footprint reduction
- Set out and implement a program of shared value with communities in the area. Companies work on these plans for a year before the National Water Authority conducts a comprehensive audit and awards the certificate.

The certificate has been well received in the private sector. In July 2017, Mexichem was the first company to obtain the Blue Certificate. In November, another company, Termoselva, received the certificate and six more started the one-year process of certification. More than 50 companies attended the award ceremony.

Companies that have achieved the Blue Certificate have reduced their fresh water abstraction by 1,000 cubic meters per year and have increased their cost-effective water storage by 14,000 cubic meters. The National Water Authority is also encouraging the private sector to include water projects in their corporate social responsibility activities. To date, financing for such activities has totaled $94,000 and more than 19,000 people have benefited from corporate social responsibility initiatives.

All eight of the companies that have obtained or are obtaining their certificate are part of the Peru 2030 WRG platform. The platform's working groups are implementing a communication strategy to engage with companies in the private sector. They have also developed an advocacy strategy and held bilateral meetings on the Blue Certificate and its benefits.

By being awarded the Blue Certificate, companies are saving water and promoting best practice, but they are also showing stakeholders and society that they are committed to responsibly using this scarce resource.

"We are committed to support activities such as the Blue Certificate that is already famous thanks to the work of the ANA and the 2030 WRG and that contributes to a greater water saving, and to a more responsible and equitable consumption of this valuable resource."

José Manuel Hernández, Minister of Agriculture and Irrigation


Companies need to know how much water they consume, understand the effect this has, and take action to reduce their footprint.

South Africa: Making mine water management sustainable

For about 150 years, mining has been woven into the fabric of South African society. Coal is used to produce about 80 percent of electricity in the country and it is the world's sixth largest exporter of the resource.

The largest coal deposits are found in the province of Mpumalanga, where the Strategic Water Partners Network (SWPN) recently helped establish a mine water coordinating body PPP. This partnership aims to identity, develop, and implement a range of infrastructure and non-infrastructure solutions for sustainable mine water management and mine closure.

If environmental water flow requirements were considered during water allocation, most of the coal fields would have less water resources available than they have now. Water flowing from the mines pollutes the Upper Olifants River catchment. Downstream from the mines, Loskop Dam has more than seven times the standard level of sulphate—a clear indication of the severity of the pollution taking place.

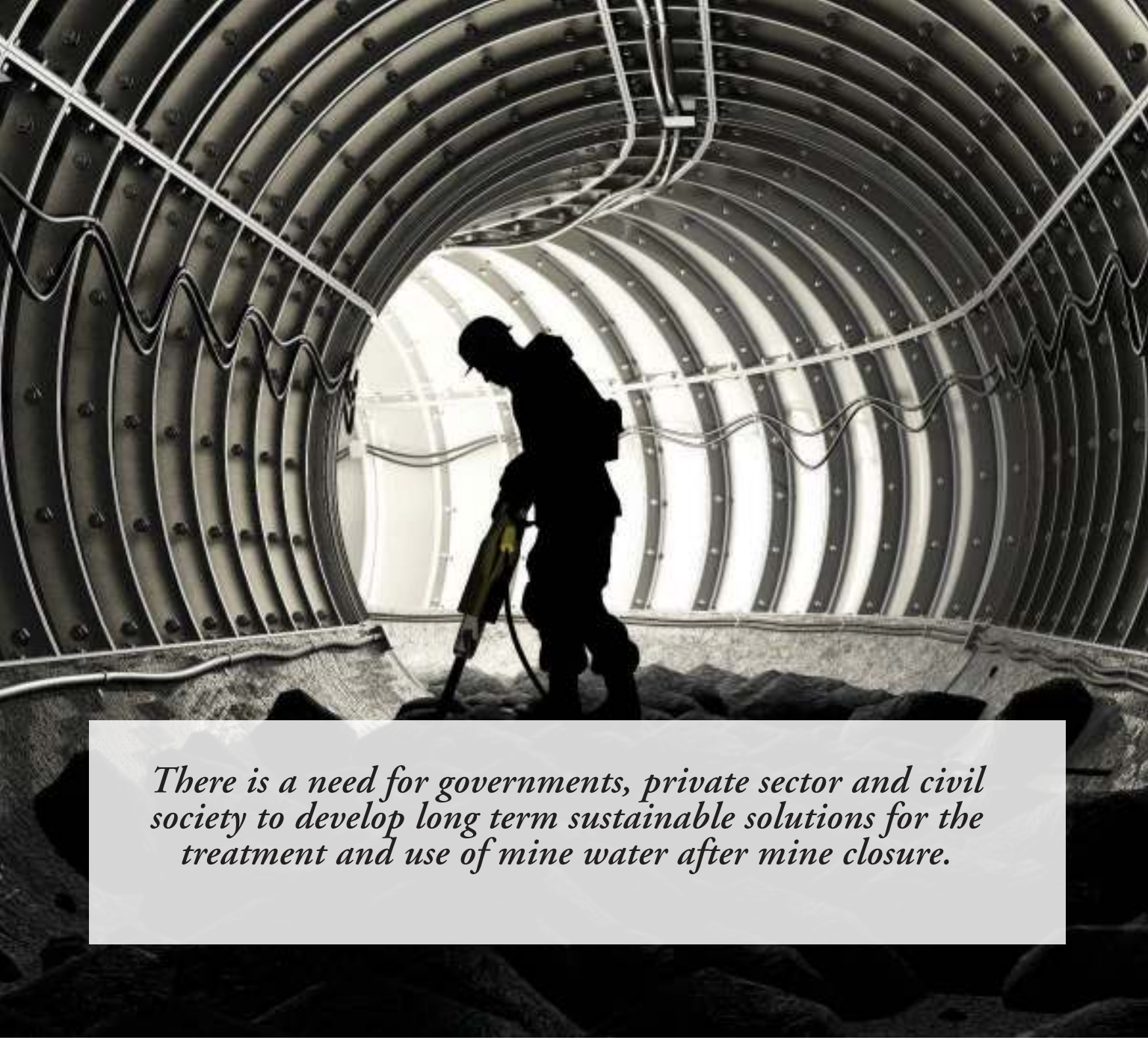
Mine water reuse has been an area of focus for the SWPN since its establishment. During the problem analysis, stakeholders agreed that mining companies' continued installation of energy and capital-intensive mine water treatment plants is not a sustainable solution to the problem of mine water generated beyond mine closure. Management solutions need to be conceptualized at a provincial scale and negotiated between key public and private mining partners.

The SWPN initiated a process for key stakeholders to work together to define and put in place the building blocks for a sustainable solution to the challenges of pollution and potential over-allocation of water. During a problem analysis, the stakeholders presented their interests and inputs, which were used to develop interventions and define the function and form of a mine water coordinating body.

In the context of contentious mine closure (owing in part to the financing of liabilities), a changing fossil fuel market, and the historical importance of mining for economic development in South Africa, establishing a coordinating body for competing mines, regulating government departments, and civil society to forge regional solutions is an important breakthrough for the sustainability of mining (and mine water management and mine closure) in South Africa.

The process was inclusive, with about 50 representatives from 20 different organizations taking part. The steering committee of the mine water coordinating body includes representatives from Anglo American, Eskom, Exxaro, Glencore, South32, Sasol, the Department of Mineral Resources, the Department of Water and Sanitation, the Water Research Commission, the Chamber of Mines, the SWPN, the Trans-Caledon Tunnel Authority (a public water infrastructure liability management utility), and the NEPAD Business Foundation (legal host). The coordinating body members have developed and approved the governance structure. The body is funded by the member mining companies.

The mine water coordinating body has several projects under way—some are being scoped and others are being implemented. These include the Mine Water for Irrigation Project, the Green Engine, and the Arnot Regional Water Scheme.



There is a need for governments, private sector and civil society to develop long term sustainable solutions for the treatment and use of mine water after mine closure.

"The first wave of wastewater PPPs for the Ganga basin exemplifies World Bank Group collaboration, building upon World Bank's overall PPP framework, 2030 WRG's stakeholder engagement process, and IFC's transaction advisory support."

—Junaid Ahmad, Country Director, India, World Bank

India: A PPP paradigm shift in rejuvenating the River Ganga

The Ganga basin, which covers more than a quarter of India's land, is home to 450 million people. Population growth and rapid urbanization have placed unprecedented stress on water resources, leading to seasonal water shortages and water pollution. Estimates suggest that 8 billion liters of untreated wastewater flows directly into the River Ganga every day.[2]

Following years of failed attempts to rejuvenate the river, the Indian government is inviting the private sector to help by entering into innovative PPPs for municipal wastewater treatment.

In 2015, 2030 WRG started collaborating with the Ministry of Water Resources, River Development, and Ganga Rejuvenation in India to develop partnerships with the private sector and civil society for wastewater solutions in the Ganga basin. It initiated a PPP demonstration project for the cities of Mathura and Vrindavan. 2030 WRG facilitated multi-stakeholder discussions and pre-feasibility studies to assess the project scope, identified partnership approaches, and developed hybrid annuity-based PPP options for sewage treatment and reuse infrastructure.

These activities, along with parallel engagements by the World Bank Group, cemented the government's decision to consider PPP solutions, resulting in the government retaining IFC as a transaction adviser in early 2017 for the first three PPPs (Mathura, Varanasi, and Haridwar) under the national Clean Ganga program. The advisory team launched a competitive bidding process with a funding structure that balanced public and market risks, which resulted in a strong market response and multiple bids. The government signed the first two concession agreements with private companies in October 2017 for a total wastewater treatment capacity of 132 million liters per day.

Under the chosen hybrid-annuity model, the government pays 40 percent of the project cost based on construction milestones. The remaining 60 percent is paid over 15 years as annuities to the private concessionaire, along with operational and maintenance expenses. In addition to enhancing project viability for the concessionaire, the performance-linked payments ensure the longevity of wastewater assets.

[2] http://nmcg.nic.in/pollution.aspx

2030 WRG has played a critical role in changing the mindsets of government leaders to recognize the role that the private sector can play in innovative PPP transaction models.

As the first PPPs in this sector, these projects represent a significant paradigm shift towards sustainable, PPP-based wastewater treatment business models in India. Building on this momentum, the government has sanctioned an additional 13 PPP projects in the Ganga basin with a total value of $650 million, leveraging the existing $1 billion World Bank loan to mobilize private capital. Under its memorandum of understanding with the Ministry of Water Resources, River Development, and Ganga Rejuvenation, 2030 WRG is supporting the identification of market mechanisms to recover and reuse resources in the Ganga basin, triggering a move from a linear to a circular economy.[3]

[3] A circular economy is regenerative, closing gaps in processes by reducing, reusing, and recycling. A linear economy uses a "take, make, and dispose" approach.

In 2016, treated effluent discharged from the central wastewater treatment plant in Ulaanbaatar into the Tuul River contained more than seven times the permissible level of pollutants.

Mongolia: Protecting water resources by making the polluter pay

Economic activity is concentrated in Mongolia's capital of Ulaanbaatar, which accounts for about 70 percent of total potable water consumption in the country.

Water availability is critical for industry, but the treatment of wastewater is limited, especially in the manufacturing sector. This pollutes the country's freshwater resources and affects water availability, which is already constrained by low rainfall and high evaporation rates. Ulaanbaatar is projected to face a 50 percent water demand–supply gap by 2030, which will have a severe effect on the city's industrial sector.

The government is focused on balancing economic and environmental considerations to secure the country's water resources and its economic growth.

The 2030 WRG team began work with the Ministry of Environment and Tourism, and private and civil society stakeholders to address issues in legislation on water pollution fees. Despite being enacted for more than five years, the law had not been implemented because of its overly complex model for estimating pollution charges in the context of limited capacity. While supporting the rationale for pollution payments, the private sector strongly voiced its concerns on these issues. 2030 WRG presented best practices from other countries, highlighting simple water pollution tariff models that incorporate economic incentives for reducing pollution, with minimal, risk-based monitoring.

Once stakeholders were convinced of the value of adopting a simpler model for determining water pollution fees, 2030 WRG coordinated stakeholder inputs to identify a preferred model for water pollution charges for the country. 2030 WRG undertook an extensive analysis of data on effluent discharge and the revenue requirement for adequate wastewater treatment to support a proposed fee structure. This was discussed with the private sector, along with measures to incentivize improvements in effluent quality. The amended Water Pollution Law has been submitted to Parliament, and implementation is proposed to start in Ulaanbaatar in 2018.

In the first year of implementation, pollution payments are expected to total more than 2.1 billion Mongolian tugrik ($900,000). The charges and incentives are expected to reduce pollution levels in effluent discharged during highly polluting activities. In addition, the revenue raised will cover the operational expenses of the city's wastewater treatment plant, preventing the discharge of more than 61.2 million cubic meters of inadequately treated effluent into the Tuul River.

2030 WRG is also helping the government and private companies pilot the reuse of industry wastewater by establishing water quality standards for identified end-uses. This will improve water resources management in the country even further.

"2030 WRG's very fruitful and successful work for the implementation of the Water Pollution Fee Law, based on the polluter-pays principle, is a big step forward in the water sector in Mongolia."

Mr. Erdenebulgan Luvsandorj, Head of Water Resources Department, Ministry of Environment and Tourism

Our Work Around the World

2030 WRG COUNTRY ENGAGEMENTS IN 2017

Today we are working in 14 countries/states. Our multi-stakeholder platforms include 642 partners from governments, private sector and civil society. They have established 46 working groups who together have developed 67 proposals for programs or policies, of which 53 are already being implemented. In many of our countries, we bring together a high level of representation across key decision makers from government, private sector, and civil society.


MONGOLIA
INDIA NATIONAL/UTTAR PRADESH STATE
MAHARASHTRA STATE
BANGLADESH
ETHIOPIA
VIETNAM
KARNATAKA STATE
KENYA
TANZANIA
SOUTH AFRICA

CHAPTER THREE

Country Engagements

Every country has unique water challenges, and these challenges will differ in time, place, and sector. A strong government commitment to work with stakeholders in constructive, transparent and sustained dialogue cannot be undervalued. It is only through an open, diverse and inclusive level of trust that reforms can gain any traction.

High-level multi-stakeholder partnership with strong private sector engagement to reduce water gap by 2030

BANGLADESH

The challenge

Bangladesh–home to 160 million people–lies in the river delta of the Ganga, Brahmaputra, and Meghna rivers. Every year about 1.26 trillion cubic meters of water flows through the country, inundating some areas. But the surface water flow is gradually reducing from the 57 transboundary rivers as demand for water increases in countries upstream. Only 0.4 percent of surface water is stored in Bangladesh.

The agricultural and textile sectors highly depend on groundwater, resulting in a rapid decline of this natural resource.

At the same time, untreated wastewater in industrial areas is polluting the country's surface water, posing a severe health risk to the surrounding communities. These challenges are exacerbated by legislative gaps, policy overlaps, and lack of institutional capacity.

IN BANGLADESH

82%

OF THE COUNTRY'S TEXTILE SECTOR ALONE DEPENDS ON GROUNDWATER

ONLY

0.4%

OF SURFACE WATER IS STORED IN BANGLADESH

THOUGH EVERY YEAR

1.26

TRILLION CUBIC METERS OF WATER FLOWS THROUGH THE COUNTRY

"The Barind Tract Agriculture Water initiative under the Bangladesh multi-stakeholder partnership will help farmers better manage limited water resources to produce crops and, in the process, increase their incomes."

Dr. Akram H. Chowdhury, Chairperson, Barind Multipurpose Development Authority, Ministry of Agriculture, Bangladesh

Focus areas

In 2015, the government of Bangladesh partnered with 2030 WRG to establish a national multi-stakeholder platform focused on improving water governance; prioritizing water-use efficiency, wastewater treatment, and conservation agriculture to reduce the water gap; and mitigating pollution and environmental concerns. The following focus areas were endorsed by the high-level national steering board, chaired by the Cabinet Secretary, the highest ranking civil servant in the country:

- Shaping effective policy together: Water governance and sustainability
- Cleaning waterbodies around the capital city area: Greater Dhaka watershed restoration
- Ensuring agricultural sustainability: Agricultural water
- Supporting development of green industrial zones: Industrial water and wastewater
- Strategic planning for water resources infrastructure: Bangladesh Delta Plan 2100

Results and outcomes

Shaping effective policy together

This work stream focuses on implementing institutional reforms in the water sector and preparing an enhanced incentives framework to promote the efficient use of water. It is also developing methodologies to value water—a global priority for the United Nations and the World Bank High Level Panel for Water, of which the Prime Minister of Bangladesh is a member. A range of high-profile private companies are participating in this initiative, including H&M, Nestlé, and Coca-Cola. This has led 2030 WRG, with input from stakeholders, to conduct a thorough review of the draft Rules and Regulations for the Bangladesh Water Act (2013), including water licensing requirements, and design specific incentives for promoting efficiency in industrial and agricultural water use. H&M is a key funding partner for this work stream.

As a result of these efforts, the 2030 WRG Bangladesh partnership has achieved the following:

- The government has approved the Rules and Regulations for the Bangladesh Water Act. This will support the implementation of the act—a central piece of legislation for improved water resources management.
- The Water Resources Planning Organization has been strengthened by allocating additional personnel.
- A preliminary development project proposal has been developed to build the capacity of the Water Resources Planning Organization (a partner organization will conduct the capacity building).
- Methodologies and implementation guidelines have been prepared for the Valuing Water Initiative.
- An enhanced incentives framework is being developed for the agricultural and industrial sectors.

Cleaning waterbodies around the capital city area

Greater Dhaka, which represents more than 40 percent of Bangladesh's national GDP, has suffered alarming levels of environmental degradation. This work stream includes an initiative to treat municipal sewage and fecal sludge flowing into the extremely polluted rivers around Gazipur City Corporation.[4]

[4] Gazipur is the largest city corporation in Bangladesh.

The multi-stakeholder platform has developed an innovative PPP model for this initiative, combining low-cost debt, grants, and private investment. This model could be replicated in other municipalities.

The 2030 WRG Bangladesh partnership has completed a rapid assessment of municipal wastewater and fecal sludge management for Gazipur City Corporation. An inter-ministerial committee has been set up to coordinate further project development. The multi-stakeholder platform is working with the Department of Environment and Bangladesh University of Engineering and Technology to develop an enhanced water quality monitoring system project, with financing of $1.8 million.

Ensuring agricultural sustainability

Agriculture in Bangladesh is primarily dependent on groundwater for irrigation. However, in the north-west region, groundwater is becoming increasingly scarce in the dry season and may be completely unavailable in 10 to 15 years. To address this problem, the work stream is undertaking a series of projects to improve water-use efficiency and groundwater sustainability in the area.

Under this work stream, the multi-stakeholder platform is implementing a pilot project in collaboration with The Coca-Cola Foundation, the Bangladesh Water Partnership, the Ministry of Agriculture, and other partners. The project involves training 2,000 farmers to use water-efficient technology and practices in mango orchards, rice cultivation, and vegetable production in the water-scarce Barind Tract in the north-west. This is expected to save more than 13.2 million cubic meters of water in the region. The project has the potential to be scaled up.

Supporting development of green industrial zones

2030 WRG is supporting the Bangladesh Economic Zones Authority on industrial wastewater treatment and reuse. This includes developing the authority's institutional capacity (in collaboration with GIZ and other partners) to oversee the treatment of industrial wastewater and reuse, setting up a centralized effluent treatment plant facilitation and monitoring unit, and further developing the human resources and knowledge skills of the Bangladesh Economic Zones Authority staff. In addition, H&M is funding a groundwater modelling study for the industrial areas around Dhaka city to better understand groundwater sustainability up to the year 2030.

The 2030 WRG Bangladesh partnership has achieved the following under this work stream:

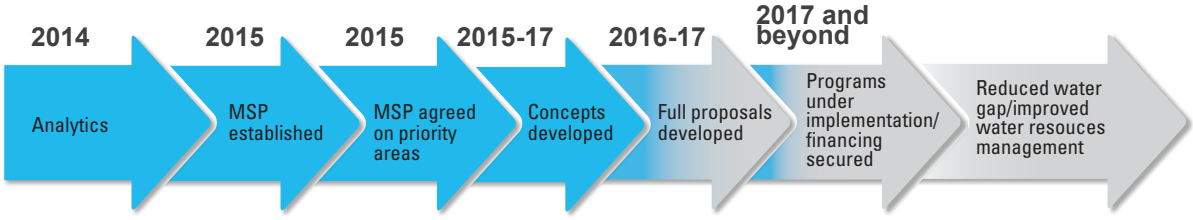
- Project development for a central effluent treatment plant in Mirsharai Economic Zone (2A) is under way and PPP transaction advisers have been hired. It is expected that this project will:
    - Reduce freshwater extraction by 34.6 million cubic meters by reusing industrial water
    - Avoid more than 39.4 million cubic meters of untreated wastewater per year
    - Facilitate $600,000 to hire a PPP transaction advisory team that will develop the business model
    - Facilitate $30 million for the central effluent treatment plant.
- A facilitation and monitoring unit has been set up in the Bangladesh Economic Zones Authority to develop a pipeline of PPPs for central effluent treatment plant projects.

Strategic planning for water resources infrastructure

The Bangladesh Delta Plan 2100 aims to identify and prioritize infrastructure investments, primarily related to water resources, to ensure the sustainable development of the Bangladesh delta. Supported by the World Bank and 2030 WRG, the investment plan focuses on three thematic areas (institutional and policy reform, enabling private sector participation, and climate change adaptation) and six regional hotspots in the delta. The work stream submitted the final investment plan to the Bangladesh government in August 2017.

The investment plan is supporting the government's initiation of several PPPs in the water sector under the seventh five-year plan. 2030 WRG helped ensure that the plan included a PPP project finance option for water sector infrastructure, which has traditionally been financed by the public sector and donors where appropriate. This is likely to mobilize PPP finance in this sector in the medium to long term.

BANGLADESH



- Water resources management
- Industrial water–textile and leather industries
- Knowledge product on adaptive Delta management (2015)

- MSP steering Board and workstreams operational, approved by Prime Minister

- Water governance and sustainability
- Greater Dhaka watershed restoration
- Agri-water
- Industrial Water and Wastewater

- MoU with SIWI
- Bangladesh Delta Plan 2100:
  - MoU with Gov't of Bangladesh, Gov't of Netherlands and World Bank
  - Scoping assessment
  - Thematic concepts:
  - Strengthening Institutional framework for WRM
  - Economic incentives for sustainable water
  - Agricultural water
  - Greater Dhaka watershed restoration
  - MoU signed with with BEZA and GIZ
  - Integrated Water Resources Management

- Preliminary Market Assessment (PMA) on Urban Wastewater completed
- Rapid assessment on BEZA's needs on industrial wastewater management in economic zones
- Recommendations developed on economic incentives for better water management
- BDP 2100 Investment Plan finalized and submitted to the GoB
- Municipal Wastewater and Faecal Sludge Management for Gazipur City Corp
- Industrial Wastewater Treatment in Economic Zones
- Water Quality Monitoring Systems for greater Dhaka area
- North West Region: Enhancing Agro-Water Productivity and Reducing Groundwater Extraction
- Project proposal for Proving Water Efficient Agriculture Solutions to be funded by the Coca-Cola Foundation
- Rules and regulations for Water Act

- US$52,000 financing secured from H&M
- US$200,000 secured from Coca Cola for Agri-Water Pilot in Barind (NW region)
- Agri-Water project in Barind under implementation by BWP and partners
- Rules for the Bangladesh Water Act 2013 approved by ECNWRC and implementation to commence soon by the GoB
- CETP Facilitation and Monitoring Unit under implementation by BEZA and GIZ
- PPP Transaction Advisor for CETP for Mirsharai 2A and 2B Economic Zones being hired through support from WB

Contacts

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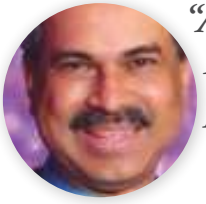
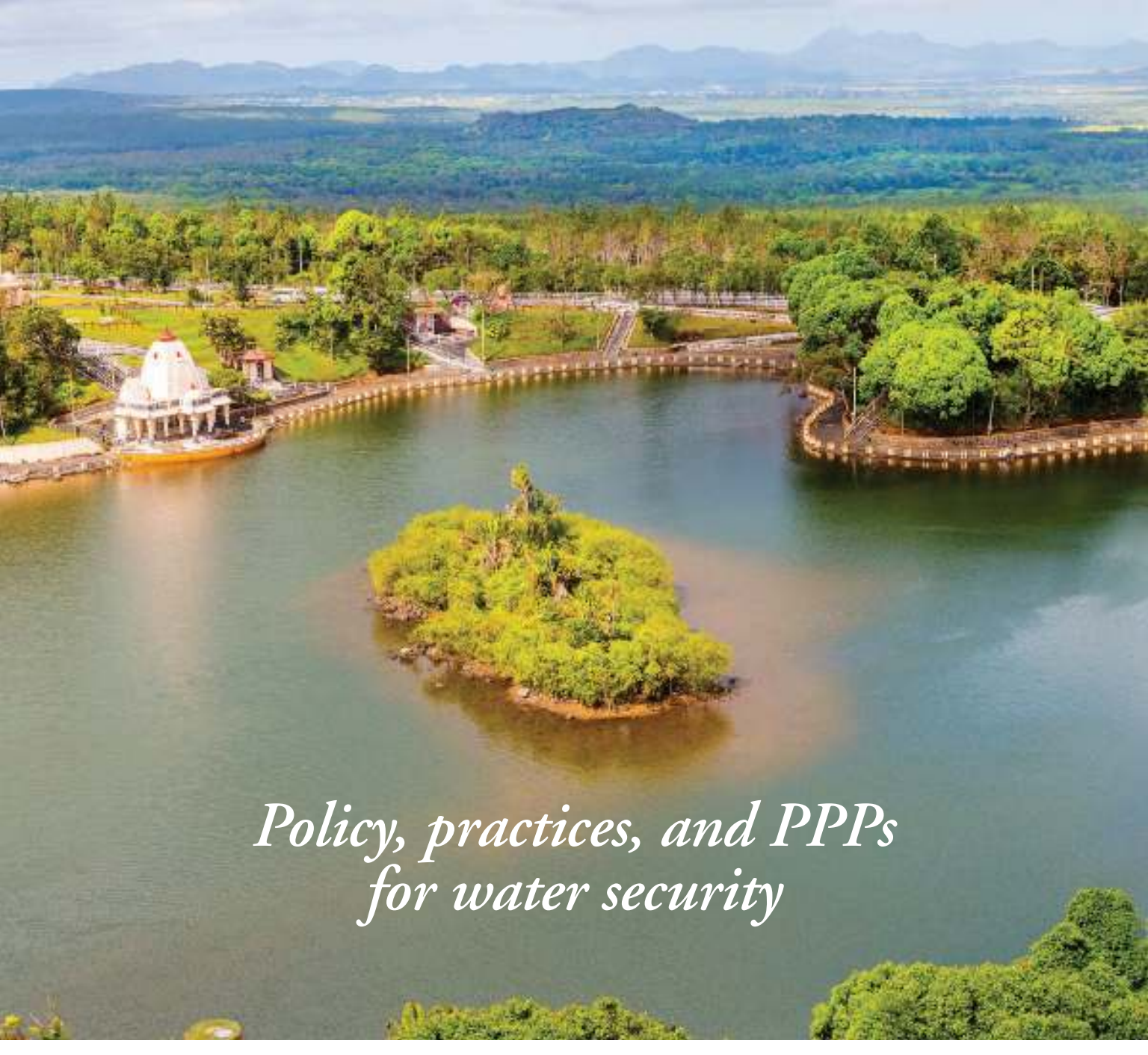
Sayef Tanzeem Qayyum, Country Representative Bangladesh, sqayyum@ifc.org

Key partners



"As a member of the National Steering Board of the Bangladesh Water MSP, I am very encouraged by the transparent and collaborative process by which innovative solutions specially to address the Urban and Industrial Wastewater challenges are being materialized."

Faruque Hassan, Vice President, Bangladesh Garments Manufacturers and Exporters Association (BGMEA)



Policy, practices, and PPPs for water security

INDIA (NATIONAL AND UTTAR PRADESH STATE)

The challenge

India's freshwater ecosystems are deteriorating. More than 80 percent of its water resources are used for agricultural production, and nearly 78 percent of the country's wastewater is untreated. About 8 billion liters of untreated wastewater flows into the Ganga every day.[5]

At the same time, extreme events like floods and droughts put pressure on people and the economy, aggravated by gaps in policy, governance systems, information, infrastructure, and technology. Large areas in the region face acute water shortages, including Bundelkhand in Uttar Pradesh, one of India's least developed areas. The majority of households live below the poverty line. The region has poor groundwater potential—only 4 percent of total rainfall can be stored—and most of the average annual rainfall (800 millimeters) occurs in winter over a period of less than two weeks.

Focus areas

The government of India is committed to effective decision making to address demographic shifts and climate change, undertaking scientific water resources assessment and planning, and rejuvenating the River Ganga and its tributaries. The Ministry of Water Resources, River Development, and Ganga Rejuvenation sets national priorities and policies, while state governments support the implementation of programs.

2030 WRG is working at a national, state, and sub-basin level to mobilize the financing, policy reform, and private sector partnerships needed to reduce

THE GANGA BASIN IS HOME TO

450

MILLION PEOPLE

NEARLY

78%

OF WASTEWATER IS UNTREATED NATIONALLY

[5] Center for Science and Environment (2016).

wastewater discharge and promote efficient water use. It also aims to help build institutional capacity for decision making on water efficiency, productivity, and quality.

2030 WRG's work with the national government and state government of Uttar Pradesh includes:

- Accelerating municipal wastewater treatment and reuse in the Ganga basin
- Introducing a participatory approach to Ganga tributary rejuvenation
- Creating a blueprint for water accounting
- Improving integrated water resources management in Bundelkhand.

Results and outcomes

Accelerating municipal wastewater treatment and reuse in the Ganga basin

2030 WRG supported multi-stakeholder discussions and project preparation for a wastewater treatment and reuse PPP for the city of Mathura, in close alignment with the World Bank's Ganga program. Facilitating alignment between the central government, state government, and municipality, 2030 WRG's stakeholder engagement process has provided a template for institutional collaboration and partnership development in the Ganga basin, and contributed to IFC's transaction advisory support for the towns of Haridwar, Varanasi, and Mathura. Early estimates project that the engagement will help avoid about 34 million cubic meters of wastewater discharge per year. See page 39 for an in-depth story on India: A PPP paradigm shift in rejuvenating the River Ganga.

Introducing a participatory approach to Ganga tributary rejuvenation: Building on the Hindon case

2030 WRG is establishing a multi-stakeholder participatory platform to rejuvenate the Ganga's tributaries in collaboration with the National Mission for Clean Ganga. The multi-stakeholder platform will provide the National Mission for Clean Ganga with a structured, single window to engage with stakeholders and mobilize resources and investment. This builds on 2030 WRG's work to clean up the Hindon River, one of the Ganga's most polluted tributaries.

In the Hindon River basin, 2030 WRG and partners, including WAPCOS and the India Water Partnership, are analyzing existing urban wastewater management infrastructure gaps and engaging with local administration, such as divisional commissioners and district magistrates, to develop district remedial action plans. Through a memorandum of understanding with Millennium Alliance, 2030 WRG is also catalyzing funding for innovation in technology acceleration and community-driven models for river rejuvenation.

2030 WRG supported a focused session during the 2017 India Water Impact Summit (organized by the National Mission for Clean Ganga and the Center for Ganga River Basin Management and Studies) to help conceptualize and develop innovative technologies and business models for recovering water resources.

Creating a blueprint for water accounting

In collaboration with the Ministry of Water Resources, River Development, and Ganga Rejuvenation and the India-European Union Water Partnership, 2030 WRG supported the development of a blueprint for water accounting, providing architecture for national and state policy decisions to accelerate demand-side water management.

The blueprint was ratified during five workshops, organized by the Ministry of Water Resources, River Development, and Ganga Rejuvenation. The blueprint has:

- Led to the launch of a water accounting training module to build the capacity of about 15 experts from the Central Water Commission, the Central Ground Water Board, the National Institute of Hydrology, and others, using the IHE Delft Institute for Water Education's remote sensing technology. The training focuses on India's Cauvery basin[6] and is funded by the World Bank's National Hydrology Project.
- Informed dashboards and indicators for Ganga municipal and industrial wastewater, in partnership with the National Mission for Clean Ganga, the India-European Union Water Partnership, and GIZ.
- Resulted in the creation of a task force on blended finance and cost recovery, together with the Organisation for Economic Co-operation and Development (OECD) and the National Institute of Public Finance and Policy.

[6] Sharing the Cauvery River has caused disputes between some Indian states.

Improving integrated water resources management in Bundelkhand

Following India's state elections in Uttar Pradesh in 2017, the new government invited 2030 WRG to develop an integrated multi-stakeholder water resources management program for the sustainable economic development of the Bundelkhand region.

The proposed program focuses on the following:

- Restoring and managing watersheds, including water storage structures
- Improving irrigation technologies and practices
- Increasing farm productivity and crop diversification, including improving soil and fertility management
- Creating market linkages and improving access to agricultural inputs and financial products
- Raising awareness and building capacity among farmers, especially women.

2030 WRG is working with partners on the analytical work, initiated at the request of the state's Chief Secretary, before it establishes an area-based multi-stakeholder platform.

Contacts

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Anil Sinha, Senior Adviser and Head, Uttar Pradesh Program, asinha@ifc.org

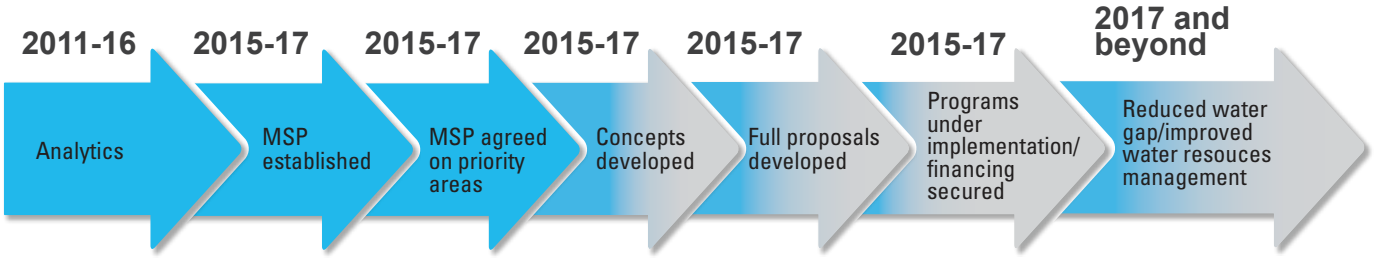
"I appreciate the partnership with 2030 WRG for the setting up of a multi-stakeholder platform and integrated plan for Bundelkhand. The Government of U.P. places high importance on this water-stressed district and 2030 WRG has reflected this priority with dedication and professionalism."

Rajive Kumar, Chief Secretary, Government of Uttar Pradesh

"2030 WRG has played a strong catalytic role in unlocking PPPs for wastewater treatment in the Ganga. They have facilitated a new framework for water accounting by mainstreaming state-of-the-art practices in the management of India's water resources."

Dr. Amarjit Singh, Secretary, Ministry of Water Resources, River Development and Ganga Rejuvenation

INDIA NATIONAL/UTTAR PRADESH*



2011-16

- National Water Resources Framework (2011)
- National Water Platform (2013)
- Collective Action for Water Security and Sustainability (2014)
- Hindon Yatra Case Studies (2016)
- White Paper on Urban Wastewater PPPs with FICCI (2016)
- Circular Economy Pathways (2016)

2015-17

- Municipal wastewater stakeholder consultations
- Hindon River Rejuvenation Partnership
- Blueprint for water accounting

2015-17

- Municipal wastewater treatment and reuse
- Area-based approaches for river rejuvenation in Utter Pradesh (urban, industry, agri)
- Blueprint for water accounting
- Participatory integrated water resources management (IWRM)
- Wastewater Resource Recovery and Reuse

2015-17

- Municipal wastewater treatment:
  - PPP preparation for Mathura-Vrindavan
  - Tripartite arrangements for Ganga clean up
- Blueprint for water accounting

2015-17

- Municipal wastewater treatment—Mathura-Vrindavan (2015):
  - Cost benefit analysis on PPP technical support
  - PPP transaction advisory support
- Water Quality Monitoring System for Hindon (2016)
- River Rejuvenation Partnership
- Blueprint for water accounting
  - Water efficiency
  - Water quality

2015-17

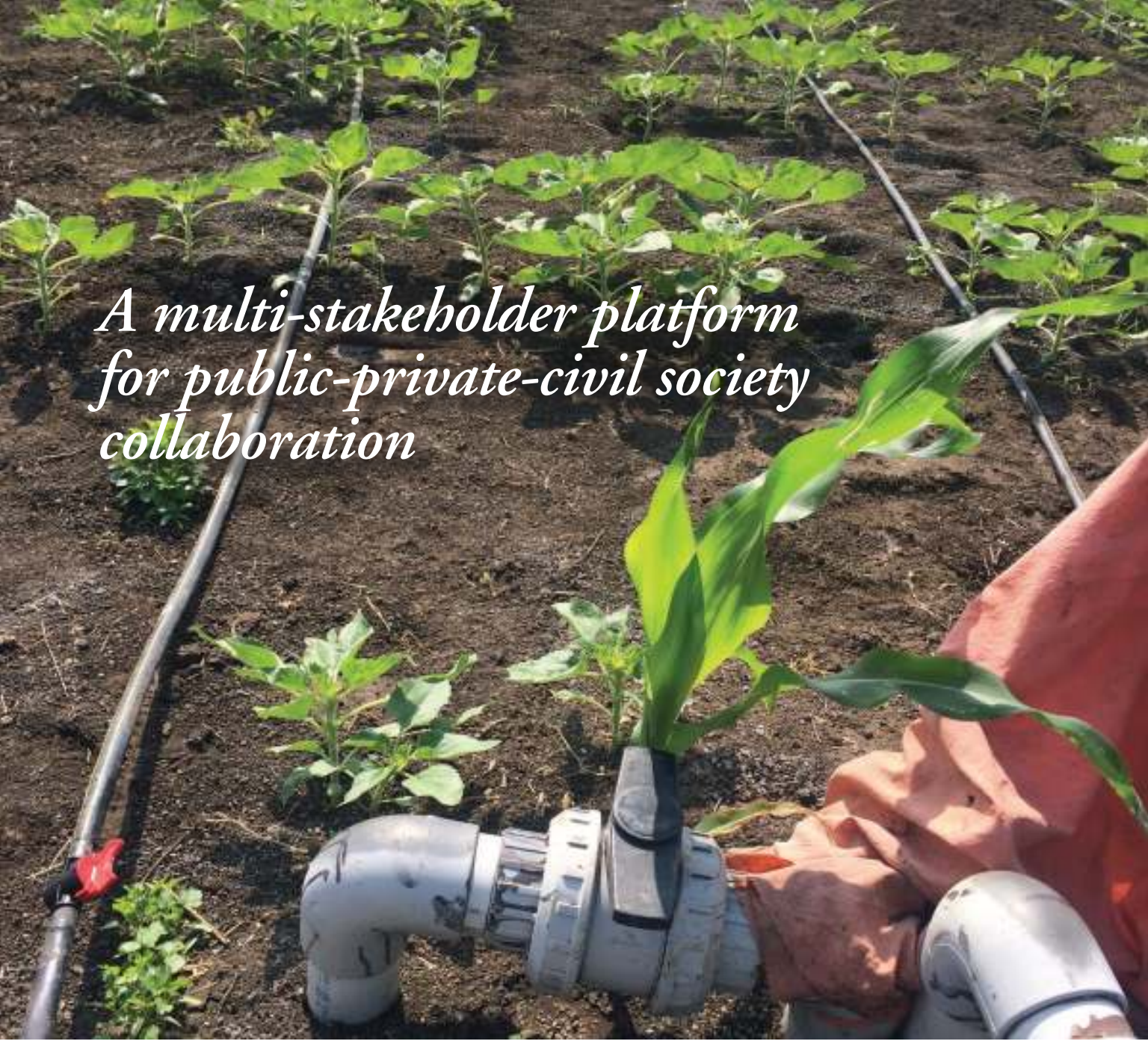
- Hindon Basin Council & Secretariat
- Millennium Alliance Call for River Rejuvenation
- Mathura-Vrindavan Wastewater Treatment and Reuse PPP under implementation by IFC PPP transaction advisors, with US$750,000 transaction advisory support
- Blueprint for Water accounting
  - Water quality engagement with IEWP/GIZ, with € 200,000 budget allocation
  - Engagement with IHE-Delft for Water Accounting trainings PMU establishment at Central Water Commission

2017 and beyond

- Municipal wastewater treatment—Mathura Vrindavan (2016)
- 34 M3 reduced discharge of untreated waste water under Mathura-Vrindavan PPP

* The 2030 WRG engagement at the national level in India was initiated in 2011 through a National Water Resources Framework Study undertaken for the Planning Commission. Analysis and subsequent assessments at the national level paved the way for a state-level engagement in Uttar Pradesh, initiated in 2015.

Key partners



A multi-stakeholder platform for public-private-civil society collaboration

KARNATAKA

The challenge

Karnataka's constrained water supply is under mounting pressure as the state continues to urbanize and industrialize. Studies indicate that the gap between the state's water demand and supply will double by the year 2030.[7] The demand in urban areas will fall short of supply by about 70 percent, with Bangalore accounting for almost half of the shortfall. Promoting water-efficient practices in agriculture, industry, and urban water resources management, and ensuring state-wide transformation in the water sector, is crucial. Achieving this goal requires innovative initiatives and partnerships for water resources management.

KARNATAKA CONTRIBUTES

7%

OF INDIA'S NATIONAL GDP

ABOUT

65%

OF KARNATAKA'S LAND IS FARMED

BUT ONLY

25%

OF THIS LAND IS IRRIGATED

[7] 2030 WRG hydro-economic analysis.

Focus areas

2030 WRG's partnership with Karnataka has made significant progress in reaching consensus on issues, challenges, and priorities to be addressed across sectors. 2030 WRG is working closely with several state government departments, including water resources, agriculture, horticulture, urban development, commerce and industries, and finance. The platform also has private sector support, with participants from agribusiness companies, financial institutions, and large manufacturing and industrial companies, among others.

2030 WRG's strategic initiatives fall within the work streams established by the Karnataka multi-stakeholder platform, including:

- Agricultural market linkages
- Water-use efficiency
- Urban water

Each of these work streams has a multi-stakeholder working group. Key initiatives include:

- Developing market linkages for farmers in drip irrigation projects in Karnataka through the innovative Drip-to-Market Agro Corridor.
- Promoting policy and programs for sugarcane drip irrigation.
- Promoting policy for wastewater reuse and creating a resource cell for guiding wastewater reuse projects in the state.

The multi-stakeholder platform is developing a fourth work stream on industrial water in partnership with the Water Leadership Group of the World Business Council for Sustainable Development to accelerate the circularity of water use in the industrial sector through programs for water-use efficiency, effluent management, reuse, and recycling.

Results and outcomes

The multi-stakeholder platform became operational in March 2017 and the steering board was established under the leadership of Karnataka's Chief Secretary. Key outcomes of the Karnataka program are outlined below.

Drip-to-Market Agro Corridor

2030 WRG has collaborated with the state government's water resources, agriculture, and horticulture departments to support a

Drip-to-Market Agro Corridor. The corridor establishes market linkages in drip-irrigated areas, structured through four-way memoranda of understanding between the government departments of water resources, agriculture, and horticulture and private sector companies. The first drip project commissioned under the initiative covers 24,000 hectares. The project, which 2030 WRG helped develop in 2012–13, has reduced the use of freshwater by 24 million cubic meters per year through drip irrigation.

Fourteen private companies have already signed the memorandum of understanding for market linkages in Ramthal, namely, Global Green Company Limited, ADM Agro Industries, Jain Farm Fresh Foods, Neo Foods, Krishi Organic Products, RSM Hitech Feeds, Maha Agro, Rovis Nutrition, Palianappa Farms, Ken Agritech, Reitzel India, Hosachiguru, Jivabhumi, and Ananya. A project implementation unit is being established to facilitate further private sector participation in the area.

Pilot projects for sugarcane drip irrigation

Recognizing the business case for drip irrigation in the sugarcane sector, the multi-stakeholder platform's steering board supported the first set of pilot projects across 10,000 hectares, to be implemented by the Water Resources Department. 2030 WRG has supported the development of innovative financing mechanisms for drip irrigation in the sector. Financial institutions have helped develop the program, and are expected to come forward to finance farm-level drip systems, supplementing government funding for off-farm community infrastructure and retrofitting existing canal systems. It is proposed that sugar mills engage farmers in their areas under the program.

Wastewater reuse policy

A multi-stakeholder committee has finalized a policy for wastewater reuse for urban centers in Karnataka and it is now being considered for state-wide implementation. The policy provides a comprehensive framework, integrating principles of cost recovery, equity, and sustainability for urban wastewater management. It also focuses on industrial reuse of treated urban wastewater, with the intention of supporting the financial sustainability of municipalities and mitigating water supply risks for industry. 2030 WRG has conducted a pre-feasibility assessment to identify models and transaction terms for wastewater reuse for one of the state's newly commissioned thermal power plants.

Wastewater reuse resource cell

With guidance from 2030 WRG, a wastewater reuse resource cell has been established in the Urban Development Department to help implement wastewater reuse projects in Karnataka and support capacity building in municipalities and related state departments.

Contacts

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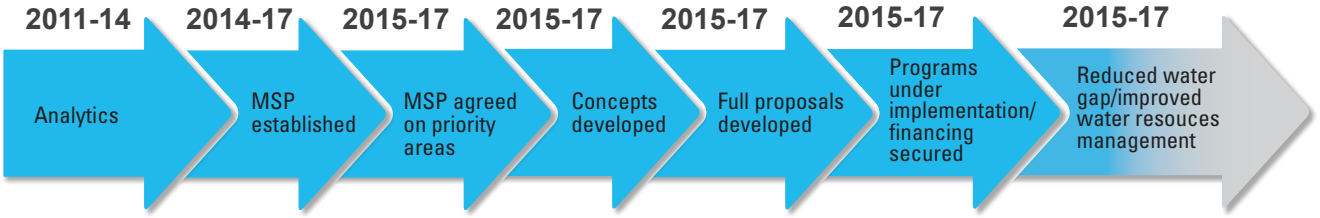
"Market linkages for agriculture-based projects ensure that the farmer has adequate avenues to sell agricultural produce, serving as an important part of the agriculture extension process. We thank 2030 WRG for their assistance in setting up these collaboration models for farmers, who will benefit from partnerships with private companies."

Maheshwar Rao, Secretary to the Government, Departments of Agriculture and Horticulture, Karnataka, India

KARNATAKA (INDIA)



- MoU with Government of Karnataka (2011)
- Agri sector (2011)
- Drip PPP (2012)
- Urban-industrial sectors (2013-14)

- Multi-stakeholder partnerships for two workstreams established
- Formalization & operationalization of state level MSP under GOK 2017

- Agri-water-use efficiency
  - Sugarcane sector
  - PPPs in command areas
- Wastewater reuse
- Industrial water

- Drip irrigation in sugarcane: financing and implementation models (2015)
- Wastewater Reuse (2015):
  - Resource Cell
  - Wastewater reuse policy (2016)
- Drip to Market Agro Corridor (DMAC) (2017)

- Drip irrigation in sugarcane: roadmap for implementation (2015)
- Wastewater Reuse Resource Cell (2016)
- Wastewater reuse policy
- DMAC

- Drip irrigation in sugarcane: State government allocation of $250 million (2015)
- Wastewater Reuse Resource Cell (Preparatory arrangements and funding) (2016)
- Wastewater Reuse Policy submitted to Cabinet 2017
- DMAC Market linkages
  - 14 MoUs signed between government and private sector (2017)
  - Establishment of Project Implementation Unit (2017)

- 24 million m³ freshwater use avoided for Ramthal drip irrigation project

Key partners

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2030
Water
Resources
Group
WORKSHOP
DRIP-TO-MARKET AGRO CORRIDOR
AGRIBUSINESS OPPORTUNITIES FOR RAMTHAL PROJECT
May 2, 2017, 10:30 am – 1:00 pm

Fueling economic growth through water-secure outcomes

MAHARASHTRA

The challenge

Maharashtra has the largest economy and the second largest population in India. It is one of the most industrialized states in the country–industry provides 13 percent of the national industrial output and 46 percent of the state's GDP.

Agriculture provides a livelihood to half the state's population, with GDP growth of 6 percent per year, but only 20 percent of the farmland is irrigated and productivity is low. The state is also rapidly urbanizing, placing additional pressure on its scarce water resources. In the urban-industrial sector, the government is implementing about 10 Smart Cities projects,[8] which will require more water as the cities attract residents.

Water resources in the state are skewed—more than 50 percent of rainfall is in the coastal region, which has limited storage capacity, while the hinterland suffers shortages due to variable rainfall and temperatures.

Moreover, the state faces gender-related water issues (such as lack of economic opportunities for women in the agricultural sector), but these are yet to be recognized and addressed at scale.

Focus areas

In May 2017, the government of Maharashtra established a multi-stakeholder platform steering board for water. The board guides coordinated multi-stakeholder efforts and facilitates sustainable and efficient approaches to managing water.

The multi-stakeholder platform focuses on water security in agricultural, urban, and industrial applications; creating frameworks for governance/policy reforms, innovative financing, and partnerships; enabling strategic planning in the water sector in the face of rapid urbanization and climate change; and creating specific work streams to deliver innovative results and address water resources management in the state.

MAHARASHTRA'S AGRICULTUAL GROWTH IS STRONG

6%

PER YEAR

ONLY

20%

OF THE LAND IS IRRIGATED

[8] India's Smart Cities Mission aims to build cities that provide core infrastructure and give a decent quality of life to citizens, ensuring a clean and sustainable environment using "smart" solutions. The focus is on sustainable and inclusive development.

"2030 WRG's multi-stakeholder platform is actively involved with MWRRA in strengthening the MWRRA Act and bringing in needed mandates on wastewater recycling and reuse into the State Water Policy."

KP Bakshi, Chairperson, Maharashtra Water Resources Regulatory Authority (MWRRA)

The platform has identified three work streams:

- Water and livelihood security in rain-fed agriculture
- Command area water productivity
- Urban industrial water security.

2030 WRG is exploring an opportunity to launch a cross-cutting work stream at the basin level, potentially Bhima, to address agriculture, industrial, and urban sector challenges in water accounting; protect water bodies and conserve water and soil; and identify market linkages between farmers, industries, and urban centers.

Key partners include:

- The government of Maharashtra (agriculture, water resources, and urban development departments).
- Industry associations (State Level Banker's Committee, Bombay Chamber of Commerce and Industry, Indian Merchant's Chamber, and Confederation of Indian Industries).
- Civil society and academia (BAIF Development Research Foundation, Watershed Organisation Trust, Indian Institute of Technology Bombay, and Advanced Centre for Water Resources Development and Management).

Results and outcomes

Water and livelihood security in rain-fed agriculture

2030 WRG, the government of Maharashtra, the private sector, and civil society are working to implement efficient and equitable solutions to maintain agricultural growth using the same amount of water used now, or less. The Maharashtra Cotton Water Platform was launched in 2015 in partnership with the government to deliver coordinated, multi-stakeholder solutions for cotton farmers in drought-prone areas particularly vulnerable to climate change. 2030 WRG recently signed a memorandum of understanding with the IDH Sustainable Trade Initiative to promote water-use efficiency and standards for cotton cultivation (the Better Cotton Initiative) by providing training and extension support to farmers.

Building on one of the Maharashtra Cotton Water Platform's decisions, 2030 WRG is helping to develop a project proposal on behalf of the Department of Agriculture for grant funding of $270 million from the Green Climate Fund. The State Committee on Climate Change has approved a concept note for submission to national government

and the Green Climate Fund. The program focuses on the rain-fed regions of Marathwada and Vidarbha, alongside a project on climate-resilient agriculture with proposed finance from the World Bank. The two projects represent a combined total of $1 billion in investment to drought-proof Maharashtra's rain-fed agriculture, including contributions from the government of Maharashtra, the private sector, and financial markets. The programs include a combination of water-efficiency solutions, infrastructure development, local water governance, good agricultural and sustainability practices, and market linkages, supported by an enabling policy and regulatory environment, to ensure secure livelihoods for smallholder farmers.

Command area water productivity

This work stream aims to maximize economic water productivity in command areas (land that can be irrigated and is fit for cultivation). With guidance from the Water Resources Department, 2030 WRG launched a study on sugarcane-focused micro-irrigation systems to support new financing mechanisms and speed up their implementation. This initiative aligns with the Maharashtra Chief Minister's vision to conserve water by bringing at least 50 percent of sugarcane cultivation under drip irrigation by 2019. 2030 WRG is aligning this work with NITI Aayog's guidelines on farm-level PPPs.

Given the importance of gender-sensitive development, 2030 WRG is exploring the relationship between gender and water management in Maharashtra's irrigated agricultural areas. In particular, it is collaborating with the private sector and civil society to document the changing role of women in relation to water technologies and extension services through entrepreneurship models.

Urban industrial water security

2030 WRG is working with the government's urban and industries departments to support policy for the reuse and recycling of wastewater (flows from urban to industrial, urban to agriculture, and industrial to industrial). It is also engaging with the Maharashtra Water Resources Regulatory Authority on State Water Policy and Regulations amendments.

2030 WRG has initiated a study to document water reuse and recycling policies and PPPs to inform policymaking and program development. It is also exploring a partnership with the Maharashtra Industrial Development Corporation to develop opportunities in wastewater reuse and recycling in industrial parks, in addition to strengthening common effluent treatment plants.

"2030 WRG's work streams to improve water-use efficiency of smallholder farmers through technology and market linkages align well with Jain's commitments towards sustainable rural livelihoods."

Anil Jain, Managing Director,
Jain Irrigation Systems Limited

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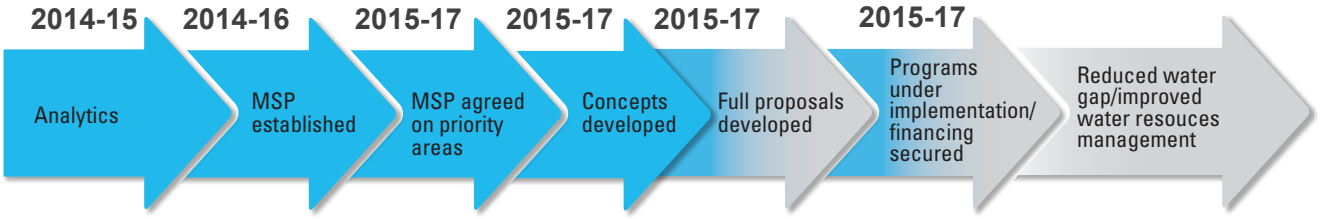
MAHARASHTRA (INDIA)



- Cotton sector gap analysis (2015)
- Hydro Economic Analysis on Agri Sector (2015)

- Agri-water sounding board (2014)
- Cotton water platform ("CWP" 2015)
- Formalization & operationalization of State level MSP under GoM (2017)
- Signed MOU with IDH for CWP

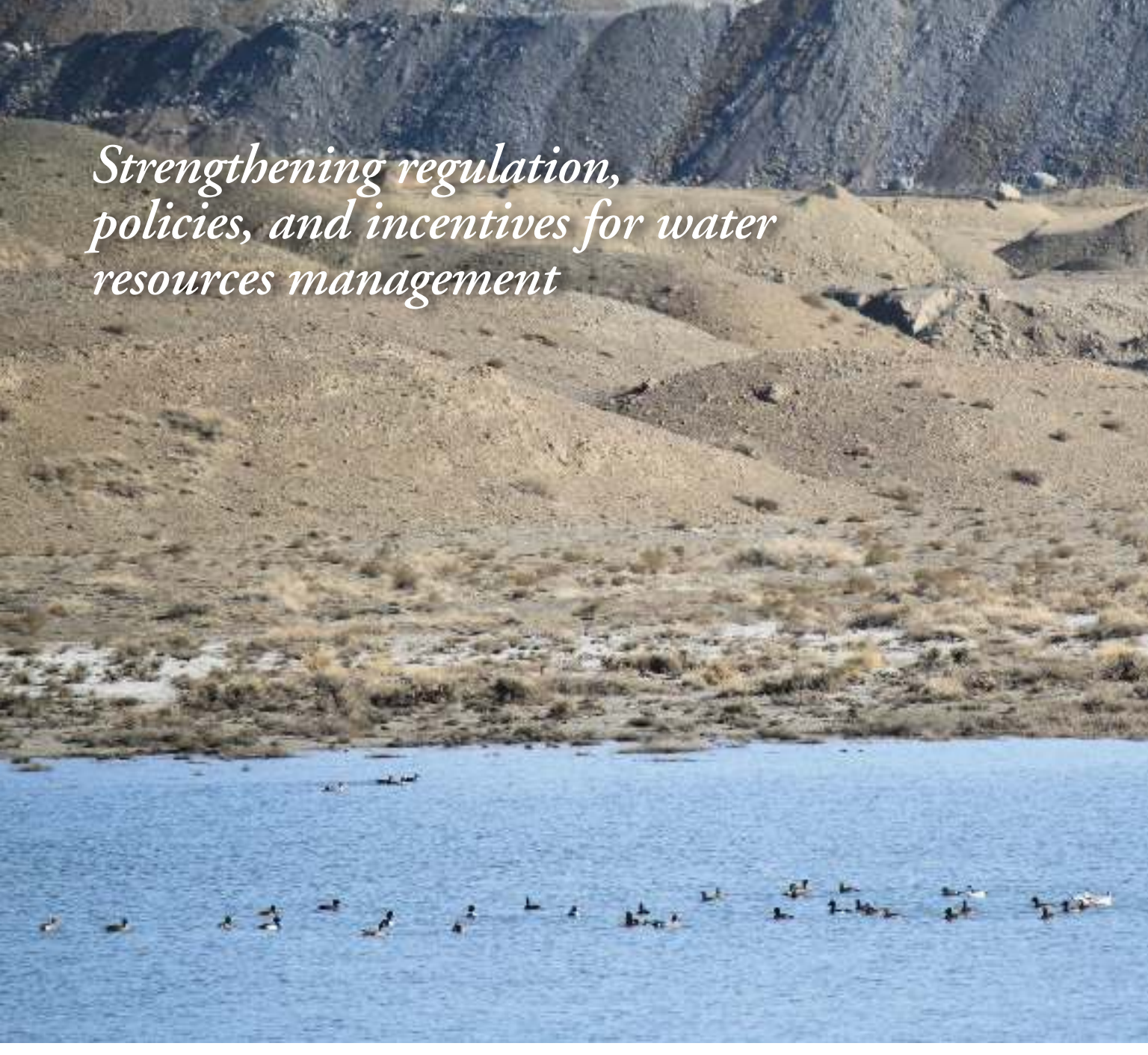
- Water and Livelihood Security in Rain-fed Agricultural Areas
- Command Area Water Productivity
- Enhancing Urban and Industrial Water Security

- Water-efficient PPPs for Integrated Agricultural Development ("PPP-IAD" (2015)
- Rainfed-agri Green Climate Fund project ($270 million) and co-financing from WB
- Climate Innovation Center
- Command Area Sugarcane Drip Conversion

- 9 water-efficient PPP-IAD projects

- 4 PPP-IADs under implementation (investment of $10 million, projected 5.7 billion liters of reduced water abstractions per year) (2015)

Key partners



Strengthening regulation, policies, and incentives for water resources management

MONGOLIA

The challenge

With water resources shrinking and overall demand expected to triple in the coming two decades, Mongolia faces a challenging water future. Significant gaps in future water supply and demand have been identified in the capital city of Ulaanbaatar, home to about half the population, and the fast-growing mining region of southern Gobi.

Given the country's rapid urbanization and mining-driven economy, a lack of available water could have a severe effect on social and economic development, and increase the risk of water-related conflict between communities and industrial users.

An effective response to Mongolia's water challenge requires cooperation and trust between communities, the private sector, civil society, and government. Inconsistently applied water pricing, a lack of understanding of regulatory requirements in industry, and limited national and local capacity to implement and enforce policies are some of the barriers that have undermined progress. At the same time, the national water policy has not translated into effective action on the ground.

MINERAL MINING ACCOUNTS FOR

85%

OF MONGOLIA'S TOTAL EXPORT REVENUE

BY 2030, ULAANBAATAR IS PROJECTED TO HAVE A

50%

WATER DEMAND/ SUPPLY GAP

Focus areas

2030 WRG started its partnership with the government of Mongolia in 2013. As a first step, 2030 WRG conducted a science-based hydro-economic analysis of Ulaanbaatar and the mining sector in southern Gobi to measure the scale and urgency of the country's water challenges. Under the guidance of the 2030 WRG Mongolia steering board, representatives from government ministries, industry, civil society, and academia have come together in work streams to strengthen local ownership and drive action. Under the leadership of the Ministry of Environment and Tourism and with 2030 WRG's support, the partnership has achieved considerable results in the following areas:

- Reducing water demand and augmenting supply in the southern Gobi and Ulaanbaatar regions
- Improving water valuation and developing incentives for sustainable water resources management
- Building capacity of stakeholders and encouraging collaboration among them
- Encouraging wastewater treatment and reuse.

Results and outcomes

Enabling legal environment for wastewater treatment and reuse

The concept of wastewater treatment and reuse has been included in Mongolian policy documents for more than five years. But little action has taken place, largely due to an overly complex model for estimating pollution charges in a context of limited technical and implementation capacity. In parallel, some private companies have started to recycle their used water and are demanding a framework for the appropriate reuse of wastewater.

2030 WRG has been working with the Ministry of Environment and Tourism and private and civil society stakeholders to address these issues by amending legislation on water pollution fees. Over a period of six months in 2017, 2030 WRG led a multi-stakeholder process that culminated in a new water pollution tariff, which incorporates economic incentives for the private sector. The government has accepted the new model and it has been submitted to Parliament. These amendments will help prevent more than 61.2 million cubic meters of inadequately treated effluent from flowing into the Tuul River. See also page 43 for an in-depth story on Mongolia: Protecting water resources by making the polluter pay.

Improving water governance at river basin level

Integrated water resources management was formally introduced in Mongolia in 2012. The legal framework puts a lot of responsibility at the river basin level. Mongolia is divided into 29 river basins, each one administered by a government river basin authority. Each authority should be monitored by a multi-stakeholder council, which represents the private sector, civil society, and environmental stakeholders at the basin level. But these councils have not functioned properly, with particularly negative effects in the Gobi region and Ulaanbaatar. During 2017, 2030 WRG worked with its partners to improve the legal and operational aspects of the river basin councils, as well as its collaboration with its river basin authority and links to the national government. The government has accepted the new guidelines, which set out the financing of councils and stakeholder responsibilities, and they will be implemented in 2018. Under the multi-stakeholder platform, a partner organization will develop a capacity-building program for river basin council members and data will be collected at the river basin level.

Incentives for water efficiency and wastewater management

While economic instruments, such as water service charges, water usage fees, and wastewater charges, were introduced in the Mongolian Water Law (2012), their current design does not provide enough of an incentive for sustainable water use.

To accelerate water-use efficiency and circular economy solutions, 2030 WRG supported an assessment of potential incentives and regulatory reform in the mining sector in Mongolia. A key recommendation was the introduction of non-financial incentives, particularly recognizing company good practices with an award.

The Golden Drop is a prestigious award that recognizes winning industry partners, while encouraging companies to innovate further and develop state-of-the-art practices in water management. 2030 WRG is engaging with key stakeholders to design the award, particularly the Ministry of Environment and Tourism, the Mongolian National Water Committee, the Mongolian Mining Association, water users, and environmental

non-governmental organizations. The award will be based on a robust nomination and selection framework to give it credibility nationally and internationally.

Contacts

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Dorjsuren Dechinlkhundev, Country Representative Mongolia, ddechinlkhundev@ifc.org

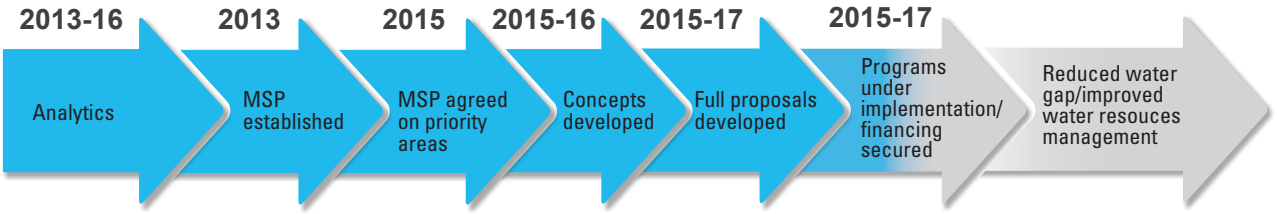
"2030 WRG has been instrumental in establishing the first-of-its-kind public, private, and civil society partnership in the Mongolian water sector. This collaboration has significantly contributed to achieving various initiatives to address the country's water challenges and we are collectively working to creatively leverage this partnership further."

Tsengel Tsegmid, State Secretary, Ministry of Environment and Tourism, Government of Mongolia, Chairperson of 2030 WRG Mongolia steering board

"Together with 2030 WRG we have been able to unleash innovative ideas and in-depth knowledge on improving water efficiency and supply solutions, which are among the major issues encountered by the mining sector in the Gobi region."

Ts Baasandorj, Vice President, Mongolian Mining Cooperation

MONGOLIA



2013-16 Analytics

- Water resources management (2013-14)
- Ulaanbaatar Hydro-Economic Analysis (2016)
- Gobi Coal mining region HEA (2016)

2013 MSP established

- MoU with Mongolian Gov't (2012)
- MoU signed in 2013
- Steering board with three workstreams (2014)

2015 MSP agreed on priority areas

- Water demand reduction and cost-effective supply:
  - Nyalga Shivee Ovoo
  - Tavan Tolgoi
  - Ulaanbaatar
- Economic incentives and water valuation
- Stakeholder collaboration and capacity building

2015-16 Concepts developed

- Economic incentives and water valuation (2015-2016)
  - Methodology and guidelines
- Stakeholder collaboration:
  - Water database (2015-2016)
  - Stakeholder training (2015-2016)
  - River basin councils/water governance improvements (2016)
- Regional Water mining program (2016):
  - Incentives
  - Efficiency and wastewater treatment on-site

2015-17 Full proposals developed

- Economic incentives and water valuation (2015):
  - New methodology to be approved by Cabinet
- Stakeholder collaboration (2015):
  - Integrated water database development
  - Stakeholder capacity building
- Voluntary Code of Practice on Water Management for mining companies (2016)
- River basin council/ water governance improvement
- Revised methodology for water valuation presented to the gov't
- Amendments on the Water pollution fee Law
- Development of guidelines of water pollution fee estimation
- Development of Standards on treated wastewater reuse
- Development of non financial incentives on water efficiency (Golden Drop award)
- Revision of River Basin Council establishment guidelines

2015-17 Programs under implementation/ financing secured

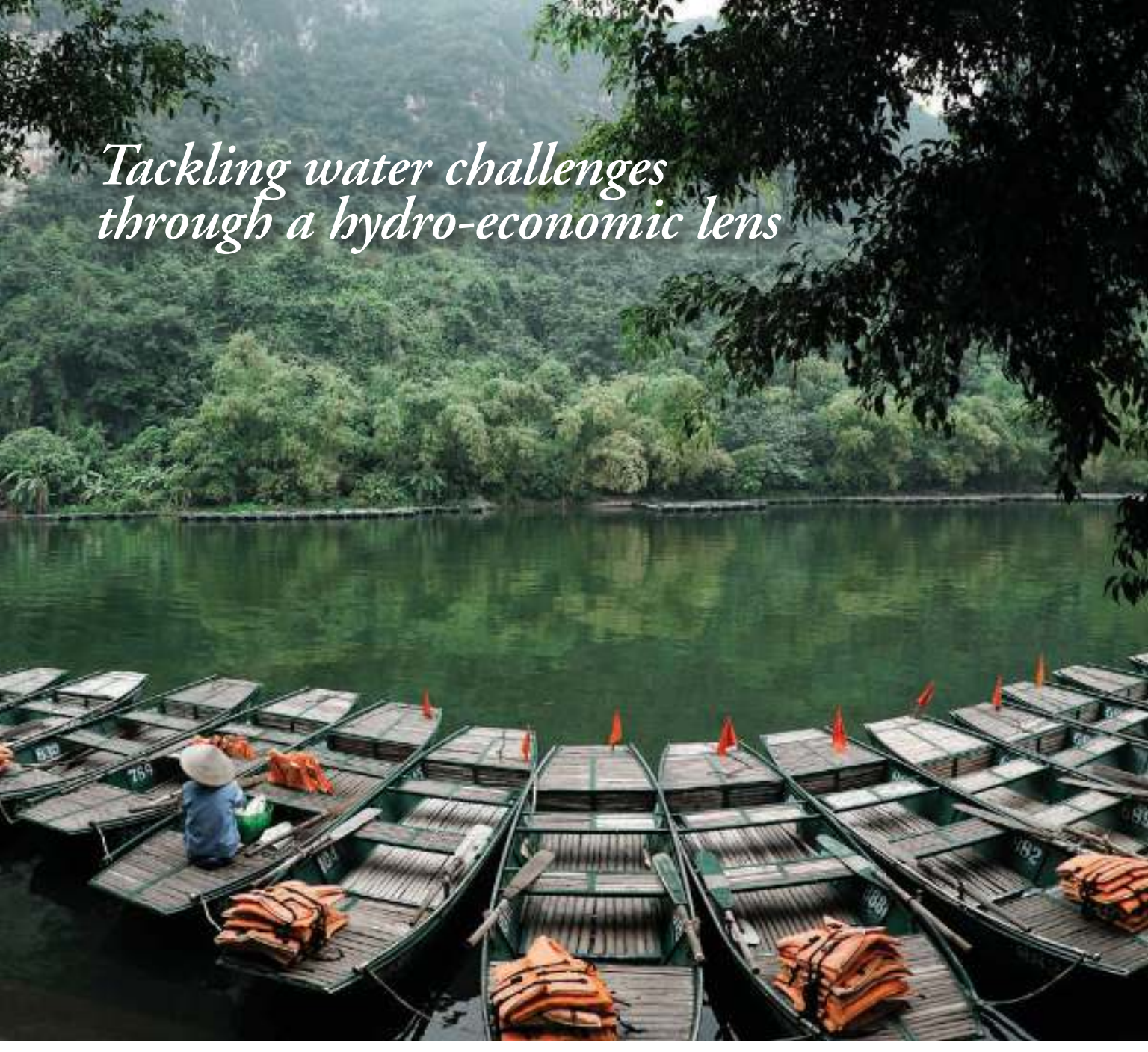
- Stakeholder collaboration (2015):
  - National water database launched
- Voluntary Code of Practice for Mine Water Management (2016)
- Enabling environment for wastewater treatment:
  - Amendments to Water pollution fee law, supplemented with streamlined guidelines for implementation
  - Standards on treated wastewater reuse
- River Basin Governance:
  - Revision of River Basin Council establishment guidelines.
  - In partnership with Swiss Development Corporation developing models and guidelines for river basin governance, US$200,000 from SDC

Key partners

"Through our joint efforts and collective initiative, we have successfully introduced good water management tools, technology, and other water resources that have benefited Mongolia's water sector. We look forward to continued collaboration with 2030 WRG in the future."

S Oyun, Chair of Global Water Partnership, Former Minister for Environment and Green Development

Tackling water challenges through a hydro-economic lens

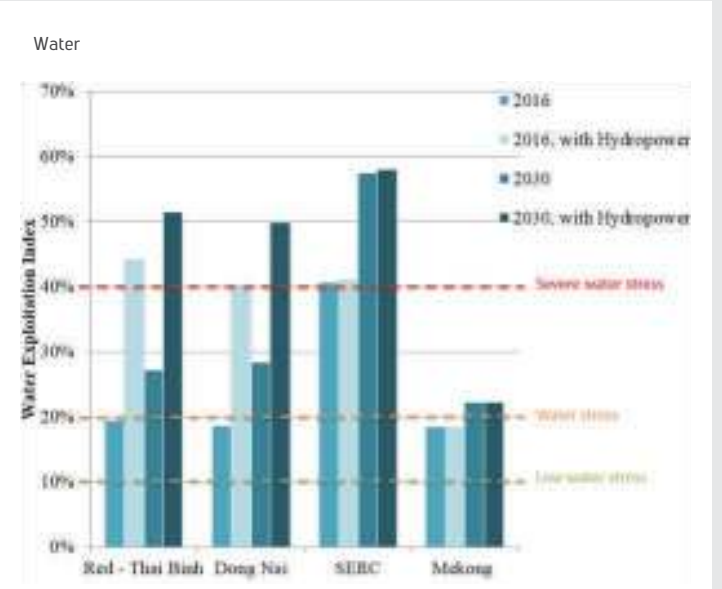


VIETNAM

The challenge

Vietnam has enough water for its people, but unequal distribution across the country means that some areas are water scarce and others are prone to floods. Climate change is expected to exacerbate the following water challenges:

- The water basins generating 80 percent of the country's GDP are expected to face water stress in the dry season by 2030 (See figure on Vietnam's water exploitation index).
- Surface water is polluted in urban and industrial areas, while groundwater suffers from saline intrusion. Over-exploitation of groundwater is depleting supply and leading to land subsidence and riverbank erosion, especially in Red River, the Mekong River delta (where 50 percent of Vietnam's rice is produced), and the Central Highlands (where 88 percent of Vietnam's coffee is grown).
- Rapid expansion of hydropower has led to water-sharing conflicts and issues related to dam safety, potentially worsening water stress in the dry season.
- Natural disaster events (droughts and floods) are increasing in frequency and severity, affecting livelihoods and agricultural production.



Water exploitation index for Vietnam's four key economic river basins

Focus areas

2030 WRG has recently completed a high-level water analysis, identifying the following possible work streams:.

- Improved irrigation practices in agriculture, targeting the coffee and rice sectors
- Wastewater treatment and reuse
- Water governance improvements and incentive frameworks for river basin management and water-use efficiency, respectively.

Building on this work, the next multi-stakeholder consultations will further define these areas of intervention for 2030 WRG in Vietnam.

Results and outcomes

A hydro-economic analysis of the water sector in Vietnam

2030 WRG conducted a high-level analysis of the water sector in Vietnam to assess the water demand-supply gap and water stress in four key river basins. Based on a cost curve analysis, it recommended cost-effective solutions to address the challenges. Following the analysis and stakeholder consultations, 2030 WRG conducted four deep dives on interventions with the most potential to address Vietnam's water resources challenges. These included:

- Alternating wet and dry rice management practices
- Enabling water efficiency for coffee production in the Central Highlands
- Promoting municipal wastewater treatment and reuse in Ho Chi Minh City
- Encouraging industrial wastewater treatment around Hanoi.

Multi-stakeholder advisory group meeting

2030 WRG established a multi-stakeholder advisory group to guide the water sector analysis. On September 26, 2017, 2030 WRG held an advisory group meeting in Hanoi to discuss the completed analysis. Members from the government, donors, water-user associations, research institutions, non-governmental organizations, and the private sector talked about the report findings and actions to be taken. This included discussion on incentives and regulatory reforms, river basin management, and policy incentives for private sector engagement.

Publications

Vietnam Hydro-Economic Framework for Assessing Water Sector Challenges

Contacts

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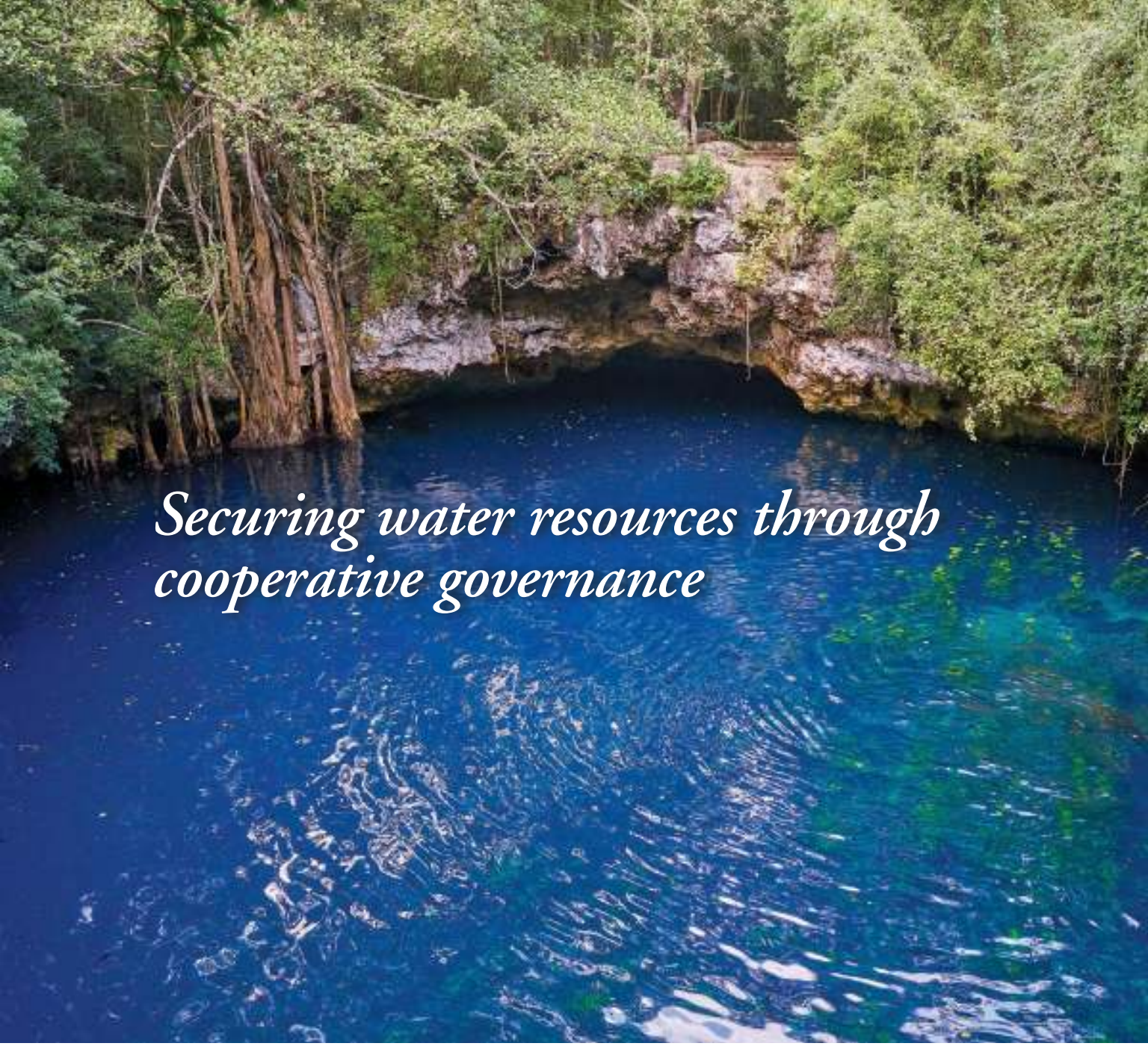
Key partners



Securing water resources through cooperative governance

MEXICO

The challenge

Most socioeconomic activities in Mexico take place in areas with the least available water. About 77 percent of the population and 79 percent of GDP production are concentrated in regions with just 32 percent of the country's existing water.

Water availability has dwindled from more than 18,000 cubic meters per person per year in 1950 to about 3,980 cubic meters in 2015. The 635 aquifers provide 37 percent of water for consumption, and 106 of these are overexploited.

Mexico is the world's seventh biggest investor in irrigation infrastructure. About 76 percent of the country's water is used for agriculture, but water productivity in the sector is low and competition for the resource is rapidly increasing. In urban areas—where 80 percent of the population lives—water utilities are performing poorly and are not financially self-sustaining. At the same time, drawbacks in wastewater management preclude the possibility of water recycling. Water pollution is a severe problem that affects the health of the country's people and ecosystems.

Climate change adds uncertainty, exacerbating these challenges. Integrated water resources management requires inter-institutional coordination between the policy sectors for water and the environment/climate change. It also requires support from the private sector—particularly given the current adverse macro-economic environment in Mexico, which is hampering the government's capacity to invest in the water sector.

WATER AVAILABILITY HAS DWINDLED FROM MORE THAN

18,000

CUBIC METERS PER PERSON PER YEAR IN 1950

TO ABOUT

3,980

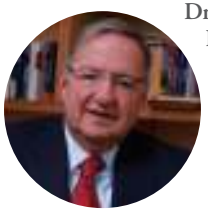
CUBIC METERS PER PERSON PER YEAR IN 2015

106 OUT OF

635

AQUIFERS ARE OVEREXPLOITED

"In partnership with 2030 WRG, the Consejo Consultivo del Agua has launched three important initiatives aimed at supporting greater public-private cooperation, shared responsibility, and inter-institutional coordination. This year the partnership between the Consejo Consultivo del Agua and 2030 WRG has moved towards implementation and stronger consolidation."



Dr. Jesús Reyes Heroles, President of the Consejo Consultivo del Agua

Focus areas

2030 WRG is working with Mexico on five key initiatives:

- Strengthening the planning and programming capabilities of the National Water Commission (Comisión Nacional del Agua, CONAGUA)
- Establishing PPPs for sustainable agricultural water infrastructure
- Integrating water and environmental policy
- Supporting water security integration and legal certainty in the industrial sector
- Improving water security in the city of Toluca.

To date, 2030 WRG has entered into three functional partnerships with key national and subnational entities. It has developed a close relationship with CONAGUA and provides technical advice as required.

In the second half of 2017, 2030 WRG was invited to become a full member of the Consejo Consultivo del Agua, giving it all the privileges and responsibilities of a member. This anchors 2030 WRG's presence in Mexico and enhances its capability to enable collective action and support institutional reform and policy change.

2030 WRG is also working with the Consejo Empresarial del Valle de Toluca and the Lerma River Basin Commission on a multi-stakeholder groundwater governance platform for the Toluca metropolitan region.

2030 WRG, CONAGUA, and the Consejo Consultivo del Agua have identified additional challenges that could be addressed through new initiatives, including building capacity in PPP policy design, formation, and management, as well as supporting the implementation of integrated wastewater management projects (following a circular economy approach).

Results and outcomes

Strengthening the planning and programming capabilities of CONAGUA

2030 WRG provided technical assistance to CONAGUA to help develop a multi-criteria prioritisation system for capital investment.

The system helps the institution to allocate scarce financial resources based on economic, social, environmental, and institutional criteria. It has proved particularly useful in the context of severe budgetary constraints. CONAGUA and 2030 WRG are assessing the system's performance and will make recommendations for improvements.

Establishing PPPs for sustainable agricultural water infrastructure

This initiative aims to enable a multi-stakeholder dialogue on the main barriers and opportunities for agricultural water infrastructure PPPs, share best practices, develop pre-feasibility studies and business cases for prospective projects, and provide initial policy recommendations and capacity building. It is being carried out in partnership with CONAGUA and the Consejo Consultivo del Agua, and includes participants such as BANOBRAS, IFC, and the World Bank, among others.

The first stage of this initiative focused on developing pre-feasibility studies and business cases for three prospective projects, including El Carrizo (in Jalisco), Valle de Guadalupe (in Baja California), and Tapaneo (in Morelia). It has also produced some policy reflections on the barriers and opportunities for PPP formation in the sector.

Integrating water and environmental policy

2030 WRG is working with the Consejo Consultivo del Agua to facilitate a multi-stakeholder discussion on green infrastructure solutions and best practice. It also aims to support the development of pre-feasibility studies and business cases, financial innovation, and the development of a road map for greater water and environmental policy integration. This initiative includes a range of participants, such as Conservation International, IFC, GIZ, the Instituto Mexicano de Tecnología del Agua, The Nature Conservancy, the World Bank, the World Resources Institute, the World Wildlife Fund, and the 100 Resilient Cities Initiative—Mexico City.

Supporting water security integration and legal certainty in the industrial sector

This initiative, led by 2030 WRG and the Consejo Consultivo del Agua, focuses on integrating water security and legal certainty considerations in business operations. The multi-stakeholder platform allows participants to discuss barriers and opportunities, and share best practices. The initiative aims to develop a methodology/toolkit for water security and legal certainty integration, and support the mobilization of financial resources for greater industrial sector adaptation to water security challenges.

"The city of Toluca is facing grave water security challenges and the business sector is extremely concerned. 2030 WRG and The Nature Conservancy are working closely with us to support the development of a groundwater multi-stakeholder dialogue platform that will help identify and implement solutions."

Ricardo Alvarez, President of the Consejo Empresarial del Valle de Toluca

Improving water security in the city of Toluca

Toluca is one of the main industrial hubs in Mexico, hosting many important corporations. But the city's water security is at risk—the river basin is depleted and polluted, and the local aquifer is being overexploited.

This initiative aims to strengthen multi-stakeholder water governance by supporting the establishment of the Toluca Valley multi-stakeholder groundwater management committee and by participating in the Comisión de la Cuenca del Río Lerma's wastewater management efforts. It is being carried out in partnership with the Consejo Empresarial del Valle de Toluca and The Nature Conservancy, and with the participation of IFC and other local stakeholders.

Contacts

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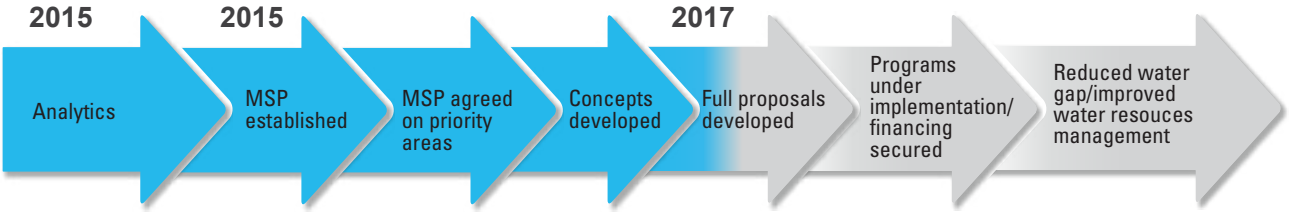
Roman Gonzalez, Country Representative Mexico, rgomezgonzalezco@ifc.org

MEXICO



- Develop a model for capital investments/ project portfolio privatization for CONAGUA
- Agreement Accord with National Water Commission signed

- Agreement with CONAGUA and CCA to establish MSP
- Agreement with Nestlé TNC and other actors to establish a geographic working group in Toluca

- CCA and CONAGUA have agreed on priority areas in MoUs with 2030 WRG

- Conagua has drafted Concept Notes for agricultural water projects for preparation for private sector investment

Key partners

CCAs membership-base is comprised of the following entities and individuals:

President and former-Presidents:

Dr. Jesús Reyes Heroles President of the CCA, former Secretary of Energy, former Director of PEMEX, former Ambassador to the United States / Mr. Carlos Fernández, former owner and CEO of Grupo Modelo / Mr. Gastón Luken, businessman and ex-President of Pronatura Noroeste / Mr. Manuel Arango, Honorary President and Founder of the CCA, businessman and philanthropist

Government Institutions:

Comisión Nacional del Agua, CONAGUA / Sistema de Aguas de la Ciudad de México, SACMEX / Other government institutions participate and convened when necessary—even though they are note members of the CCA

Private Sector Companies:

Actica / Agua de México / Agua, Servicios e Inversiones de Mexico / BAL-Ondeo (SUEZ-Environment and Grupo Peñoles) / CEMEX / Constellation Brands Mexico / Deloitte / Femsa S.A. de C.V. / Grupo Bal / Grupo Carso / Grupo Coca-Cola Company-Mexico/ Grupo GUTSA / Grupo ICA / Grupo Modelo (Anheuser-Busch InBev) / Grupo Heineken-Mexico / Grupo Lala / Grupo México-Infraestructura / Grupo Nestle-México / Grupo Peñafiel / Grupo Rotoplas / Impulsora de Empleo y Negocios de América Latina / MABE S. A. de C.V. / Proyectos Estratégicos e Integrales / Veolia-Water

Interest Group Associations:

Asociación Nacional de Empresas de Agua y Saneamiento, ANEAS / Asociación Nacional de Usuarios de Riego, ANUR / Cámara Nacional de la Industria de la Construcción, CMIC / Cámara Nacional de la Industria de la Transformación, CANACINTRA / Confederación Revolucionaria de Obreros y Campesinos

Academia:

Universidad Nacional Autonóma de México / Instituto de Ecología, UNAM / Instituto de Ingeniería, UNAM (Universidad Autónoma Metropolitana / Instituto Politécnico Nacional, IPN / Instituto Tecnológico de Monterrey, ITESM

Non-governmental Organizations:

Cantaro Azul / Centro Mexicano de Derecho Ambiental A.C. / Consejo Nacional de Industiras Ecologistas A.C. / Consultores de Educación Desarrollo y Capacitación A.C. / Fundación Mexicana para la Educación Ambiental A.C. / Instituto de Asistencia en Investigaciones Ecológicas A.C. / World Wild Fund-Mexico

International Organizations:

2030 Water Resources Group

Private Individuals:

Mr. Salomon Abedrop, former Deputy Director of CONAGUA, financial consultant / Ms. Regina Barba, Environmental Consultant / Mr. Francisco Covarrubias Giatan, former Undersecretary of State for Urban Development / Mr. Jose Angel Gurria (Secretary General, OECD) / Mr. Cesar Herrera Toledo, former Deputy Director of CONAGUA / Dr. Blanca Jiménez Cisneros, Coordinator of Water Treatment and Re-Use, at the Engineering Institute, UNAM (and Director of the Division of Water Sciences and Secretary of the International Hydrological Programme (IHP) / Mr. Francisco Mayorga Castañeda, former Secretary of State for Agriculture / Mr. Rodolfo Ogarrio, former Executive Director of CCA, Executive Director of Fundación Mexicana para la Eduación Ambiental / Mr. Bernardo Sepulveda Amor, former Secretary of Foreign Affairs and former International Court of Justice Judge / Mr. Eduardo Vazquez, former Executive Director of CCA, Mexico City Water Fund Manager

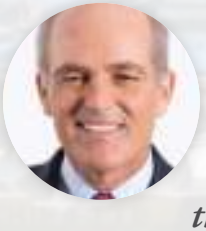
The CEVATs membership-base is comprised of:

Barcel / Bonafont / Bosch / CACSA / Cervercería Cauhtemóc / Cervecería Modelo / CINASA / Compañia / Harinera Los Angeles / Coca-Cola Femsa / Chrysler / Detto / Dupont / Editorial Cigome / Gates / Gelita / General Motors / Grupo Bimbo / Holiday Inn Express / Kellogg's / KHS / Marriot Courtyard / Nalco / Nestle / O'Donnel Competitive / Polioles Poliuretanos / Reciclagua /Roche /SC Johnson /SafMex / Sealed Air / Signa / Tecnológico de Monterrey

"The agricultural water sector in Mexico requires more investments for its modernisation, something that can be accomplished through alternative financial mechanisms. The CCA and CONAGUA, with the support of the 2030 WRG, are working together to innovate and facilitate PPP formation in the sector."

Marco Antonio Parra Cota, Deputy Director of Irrigation Infrastructure, CONAGUA

Building robust policies and alliances for sustainable water management in Peru



"In Peru we do not lack water; what we need is a responsible and sustainable management of water resources. Peruvian businessmen share the vision of harmonizing economic growth, the social agenda, and the protection of the environment. We join this effort of 2030 WRG and the ANA [National Water Authority] to make water management a priority issue."

Roque Benavides, President, Confederación Nacional De Instituciones Empresariales Privadas (CONFIEP)

PERU

The challenge

Despite an abundance of fresh water, Peru faces growing water scarcity. Up to 98 percent of freshwater run-off flows into the sparsely populated Amazon region, with just 1.8 percent available to support 70 percent of Peru's population, who live in the arid desert regions of the Pacific coast.

Pressure on water resources in these regions is increasing due to economic development and a rapidly growing, urbanizing population concentrated around the capital, Lima. Water scarcity not only threatens Peru's economic and social development, but also causes conflict between communities and industrial users.

Historically, lack of trust and coordination between different sectors, limited public funding for infrastructure, and limited private sector engagement or investment have prevented Peru from effectively responding to its water challenge. The national water agency, responsible for managing water across the country, has estimated that $45.7 billion in new investment is required by 2035 to meet the nation's water needs.

98%

OF FRESHWATER RUN-OFF FLOWS INTO THE SPARSELY POPULATED AMAZON REGION

ONLY

1.8%

AVAILABLE TO SUPPORT 70 PERCENT OF PERU'S POPULATION

Focus areas

At the beginning of 2017, the three working groups that had been operating evolved into six working committees focused on the needs, problems, and opportunities identified during dialogues. Stakeholders are now organized into thematic working groups to advance a range of water initiatives, supported and facilitated by 2030 WRG. The new committees address the following issues:

- Water works for taxes
- Groundwater management
- Water-responsible companies
- Water governance and dialogue processes
- Promotion of public policies around water
- Water stress and adaptation to climate change.

These committees search for concrete solutions with specific tasks assigned to the different stakeholders. To ensure a coordinated government response, representatives of key ministries participate in the working groups. In addition, they have made a concerted effort to ensure companies from the energy, mining, agriculture, and food and beverage sectors participate by building a stronger appreciation for the business risks associated with water scarcity.

Results and outcomes

The Peru 2030 WRG partnership consists of more than 70 institutions participating in working groups and initiatives for the sustainable management of water, including high-level members from the private and public sectors. Civil society is also strongly represented. The chair of the country's 2030 WRG steering committee was appointed by the President of Peru, who strongly supports 2030 WRG. His support has been key to the platform's convening power and legitimacy. The committee also includes five ministers who lead the implementation of key water resources initiatives.

Shaping new regulations

Platform members have actively helped to shape new regulations to manage groundwater, including through the Groundwater Management and Monitoring Tariff, a new levy that utilities in Lima and Trujillo are raising from industrial groundwater users. The levy is now being extended to other regions.

Unlocking PPP opportunities

The Ministry of Housing is piloting an innovative scheme called Taxes for Projects, which allows companies to use up to 50 percent of their tax obligations to implement water infrastructure projects. Streamlined government processes make it easier for companies to participate. In 2017, the ministry launched three projects for $13.5 million; two of them are being built by company members of the platform.

Encouraging business action

The government has designed a Blue Certificate initiative to encourage businesses to measure and reduce their water footprint; capacity-building support is also provided. By the end of 2017, eight companies were in the certification process, all of them members of the multi-stakeholder platform. See page 34 for an in-depth story on Peru: Recognizing responsible water-using companies.

Contacts

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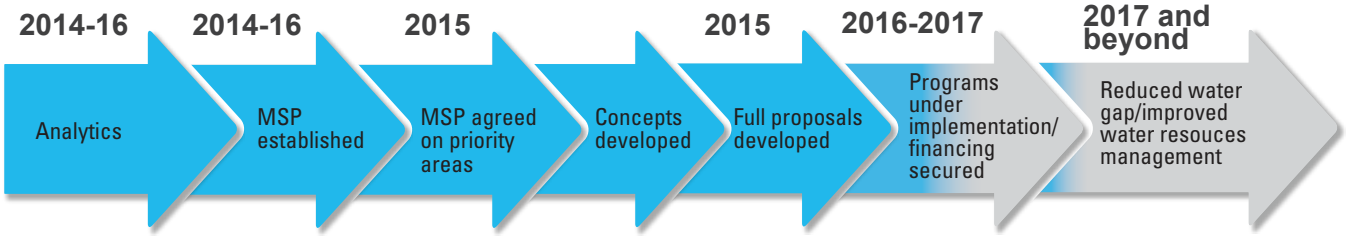
PERU



- The publication "Planificación Hídrica en el Perú" with Ana (2016)
- The advocacy paper developed by 2030 WRG helped position water on the political agenda during the 2016 presidential elections (2016)

- Steering Board committee strengthened with the presence of 5 ministers and the Chair appointed by President Kuczynski– (2016)
- Over 50 partners engaged in MSP
- The Steering committee strengthened with the presence of 5 ministers and the Chair appointed by President Kuczynski (2016)

- Economic Incentives for Sustainable Water Management
- Public-private Partnerships for Sustainable Watersheds
- Innovative Financial Solutions for Investment in Water Projects

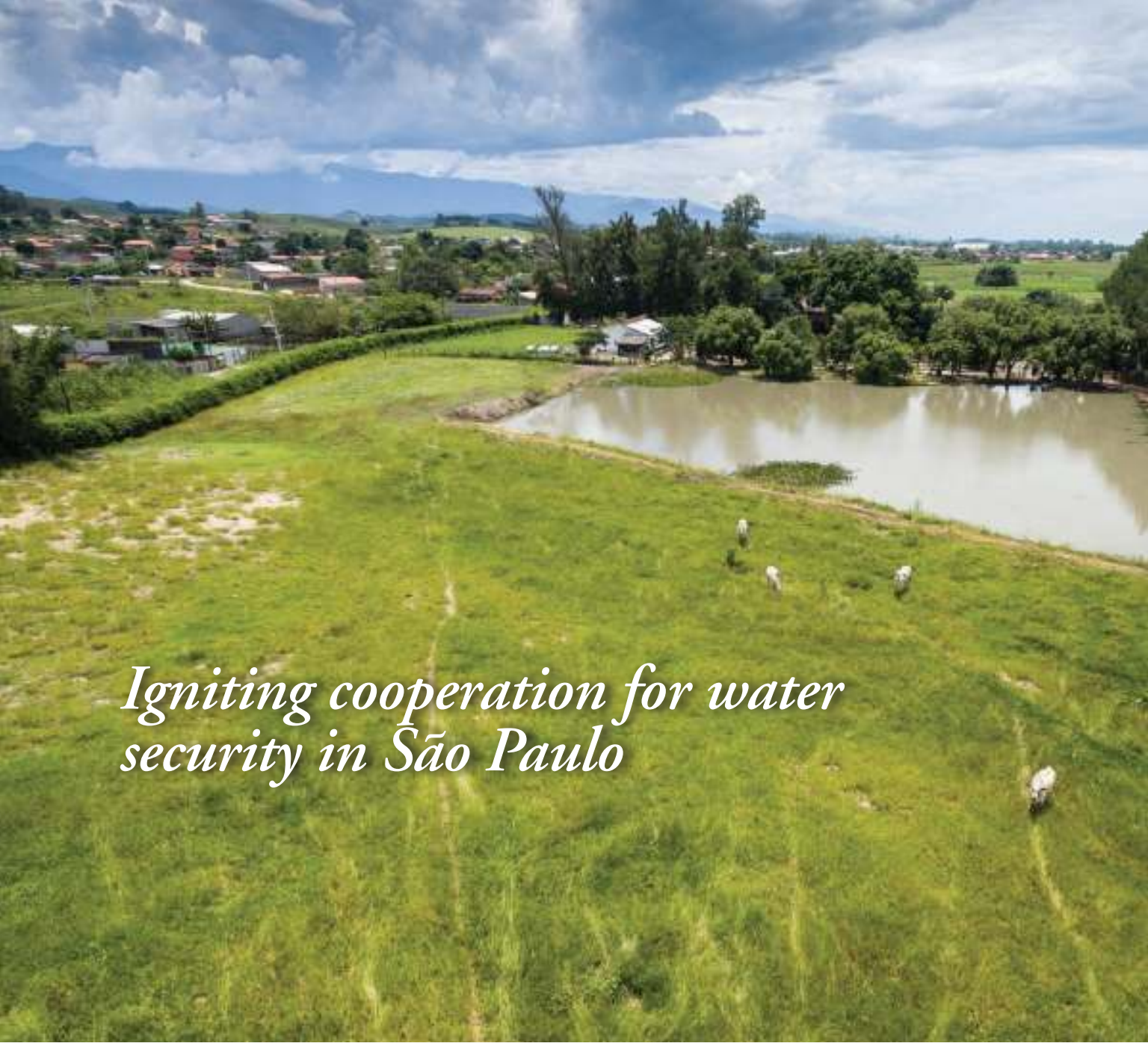
- Works for Taxes (OxI) project concepts under development in Agriculture and Housing Ministries (2016)
- 2030 WRG is helping the new administration set up major new funds for water security and water access. Validation of the "Fondo de Agua Segura" (2016)

- Prioritization of investments
- Groundwater abstraction tariffs
- Blue Certificate
- AWS asparagus project

- ANA formally adopts prioritization study as legal norm
- SUNASS and utilities confirming responsibilities for implementation of groundwater regs
- AWS water stewardship asparagus project under implementation
- 8 companies are inscribed at the Blue Certificate program…as of December 2017
- 6 new Working Groups 2030 WRG of Peru now in the phase of Transformation

- Water saving measures implemented by 2 companies under Blue Certificate scheme

Key partners



Igniting cooperation for water security in São Paulo

SÃO PAULO, BRAZIL

The challenge

The state of São Paulo is highly urbanized, with 22 percent of the country's population concentrated in this region.

Water demand is higher than availability in its main metropolitan areas. In addition, the region has been under severe water stress in the last few years, threatening water availability for people and economic activities. Inadequate sewage treatment infrastructure, poor water quality, and the effects of climate change exacerbate the problem.

The state needs a range of innovative policies, institutional arrangements, and investments to increase water availability, expand domestic sewage treatment to the entire territory, and broaden the use of best practices in the water sector. This can only be achieved through collaboration among stakeholders from the public, private, and civil society sectors.

Focus areas

The unprecedented drought that affected São Paulo in 2014 and 2015 highlighted its water insecurity and created the momentum for 2030 WRG's engagement.

Based on dialogues with government, the private sector, and civil society, 2030 WRG identified two strategies to improve the state's water security. The first

MORE THAN

95%

OF SAO PAULO'S POPULATION USES TREATED WATER

HOWEVER, ONLY

60%

OF THE EFFLUENTS ARE TREATED

is to reuse effluents from domestic sewage treatment stations to reduce the excessive water demand for productive activities, which in some regions competes with the ability to supply water to urban populations. The second strategy involves improving the performance of sanitation services in small and medium municipalities in São Paulo, and supporting and developing new financial and institutional arrangements that can guarantee the economic and environmental sustainability of sanitation services.

Results and outcomes

In July 2017, 2030 WRG signed a memorandum of understanding with the São Paulo Water and Sanitation Secretariat and hired a representative to lead the program. Four working groups, with the participation of key decision makers, have been established to foster dialogue and transparency in seeking solutions for the water security challenges identified.

Environmental and sanitary regulation of industrial reuse

The working group allows stakeholders to establish an easier way to communicate with regulatory and control bodies, consolidate experiences, and try to make regulation of reuse from sewage treatment stations adaptable and replicable. It also aims to help companies comply with recent regulations.

Market analysis of new reuse facilities

The working group is studying the viability of new production and commercialization units for sewage treatment stations.

An increase in affordable technologies and greater awareness about the water stress in São Paulo may help with implementing solutions suggested by previous studies, such as expanding measures to rationalize the use of water resources..

Stormwater retrofitting

This working group is focusing on the technical and financial feasibility of retrofitting stormwater reservoirs, which will be supplemented with compact treatment stations.

Financial sustainability of sanitation for small municipalities

The working group is discussing the dynamics that lead to some small and medium municipalities (with less than 300,000 inhabitants) in São Paulo providing inadequate water and sanitation services. It aims to support the state in its usual funding programs and to provide a solid basis for further diversified investments.

As these groups began their work, 2030 WRG continued to reach out to local stakeholders to present its activities. The response to its presence and performance in helping to improve water security has been positive.

Contacts

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Stela Goldenstein, São Paulo Representative, sgoldenstein@ifc.org

Key partners

ABDIB, aquapolo ambiental, Braskem, Dow, FGV Grupo de Economia da Infraestrutura e Soluções Ambientais, Sanasa Campinas – Nossa vida é inovar, Sabesp, Governo do Estado São Paulo – Secretaria de Saneamento e Recursos Hídricos

"In Brazil, 2030 WRG has become one of the most important forums on water and wastewater discussions encouraging participation from different sectors. A clear agenda on prioritization allows us to believe in a new future where we will accelerate good solutions to solve long-term issues."

Renato Ramos, Latin America Commercial Leader,
Water & Process Solutions, Dow Chemical

Water partnerships for growth and transformation

"Water resources management is critical to benefit the socio-economic welfare of the people in Ethiopia. Therefore, local, regional and national actors need to collaborate to ensure sufficient quantity and quality of water is available for all. 2030 WRG Ethiopia convened a diverse group of stakeholders, which is the first step in forming the partnership together. We look forward to jointly building this Partnership in Ethiopia."

Tegenu Zerfu, Resident Program Manager, Dutch Water Authorities

ETHIOPIA

The challenge

The government of Ethiopia aims to become a middle-income country by 2025 by building on its agricultural base, stimulating industrial growth, and attracting more investment. Water resources are a critical enabler to this growth and present both risk and opportunity.

Each year, Ethiopia has 122 billion cubic meters of water available for use but is faced with high levels of variability, both geographically and temporally. The country lacks the necessary infrastructure to adequately manage this variability. Water variability costs the Ethiopian economy an estimated 38 percent of its potential growth rate and increases poverty rates by 25 percent. This presents risks to growth, transformation, and interest from private investors; the delivery of public services; and broad-based growth that benefits all Ethiopians.

Focus areas

Based on stakeholder consultations, two initial priority areas and multi-stakeholder work streams are being explored and will be defined in the near future:

- **Water for agriculture** aims to accelerate water-use efficiency and support improvements in water productivity in agricultural cultivation.
- **Water for industrialization** aims to support integrated water resources management for industrial practices, including accelerating wastewater treatment and reuse, developing public-private-community partnership models, and facilitating finance.

HYDROLOGICAL VARIABILITY COSTS THE ECONOMY AN ESTIMATED

38%

OF ITS POTENTIAL GROWTH RATE AND INCREASES POVERTY RATES BY

25%

The outcomes of a hydro-economic analysis, currently in the pipeline, will further refine these work streams.

Results and outcomes

2030 WRG held more than 100 consultations with different stakeholders to understand the water challenges they face. It convened several small gatherings to discuss the multi-stakeholder platform's governance structure and brainstorm ideas for the focus areas.

Contacts

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Nina Jansen, Country Program Coordinator, njansen@ifc.org

"In Ethiopia, cotton is projected to be a fast-growing cash crop, and the current practice of dependence on furrow irrigation in cotton production is not sustainable from environmental and productivity points of view. We, at the Cotton Association, therefore, look forward to collaborating with 2030 WRG and relevant government schemes in the promotion of relevant on-farm irrigation technologies."

Haddish Girmay, Vice President, Ethiopian Cotton Producers and Exporters Association

Working through partnerships to secure Kenya's water-smart future

"They say a problem shared is a problem halved and solved. And when we build a partnership beyond the national and county government, I believe we are able to achieve these goals."

Eugene Wamalwa,
Cabinet Secretary,
Kenya Ministry of Water and Irrigation

KENYA

The challenge

Kenya is a land of contrasts: it is home to water towers such as Mount Kenya and the Aberdares, yet 80 percent of the country is arid and semi-arid. With rapid urbanization, population growth, and ambitious economic plans and targets, Kenya faces environmental, social, and economic challenges, including water stress. If Kenya maintains a business-as-usual approach to managing its water resources, by 2030, there will be a 30 percent gap between water demand and available supply.

Focus areas

The 2030 WRG Kenya partnership aims to accelerate reforms and facilitate action to help close the projected 30 percent gap between water supply and demand in the following areas:

- Agricultural water management
- Industrial water management
- Urban water management.

A BUSINESS-AS-USUAL APPROACH WILL LEAD TO A

30%

GAP BETWEEN WATER DEMAND AND SUPPLY BY

2030

MORE THAN 100 PARTNERS FROM ACROSS THE COUNTRY HAVE COME TOGETHER TO HELP CLOSE THIS GAP.

"Solutions to Nairobi's unique water-related challenges can only be found through strong involvement among public, private, and civil society players. This alliance creates an opportunity to properly engage in a way that did not exist before."

Phyllis Wakiaga, Kenya Industrial Water Alliance Chair and CEO of Kenya Association of Manufacturers

Results and outcomes

Agricultural water management

In 2017, the newly established Mount Kenya Ewaso Water Partnership, supported by 2030 WRG and spearheaded by the county government of Laikipia and Mount Kenya Growers Group, grew its partnership to 69 organizations through an awareness campaign and membership drive. In partnership with the Water Resources Authority, water resource user associations and the Mount Kenya Growers Group, the partnership implemented a water-rationing program to restore river flows and reduce upstream–downstream conflicts. The Mount Kenya Ewaso Water Partnership is also working with Wetlands International to strengthen the institutional capacity of water resource user associations and with SNV to promote efficient irrigation practices by offering a platform for the irrigation acceleration program. With support from 2030 WRG, the partnership is developing project proposals for community water storage.

Initially under the Ministry of Water and Irrigation's leadership and technical assistance from 2030 WRG, the East Africa irrigation financing facility has been approved and will now be implemented. The facility aims to increase access to water productive irrigation systems for smallholder farmers, leveraging partnerships among key stakeholders across the value chain: banks, equipment providers, smallholder farmers, and offtakers, with cooperation agreements in place. The facility will be anchored within IFC.

Industrial water management

The Kenya Industrial Water Alliance, established by GIZ's IWaSP and 2030 WRG and spearheaded by the Kenya Association of Manufacturers and the Water Resources Management Authority, organized two peer-to-peer learning events; a knowledge exchange workshop, which brought together 60 stakeholders from government, manufacturing industries, and academic institutions; and a visit to Nairobi Bottlers, a Coca-Cola subsidiary, to learn about industrial water management. The events aimed to promote best practices in industrial water management in companies. In collaboration with other partners, Kenya 2030 WRG is also working with the Nairobi City Water and Sewerage Company to develop a mechanism that will improve effluent waste management and enhance recycling at source by promoting wastewater treatment and compliance with effluent discharge regulations.

Urban water management

Under the leadership of the Ministry of Water and the Kenya Water and Sanitation Network, the Kenya 2030 WRG partnership is working with stakeholders to develop initiatives to promote innovative financing models such as performance-based contracts to encourage private sector investment in solutions that help address municipal leaks and non-revenue water—water that is produced for consumption but lost before it reaches the user.

Contacts

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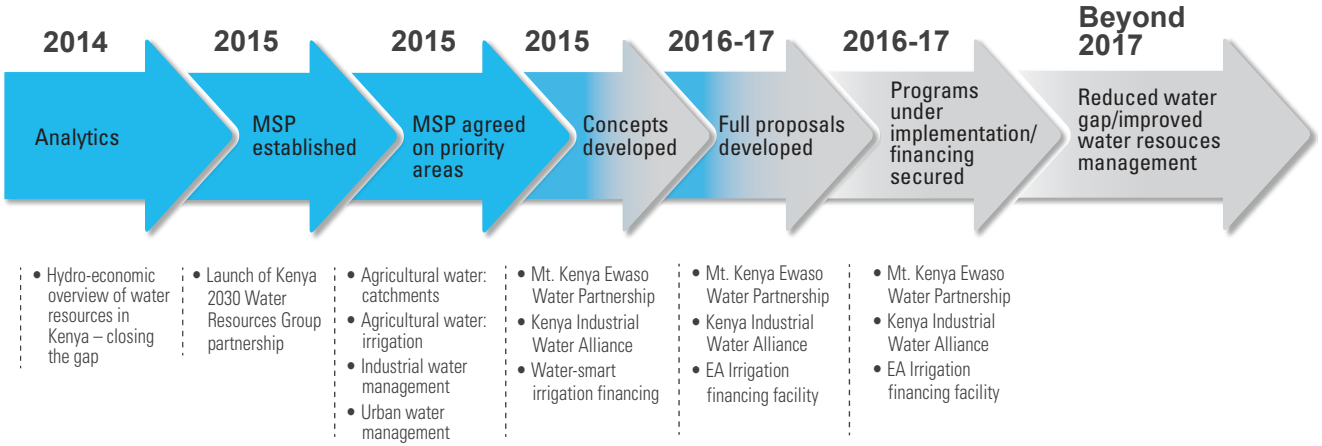
KENYA



Key national partners

Key KIWA partners

Key MKEWP partners

In addition to the above-listed partners, there are over 60 partners that comprise the newly launched Mount Kenya Ewaso Water Partnership.

Innovating for impact

"Acknowledging that water is not an isolated sector but an enabler for us to achieve the goals set out in our National Development Plan, the Strategic Water Partners Network has become the key platform to facilitate new forms of partnerships between different actors needed for us to achieve water security in South Africa and in the region (Southern Africa)."

Lindiwe Lusenga, Deputy Director General, International Water Cooperation, Department of Water and Sanitation

SOUTH AFRICA

The challenge

Despite the South African government limiting the agricultural sector's water use through legislation, the combination of increasing domestic and industrial water demand and high but stagnant agricultural water demand will lead to a 17 percent gap between water supply and demand by 2030.

Focus areas

2030 WRG identified three key areas that need to be improved to help close the gap between water supply and demand:

- Water-use efficiency and leakage reduction
- Agricultural supply chain water
- Effluent and wastewater management.

The SWPN – a partnership between the public, private, and civil society sectors aimed at reducing the gap between water supply and demand – focuses on putting in place the building blocks and testing and scaling innovations (institutional and financial) that accelerate the above thematic areas. There are also plans to expand the focus to sanitation, skills development, and transformation, as well as create a water stewardship working group to review the SWPN's work.

WITH SOUTH AFRICA'S GROWING POPULATION, AND CURRENT EFFICIENCY LEVELS, THE COUNTRY COULD HAVE A WATER DEFICIT OF UP TO

3.8B m^3 by 2030

THAT'S A

17%

GAP BETWEEN WATER SUPPLY AND DEMAND

Results and outcomes

Water-use efficiency and leakage reduction

Reducing losses of existing water supply is more cost-effective and reliable than developing new sources – dams, reuse, groundwater, or desalination. It also helps improve scarce municipal revenues – non-revenue water in South African municipalities amounts to an estimated R7 billion each year. The SWPN is combining partner efforts (including corporates, development banks, and donor-funded programs) to reduce municipal non-revenue water. The success of one of the partnership's flagship initiatives, the No Drop program, is reflected in the use of its tools and results by various stakeholders, including:

- The Department of Water and Sanitation, to provide regulatory support to municipalities
- Municipalities, as planning tools for their internal non-revenue water work
- Private sector partners, to identify municipalities with whom to develop partnerships for leak-reduction projects.

Agricultural supply chain water

Water use for agriculture accounts for about 66 percent of national demand; however, between 30 percent and 40 percent of the irrigation water is lost through conveyance in irrigation canals. There is a huge backlog to refurbish irrigation infrastructure, which, if implemented, would enable the sector to grow without increasing its water use. The SWPN supported the installation of the Water Administration System – a proven irrigation water-saving management system – in six irrigation schemes. As a result, these irrigation schemes save 55 million cubic meters of water each year. This is half the annual amount of water used by Nelson Mandela Bay (a city with a population of over 1.1 million residents) and about 2 percent of the gap in water supply and demand, estimated at 2.7 billion cubic meters per year, expected by 2030. The SWPN is also working on initiatives in infrastructure finance, smallholder productivity, and financing irrigation efficiency.

Effluent and wastewater management

While examples exist of good municipal wastewater management, the 2011 Green Drop report—a measure of wastewater management performance in South Africa – classified 56 percent of wastewater treatment plants as either performing poorly or being in "critical condition." The mining sector has also traditionally fared poorly in terms of managing its effluent: the regional concentrations of mining activities have polluted water sources, in some cases for over a century.

This working group is putting in place the policy, institutional, and financial enablers for improving wastewater treatment reuse. The mine water coordinating body is developing an initiative to use reclaimed mine water to irrigate soya beans and wheat on 60 hectares of land in the Mafube and Arnot coal mines. Half of this area is mine-rehabilitated land. See page 27 for an in-depth story on South Africa: Making mine water management sustainable.

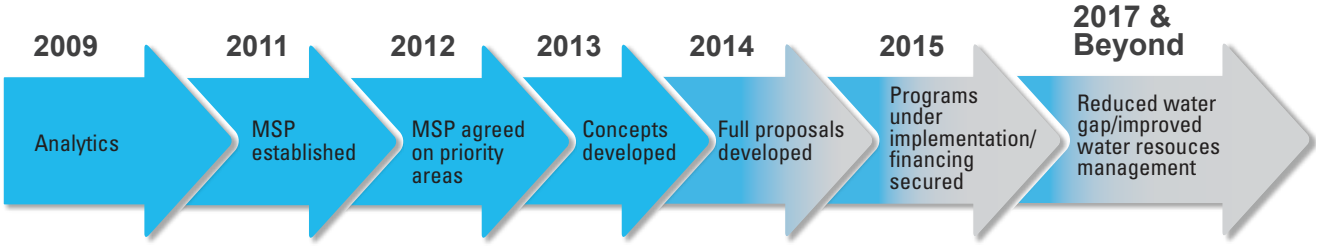
Contact

Nick Tandi, SWPN Programme Manager, nick.tandi@thenbf.co.za

"The Strategic Water Partners Network is a true embodiment of our collective ambition to create partnerships at the scale that matches the magnitude and complexity of the water risk that we have to manage now and into a future made uncertain by climate change."

David Grant, Sustainable Development Manager, Africa Zone, AB InBev

SOUTH AFRICA



2009	2011	2012	2013	2014	2015	2017 & Beyond
• Charting Our Water Future analysis	South Africa Strategic Water Partners Network established	• Water Use Efficiency and Leakage Reduction • Effluent and Waste Water Treatment • Agricultural supply chain • Two new work streams under development (2015)	• No drop programme (municipal water loss) • Performance-based contracting toolkit • Mine Water Coordinating Body (Olifants River Catchment • Vaalharts irrigation PPP	• No drop programme (municipal water loss) • Performance-based contracting toolkit • Water administration system (irrigation) • Mine Water Coordinating Body (Olifants River Catchment)	• No drop programme (municipal water loss) • Water administration system • Mine Water Coordinating Body (Olifants River Catchment)	• Reduced the abstraction of freshwater by 55 million m³/year

Key partners

AngloAmerican, ARC • LNR, BIGEN AFRICA, Joburg, CITY OF TSHWANE, Eskom, ENDANGERED WILDLIFE TRUST, exxaro POWERING POSSIBILITY, IWaSP, Johannesburg Water, NEPAD BUSINESS FOUNDATION, Nestlé, RAND WATER, SAB, SALGA Inspiring service delivery, SABI, SASA, sasol, SOUTH32, The Coca-Cola Company, TRANSNET, SIWI, water & sanitation, Department: Water and Sanitation, REPUBLIC OF SOUTH AFRICA, WATER RESEARCH COMMISSION, WWF, Strategic Water Partners Network

Securing water for agricultural growth

"We really appreciate 2030 WRG's drive towards achieving the desired objectives and let me reiterate our (TAHA and the industry) commitment and support in this partnership."

Jacqueline Mkindi,
Chief Executive, Tanzania Horticultural Association

KWSP is a critical platform which enables public and private sectors to come together to solve the difficult problems of water management that face us all. In the future, people will see this as a critical step to ensuring sustainable development in the Kilimanjaro Region.

Mark Blackett, Regional Director, Rikolto East Africa

"2030WRG has provided an opportunity for different sectors to come together to work together towards the protection of water resources in Tanzania. Creations of national forums, platforms and stakeholder meetings at catchment and national level, enhances exchange of experiences and ideas between different sectors. This is of paramount importance in our work in water resources management."

Herbert Kashililah, Africa Project Manager, Water Witness International/Shahidi wa Maji

TANZANIA

The challenge

Tanzania's available water is declining from 2,300 cubic meters per person in 2002 to less than 1,700 cubic meters today. Water scarcity and pollution are contributing to disputes among users and jeopardizing the country's development goals.

Over the last five years, Tanzania's renewable freshwater resources dropped below 1,700 cubic meters per person—the level at which countries are considered to be water stressed. Crossing this threshold is a warning signal for the country: action on water resources is needed, and it is needed now.

If Tanzania cannot make more water, then it will need to manage it better. Managing water resources will ensure that the country's economic growth stays on a sustainable path and the water needs of future generations are met.

Focus areas

The 2030 WRG Tanzania partnership is working to address these challenges through various national and catchment-level water stewardship and agricultural water efficiency initiatives. The focus areas include:

- Facilitating the creation of an irrigation financing facility
- Promoting water stewardship standards
- Developing catchment governance and restoration initiatives
- Raising awareness and advocating for sustainable water resources.

AGRICULTURE IN TANZANIA ACCOUNTS FOR

85%

OF EXPORTS

MORE THAN

50%

OF EMPLOYMENT

AND

85%

OF WATER USE

In 2018, the 2030 WRG Tanzania partnership will lead the first component (water resources management) of the Water Sector Development Program, representing development partners. This is a joint technical working group comprising the government, civil society organisations, and development partners such as the Department for International Development, GIZ, the World Bank, The Nature Conservancy, the World Wildlife Fund, the International Union for Conservation of Nature, and Water Witness International (Shahidi wa Maji), among others.

Results and outcomes

The 2030 WRG Tanzania partnership has made significant progress in the following areas:

National multi-sectoral platform for water resources management

The 2030 WRG Tanzania partnership together with the Ministry of Water and Irrigation launched a national multi-sectoral platform annual meeting for water resources management in October 2017. The event was attended by 86 individuals/institutions. The platform operates alongside the country's official integrated water resources management structures, playing an important role in bridging the public-private collaboration gap at the national level.

Outreach to other initiatives

The partnership has reached out to a range of stakeholders and other initiatives to get a sense of activities in the sector and avoid replication. Such initiatives include the Southern Agricultural Growth Corridor of Tanzania (to gain insight into planned agricultural activities in the Rufiji basin) and the Water Futures Partnership (a risk assessment it conducted in the Wami-Ruvu basin was an important source of information for 2030 WRG's analysis)..

Kilimanjaro Water Stewardship Platform

The platform, launched in April 2016, provides a mechanism to co-develop, coordinate, and scale up interventions and solutions in areas such as:

- Improving catchment management and restoration
- Increasing water-use efficiency
- Promoting the uptake of water stewardship and standards
- Strengthening catchment governance.

It involves a range of participants, including the International Water Stewardship Program, the Pangani Basin Water Board, the Tanzania Horticulture Association, Alliance for Water Stewardship, Serengeti Breweries, TPC, Kiliflora, and Water Witness International.

The platform has made significant progress. It has mobilized resources for the preparation of concrete programs to be implemented; a water resources action plan; and established a solid partnership between the public and private sectors.

Great Ruaha restoration platform

The Great Ruaha River in south-central Tanzania is critical to the country's growth, but it is rapidly drying up. The Great Ruaha restoration platform aims to forge partnerships between public, private, and civil society actors to address this water crisis. 2030 WRG conceived and promoted this initiative with a range of partners, notably the Ministry of Water, the Rufiji Basin Water Office, the CEO Roundtable of Tanzania, the Southern Agricultural Growth Corridor of Tanzania, and WWF-Tanzania.

The platform has scaled the basin's integrated water resources management development plan down to catchment level and developed an agreed concept note to take the partnership forward. It also raises awareness of key players, which contributed to the Office of the Vice President's decision to form a task force for the drying river.

National efficient irrigation financing facility

The 2030 WRG Tanzania partnership has been working on this initiative since 2016 to encourage increased agricultural productivity through investments in irrigation infrastructure. This will ensure that water is used more efficiently and effectively. In 2017, the partnership consulted with finance experts and transaction advisers to further develop the facility.

Contacts

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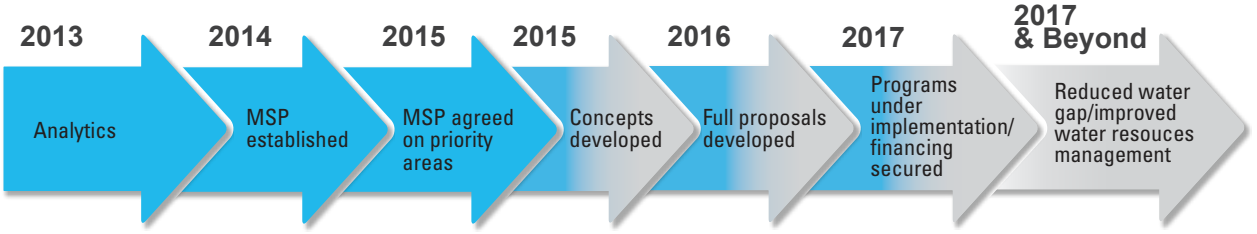
TANZANIA



- 2013
  - Targeted analysis on water resources management issues
  - Agricultural Water Scoping Report
- 2014
  - Tanzania 2030 WRG partnership established
- 2015
  - Water efficiency
  - Water storage and source protection
  - Cross-sector collaboration
- 2015
  - Greater Ruaha Restoration Campaign
  - Kilimanjaro Water Stewardship Campaign
  - Innovative financing for water-efficient smallholder agriculture
- 2016
  - Kilimanjaro Water Stewardship Campaign
- 2017
  - Kilimanjaro Water Stewardship Campaign
  - Catchment Restoration initiative going on under KWSP (secured $500K), for program development (not for investments!)
  - Irrigation Financing WG assessed priority value-chain led by VECO & TAHA and Nationa Financing Facility underway in collaborations with FSDT
- 2017 & Beyond
  - Ministry adopted the National MSP and some support funds are allocated through WSDP

Key partners

SCALING UP FOR IMPACT | 115

CHAPTER FOUR

COMMUNICATIONS, OUTREACH, AND KNOWLEDGE MANAGEMENT

Our presence in the media (mainstream, local, and online/social) is steadily increasing as momentum is gained in the countries with which we work. We are increasingly cognizant of the importance of positioning and raising awareness of our work, especially in new country engagements, as our brand continues to grow and mature.

Wider online presence

High-quality engagement on the 2030 WRG Twitter channel is presenting opportunities for growth. Our connection with several partner accounts with established feeds, including IFC and the World Bank Water Global Practice, has widened our reach and increased our impact online. Several of our Governing Council and Steering Board members are major influencers in the field, enabling us to expand the reach of our key messages even further. Our quarterly e-newsletter is an informative tool that is well received by partners and interested stakeholders. A website campaign in the second half of 2017 added more subscribers to the distribution list, which currently has about 5,200 subscribers.

Event highlights

We participated in various international workshops, seminars, and conferences, including the World Economic Forum Annual Meetings in January, World Bank Water Week, and Stockholm World Water Week. 2030 WRG works with existing partners and key clients to raise awareness about its country work, collaborate with others, and put multi-stakeholder partnerships and collective action in the water sector high on the global agenda. We look forward to forging new partnerships and seeking efficiencies with our Water Global Practice colleagues in the new year.

Key event highlights include the Peru-Mongolia Water and Mining Exchange, organized by 2030 WRG in April 2017. The 2030 WRG team interviewed several high-level partners in Peru and representatives from the Mongolian delegation, which will be featured in a new short film about the exchange. The video is part of a larger selection of 2030 WRG multimedia material that showcases our work and our partners, including a video of an industry study visit by the Kenya Industrial Water Alliance to a Kenyan bottler in Nairobi. The video clips have been made available on the website https://www.2030wrg.org/news/videos and social media channels, and will be shown at various local multi-stakeholder meetings as well as international water-related events.

Group collaboration

Within the World Bank Group, 2030 WRG continues to work closely with the IFC and Water Global Practice communications teams, providing input into regular IFC communications reporting on media appearances, updating information briefs, and providing relevant information and results for largely internal audiences. In April, 2030 WRG collaborated with IFC and the Water Global Practice on a BBC article on global water security. This article, along with other stories, blog pieces, and policy notes produced during the year, demonstrated that working with partners on thought pieces is a good way to explore further media opportunities in future.

In 2018, 2030 WRG will be branded as ***2030 Water Resources Group, a public, private, civil society partnership hosted by the World Bank Group***, with the existing 2030 WRG logo on the left and the World Bank Group logo on the right, which will appear on all official communications and materials. A practical communications guide will be developed to help partners and vendors adapt to the changes.


WORLD BUSINESS
B3

CHAPTER FIVE

GOVERNANCE

Governing Council

2030 WRG's governance structure comprises a Governing Council, Steering Board, and Secretariat. The Governing Council consists of 19 senior executives of development partners, who guide the strategic direction of 2030 WRG.

2017 Governing Council members

- Paul Bulcke (Co-Chair), Chairperson of the Board, Nestlé[9]
- Philippe Le Houérou (Co-Chair), Executive Vice President & CEO, International Finance Corporation (IFC), World Bank Group
- Akunwumi Adesina, President, African Development Bank
- Inger Andersen, Director-General, International Union for Conservation of Nature
- László Balogh, Deputy State Secretary, Ministry for National Economy, Government of Hungary
- Guang Zhe Chen, Senior Director for the Water Global Practice, World Bank Group
- Carin Jamtin, Director-General, Swedish International Development Cooperation Agency[10]
- James Quincey, President and CEO, The Coca-Cola Company[11]
- Andrew Liveris, Chairperson and CEO, The Dow Chemical Company
- Nomvula Mokonyane, Minister of Water Affairs and Sanitation, South Africa
- Luis Moreno, President, Inter-American Development Bank
- Muhammad Musa, Executive Director, BRAC[12]
- Mads Nipper, CEO, Grundfos
- Indra K Nooyi, Chairperson and CEO, PepsiCo
- Frank Rijsberman, Director-General, Global Green Growth Institute
- Manuel Sager, Director, Swiss Agency for Development and Cooperation
- Richard Samans, Head of the Centre for the Global Agenda, Member of the Managing Board, World Economic Forum
- Oyun Sanjaasuren, Chairperson, Global Water Partnership
- Achim Steiner, Administrator, United Nations Development Programme.

[9] Paul Bulcke succeeded Peter Brabeck-Letmathe.
[10] Carin Jamtin succeeded Lennart Båge.
[11] James Quincey succeeded Muhtar Kent..
[12] Muhammad Musa succeeded Sir Fazle Hasan Abed KCMG.

Steering Board

The Governing Council appoints the members of the Steering Board. The Board reviews and submits annually to the Governing Council the strategic plan and budget, supervises the Secretariat, and approves its plan, budget, and proposed country programs. The Board also supervises funding and resource development within countries, and comments on 2030 WRG's annual performance reviews and impact assessments.

2017 Steering Board members

- Dominic Waughray (Co-Chair), Head of Public-Private Partnerships, Member of the Executive Committee, World Economic Forum
- Jyoti Shukla, (Co-Chair) Director, World Bank Water Global Practice
- Roberta Barbieri, Vice President, Global Water and Environmental Solutions, PepsiCo
- Anders Berntell, Executive Director, 2030 WRG
- Rudolph Cleveringa, Executive Secretary, Global Water Partnership
- Michael Goltzman, Vice President, Global Public Policy, Environmental Sustainability, and Social Impact, The Coca-Cola Company[13]
- Ana Gren, Senior Policy Specialist Water Resources Management and Sanitation, Department for International Organizations and Policy Support, Swedish International Development Cooperation Agency
- István Joó, Ministerial Commissioner for the EU Danube Regional Strategy, Ministry of Foreign Affairs, Government of Hungary
- Isabella Pagotto, Senior Adviser/Senior Programme Manager, Global Programme Water, Swiss Agency for Development and Cooperation
- Morten Riis, Group Public Affairs Director, Grundfos
- Milagros Rivas Saiz, Manager, International Finance Corporation[14]
- Lisa Schroeter, Global Director, Trade and Investment Policy, The Dow Chemical Company[15]
- Mark Smith, Director of the Global Water Program, International Union for Conservation of Nature
- Ghislaine Weder, Head, Economics and International Relations, Nestlé

[13] Michael Goltzman succeeded Greg Koch.
[14] Milagros Rivas Saiz succeeded Emmanuel Nyirinkindi.
[15] Lisa Schroeter succeeded Snehal Desai.

CHAPTER SIX

OUR DONORS AND PARTNERS

We thank our partners for their generosity and continued support.

2030 WRG Global Partners 2018

- Multinational companies
- Bilateral donors
- Development banks
- INGOs and IGOs

WORLD ECONOMIC FORUM

IFC International Finance Corporation WORLD BANK GROUP

WORLD BANK GROUP Water

Ideation, preparation and incubation
2008–2002

→

Demonstration
2012–2017

→

Getting to scale
2018–2023

CHAPTER SEVEN

FINANCIAL REPORT

Global level contributions

In addition to the financial contributions stated in the table, WEF, Swiss Agency for Development Cooperation (SDC) and IFC have provided significant in-kind contributions. WEF provides logistical support as well as access to its network via the Annual Davos Forum event and the various regional or country specific events. Additionally, WEF supports 2030 WRG in the development and implementation of a private sector outreach strategy. SDC provided a secondment of a senior staff for the entire FY15-17 strategy cycle. Finally, IFC continues to provide significant in-kind administrative support including office space, legal, financial, procurement, and trust fund management at the IFC headquarters in Washington, D.C.

In addition, we have received parallel funding from various actors of in total US$4,941 million for work in specific countries (see country-level contributions). This is a dramatic increase compared to earlier years, and provides significant evidence of the appreciation of the work of 2030 WRG from these actors also outside of the core group of funding partners.

Annual expenses

Compared to last year when total expenses were US$7.091 million at this time, the expenses this year total US$6.252 million. A cautious approach to spending on new programs has been applied because of the ongoing transition of hosting for 2030 WRG between its previous host, IFC, and the new host as of Jan 1st, 2018, the WB Water Global practice. Approximately 80% of our expenses occurred in the various country programs, where they finance support for setting up the multi-stakeholder platform and setting up working groups in the country, hiring of local 2030WRG representatives, costs for the regional managers, comprehensive economic analysis in countries, and development of concrete projects, programs and policy proposals.

Hydro-Economic analysis in countries is normally a significant part of the 2030 WRG total expenses. This year however, the only full scale national hydro-economic analysis that was performed was for Vietnam, which has contributed to the lower total expenses compared to earlier years.

The donors and their contributions for this fiscal year (FY17) are provided below.

2030 WRG Fiscal Year 2017 Income (USD'000)

Contributions			FY17 Income (in USD '000s)
Donors (Contributions to 2030 WRG Trust Fund)	Bi- & Multilateral Donors	IFC	1,000
		SDC (Switzerland)	1,220
		Green Growth Fund (Denmark)	200
		Hungary	1,800
		SIDA (Sweden)	1,000
		PPPIAF	170
	Private Sector	PepsiCo	500
		Coca Cola	750
		Nestlé	500
		Dow	500
		Grundfos	500
		SAB Miller, India	125
	Carry over from FY16		3,366
Total Income			**11,631**

Country level contributions

South Africa

The 2030 WRG multistakeholder platform in South Africa is called the Strategic Water Partners Network, SWPN. It is supported by an annual US$150,000 contribution from the 2030 WRG. In

Calendar Year 2017 Expenditures (USD '000)

Regional program support by 2030 WRG Trust Fund	Expenditure (Expenses + Commitments)
South Asia	2,147
East Asia	894
Africa	1,105
Latin America	993
Total	**5,139**

Global Program by 2030 WRG Trust Fund	Expenses
Knowledge products	59
Communications	119
Conference & workshops	48
Total	**226**

Global Secretariat	Expenses
Staff salary and benefits	576
Travel	174
Other	136
Total	**886**
Grand Total	**6,251,545**

2017, additional contributions from the following partners were received:

- GIZ (German Corporation for International Cooperation): US$97,157
- The Department of Water and Sanitation and SWPN corporate members (South African Breweries, Anglo American, South32, Eskom, Sasol, Nestle, Exxaro, Transnet, South African Sugar Association, The Coca Cola Company): US$111,155
- Funds from partners that funded specific projects directly:
  - Water Research Commission – US$476,923;
  - Public-Private Infrastructure Advisory Facility (PPIAF)/2030 WRG – US$76,923;
  - The Land Bank (of South Africa) US$76,923.

These funds bring the total budget for SWPN operations and projects in 2017 to US$989,082.

Kenya

In Kenya, 2030 WRG's projects are financially supported with $195,000 in the following ways:

Kenya Industrial Water Alliance – GIZ has committed $160,000 for operationalization of the alliance during the period 2017–2018

Mount Kenya Ewaso Water Partnership – has received commitment of $20,000 from Wetlands international, SNV and Mount Kenya Growers group in its capacity as a convening platform and provision of project oversight over various projects in water resource management in the Laikipia region. They have also received $15,000 from Flora and Fauna towards the water component (improving water availability for domestic use, livestock and wildlife). This component is part of a much larger grant of the Darwin initiative.

Tanzania

GIZ/IWaSP has made a direct commitment to Kilimanjaro Water Stewardship Platform (KWSP) Managers operations ($27,000), and other leveraged resources (cash and in kind) amounting to $500,000 under the KWSP.

FSDT and VECO have committed $50,000 each towards the Irrigation Facility Fund under KWSP.

India

For India national level work we have received US$235,000 (Euro 200,000) in parallel funding from GIZ (German Corporation for International Cooperation) and India-EU Water Partnership for water quality activities under national-level water accounting work.

For Maharashtra, we have received US$112,750 from IDH (The Sustainable Trade Initiative) as in kind support for our work in the Maharashtra Cotton Water Platform.

Bangladesh

In Bangladesh H&M has supported the activities of the multistakeholder platform by funding of US$52,000 to the work streams on Improved Water Governance and Industrial and Urban Water Pollution through parallel funding via the BWP (Bangladesh Water Partnership).

The Coca-Cola foundation is providing a US$200.000 support through BWP for Introducing Water Efficient Technologies to the Barind Tract project which is a part

of the work stream on Efficient Agricultural Practices.

Mongolia

In Mongolia, Swiss Agency for Development Cooperation (SDC) has provided financial support of additional US$200,000 for strengthening of multi-stakeholder governance at the river basin level.

Peru

In Peru, the Inter-American Development Bank (IDB) is providing substantial support by funding the ongoing work in the working group that develops concrete projects within the national program on Work for Taxes, with a particular focus on projects in the agricultural sector. IDB is providing US$1,800,000 for a four-year program through the national NGO Agualimpia.

SDC is also supporting the above-mentioned program on Work for Taxes through a one-year funding of US$140,000, but with a focus on promoting more investment in rural projects for water supply by the mining sector. This support goes through the CSR Mining in Peru.

SDC is furthermore supporting the work of the working group on Reducing Corporate Water Footprint with a contribution of US$540,000 in a two-year program in order to promote the participation of more companies into the National Water Agency's Blue Certificate program. This support is also provided in parallel through the NGO Agualimpia.

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The 2030 Water Resources Group is hosted by the International Finance Corporation.