

# CATALYSTS FOR ACTION



**PARTNERSHIP FOR SUSTAINABLE  
WATER RESOURCES MANAGEMENT**

2012 Annual Report







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# MESSAGE FROM THE CHAIR

**Peter Brabeck-Letmathe**  
*Chair of the 2030 Water Resources Group*

One of the most important and urgent issues today is freshwater security. Agriculture is the single greatest user of freshwater resources. If we continue overusing this valuable and scarce resource the way we do today, a major food crisis will become inevitable.

Yet our species is rational. We communicate stories from the past. Despite our competitive instincts we band together, develop creative solutions, and act in concert against encroaching risks. It is in our nature to collaborate. The challenge is to grasp the nature and extent of the shared threat we face with respect to water supply and use.

Today's water security threat is unlike previous extremes against which we evolved and adapted. Because it is more gradual than hurricanes or eruptions, fires or floods yet harder to escape than local drought and hunger, the risk posed by water security is complex, silent, invisible and global.

It took decades to recognize that water security is a global issue. Water is local, but in a world linked by trade the daily decisions made in one place—what we eat, drink or burn as fuel in our automobiles—can expand or limit access to water for thirsty societies halfway around the world. Once that connection was made, it was apparent that no individual could resolve it alone. It would require a careful and deliberate and cooperative effort by governments, by businesses, and by civil society working together.

From there it was but a few steps to charter the 2030 Water Resources Group (2030 WRG).

A skilled conductor of a symphony orchestra, by engaging the resources and talents of those he leads, unlocks the potential of different groups to collaborate. So it is with the 2030

WRG. By tapping into partnerships on this issue at an opportune time, 2030 WRG can help stakeholders reach harmonic convergence on the political economy of water.

Progress toward that goal has been made in a very short time. With clear leadership by governments, from Jordan and Mexico to South Africa, India, and Mongolia—and soon, perhaps, Peru, Tanzania, Bangladesh and provinces of China—diverse stakeholders have come together out of a shared concern. 2030 WRG provided advice. Seeking clarity, we sifted through transparent sources of data. Building trust, we explored comparative interests within a sovereign state. Forging a path forward, we weighed costs and benefits of a full range of options from which political leaders can choose.

By broadening the range of options and including new actors and stakeholders to inform policy, something exceptional emerged: the most efficient decision came to be seen as the fairest and most durable solution. This report offers a glimpse of that process. There still are enormous challenges ahead of us and the seriousness of the situation can not be underestimated. We need more partners to join our effort and to participate politically, environmentally, socially and economically. We have only just begun.

This year, we have seen the small child that 2030 WRG once was move from its previous home within the World Economic Forum to its new home at IFC. It is natural for the young to move away from home when they grow up. Fortunately, 2030 WRG has many parents to offer support. We are very grateful for the strong support it receives from all our partners and in particular from IFC, its new host.



# EXECUTIVE SUMMARY

The 2030 Water Resources Group is a unique public-private-civil society partnership that helps governments to accelerate reforms that will ensure sustainable water resource management for the long-term development and economic growth of their countries, while at the same time addressing the social and environmental implications of the use of those resources. It does so by helping to change the “political economy” for water reform in the country. This is achieved by providing an economic analysis of the management of water resource and presenting it in ways that are digestible for politicians and business leaders as well as by helping to create platforms where a wide range of actors from public, private and civil society can meet, discuss and develop proposals for action.

In the last three years, 2030 WRG and its partners have elevated awareness about the challenges and risks of water scarcity in select countries and demonstrated how parties can effectively turn crises into opportunities. Beyond demonstrating the need for better water resources management and highlighting the trade-offs and tough choices for water resources that may be required, 2030 WRG has helped forge public and private partnerships, and empowered them with tools to increase supply by reducing demand.

In 2012, 2030 WRG moved to a new home in the headquarters of IFC, a member of the World Bank Group. It hired Executive Director Anders Berntell, and deepened 2030 WRG’s engagements in countries where it was already active, expanded opportunities in additional countries, and extended its network of partners and donors.

2030 WRG helped shape Jordan’s national water strategy, which is now being

implemented with another donor’s support. In South Africa, 2030 WRG catalyzed formation of the Strategic Water Partners Network, which identified three key priorities to South Africa’s water security and is developing corresponding projects to rehabilitate irrigation infrastructure, reduce leakage in municipal supply, and recover clean water from polluted mine waste runoff. In Karnataka, India, 2030 WRG designed pilot projects that use micro-irrigation to enhance agricultural water productivity. Our partnership in Mexico created cost curves and hydro-economic models to shape its new national water strategy and also support and advance reforms in the water sector, centered upon water use and allocations.

2030 WRG has initiated work in Mongolia, our most recent partner, aiming for a deeper understanding of its current rate of water usage and how that relates to its growth aspirations. In addition, potential solutions are being sought to improve the urban water situation in Ulaanbaatar and to introduce best practices for industrial water efficiency in mining. Success in these countries has attracted interest elsewhere, including in Peru, Tanzania, other states in India, Bangladesh, and elsewhere.

While pursuing these projects, 2030 WRG has also moved forward by raising funds, forging diverse partnerships and convening and participating in seventeen high-level sessions in global conferences related to water, business, and sustainable development. These efforts help raise awareness of the value of involving multiple stakeholders in a coordinated approach to water resources management.

# THE GLOBAL WATER CHALLENGE

Judging by current business practices, the global thirst for safe freshwater could outstrip the earth's capacity to supply water by 40 percent by 2030. This looming gap between demand and supply poses a threat to all people.

The potential for a water security crisis presents a challenge and an opportunity to close the gap by working together across interest groups and boundaries.

**“Sustainable water management is a business imperative. To remain competitive and ensure the sustainability of communities where we operate, business needs to work collaboratively with governments and civil society to develop programs that will address the issue of water scarcity. As a global food and beverage company that depends on natural resources, we strive to be responsible water stewards in every market where we operate globally. The 2030 Water Resources Group, which is helping to create the water use models of the present and future, is vital to these efforts.”**

**Indra K. Nooyi**  
*Chairman and Chief Executive Officer, PepsiCo, Inc.*

Finding practical ways in which countries can cooperate on this effort provides the rationale for 2030 WRG's work. We are not alone in this effort, and indeed rely heavily on partner initiatives and institutions including partners and supporters of the 2030 WRG, other parts of the World Bank Group, UN agencies and programs, other international organizations and institutes.

At the core of our work is the irrefutable

logic of numbers that just don't add up. Each year the world can reliably and sustainably use a finite amount of fresh water, estimated at 4,200 billion cubic meters. Thanks to the mining of fossil aquifers, the melting of glaciers, and the pumping of groundwater faster than it can be renewed, humans currently require 4,500 billion cubic meters. But within a few decades, billions more people will seek 2,400 billion more cubic meters to grow their food, produce their energy and for their household needs.

Agriculture already uses 70 percent of annual global withdrawals and seeks more to produce a growing volume of food for a hungry planet. Food prices are peaking due in large part to scarcity of even the virtual water embedded in grain and traded worldwide. Where food prices increase, instability ensues.

Nature cannot offer new sources of “free” water. Rivers are already fragmented, diverted, and polluted. Groundwater holds potential, but lifting, treating and conveying it requires immense amounts of energy—which in turn requires more water use. Countries recognize the urgent need to restore more water back to nature.

The issue is how to manage scarce water resources efficiently and equitably. This challenge presents governments of many developing and fast-growing countries with political and economic risk and developed nations also are exposed. Officials and businesses in water-stressed regions face questions about water that have no easy answers:

- How do we manage competing demands among farming, energy, cities and industry?





- What drives stakeholders toward more effective water use within and between sectors?
- How much freshwater base should be ensured through environmental flows?
- Where can nations reduce demand for water without slowing economic growth?
- How do a changing climate and growing urbanization compound stress on water systems?
- Who provides neutral, practical, contextual and comprehensive advice in these matters?
- How can government water officials and other water professionals engage new actors (private sector, civil society, other government ministries), in the debate, change water's political economy, and trigger a substantive reform in resource management?

There are no simple and definitive answers to these questions. We can only try to engage the right mix of individuals and institutional stakeholders to seek answers that help the world adapt, build resilience and accommodate the needs of all by developing a portfolio of solutions.

# THE 2030 WRG APPROACH: ACT

2030 WRG's partnerships gain their strength from the fact that they are voluntary. When invited by a country or state, we bring the full focus of our lean organization and network of resources to bear upon the most pressing water challenges that governments face at home and outside their borders. By asking the hard questions, we help officials arrive at solutions tailored to meet the specific needs of the people affected and on their own timetable.

“Neither people, nor businesses, nor the environments they share can develop and thrive without adequate water. The 2030 Water Resources Group connects actors across the golden triangle of government, civil society and business, creating a robust understanding of the challenge and a newfound respect for water. Through 2030 WRG’s work, we are advancing the necessary solutions which will close communities’ water supply gaps.”

**Muhtar Kent**  
*Chairman of the Board and Chief Executive Officer, The Coca-Cola Company*

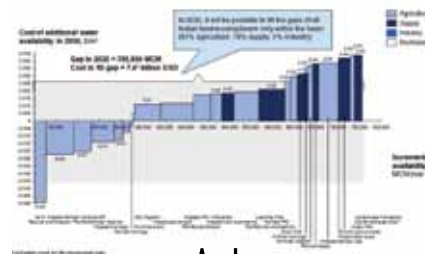
While timetables vary, 2030 WRG partners share a fierce sense of urgency and a strong bias for action.

Our core business model is one that can be scaled, adapted and replicated in any country or at a sub-national level. Arriving at the action phase involves the three stages of Analysis, Convening and Transformation (ACT).

We start with an economic **analysis** of the current water situation. This could be—and typically has been—a cost-curve, or

breakdown of expense per unit of water saved versus that used. Alternatively, it might involve assessing the relative benefits to be derived from water use depending upon how different sectors allocate it. A third approach might examine the extent of water-related risks, weaknesses, vulnerabilities or threats a country faces.

We then help governments to establish a platform to **convene** and gather insights from a diverse group of stakeholders. Concrete proposals that could be implemented within



**Convene**



**Transform**

a given time frame are required and they might range from governance reforms and economic instruments to actual pilot programs and demonstration projects.

The third stage is **transformative** implementation. Proposals need to be put into action and begin to yield higher performance, efficiency, and sustainability. To endure, this transformation requires careful investment of financial and human resources by public and private allies. As we have seen, those allies on the ground all share a strong, tangible stake in the outcome.

## Four Objectives

The 2030 WRG process also focuses on outcomes. Four interrelated objectives guide 2030 WRG's work and help us judge whether we are achieving tangible results:

1. Educate decision makers about the importance of water supply for their economies;
2. Equip them with tools and knowledge to make wiser water use decisions;
3. Establish multi-stakeholders' platforms to discuss and help implement the decisions;
4. Help those stakeholders' platforms to implement appropriate action.

These objectives interlock. Increased awareness of water's economic importance builds demand for tools and knowledge that can help identify possible solutions. Water's political sensitivity means the best solutions require societal consensus. Consensus is best arrived at through multi-stakeholder platforms. Finally, we keep deliberative platforms from degenerating into inaction through a relentless focus on

results. The best results stem from involving diverse views and recommendations to lead to the ultimate outcome: efficient, productive and sustainable use of water.

To be successful, outcomes must be measurable over some period of time. The full impact of 2030 WRG activities may not be felt fully during the period that 2030 WRG is engaged with a particular country, typically about 2 years. Nor can all of a given impact be attributed solely to 2030 WRG-supported interventions. Rather, 2030 WRG acts as the early-stage catalyst for deliberative action, jump-starting a process that leads to efficient and equitable water sector reforms.

Country-specific indicators to measure outcomes must be tailored to meet individual country needs and the length of engagements will depend upon the nature of activities supported in each country. Some examples of key impacts that 2030 WRG activities can generate, measured against benchmarks, are the following:

- Increased water productivity across the economy;
- Improved levels of service provision;
- Increased financial viability of the water sector;
- More investment by private and public sector, through PPPs;
- Activation of water management projects in high-demand sectors like power generation and agriculture;
- Creation of effective, results-oriented multi-stakeholder platforms;
- Implementation of sound and comprehensive policies that address water security.

# 2030 WRG BACKGROUND



**“Water security is one of the biggest issues facing the world in the 21st century. It presents a profound challenge to our social wellbeing and our economic growth. To address it, we need new models of collaboration between public, private and civil society communities. I welcome the efforts of the 2030 Water Resources Group, which is an excellent example of joint leadership from the Forum’s Strategic and Industry Partner communities with government and civil society to address the global water challenge. I am delighted the World Economic Forum has been able to play a role in supporting this important initiative and pleased to continue our support in its endeavor to scale up.”**

**Klaus Schwab**  
*Executive Chairman of the World Economic Forum*

A number of international leaders from private and public sectors recognized early on that a looming water crisis carried serious potential implications for certain economic sectors and some entire countries. The challenge of producing food and energy for growing populations, providing water for household use and sustaining ecosystems is a serious one and it was clear that concerted and coordinated action was needed to address it.

At the Forum’s annual meeting in 2008, groups that included representation from the United Nations, individual governments and companies as well non-governmental organizations were urged to give the issue of water security and its geopolitical and economic implications a higher global profile. This helped to stimulate existing initiatives and to develop new economic analytical

tools, such as the cost curves done on behalf of an informal consortium of companies and IFC. This consortium called itself the 2030 2030 Water Resources Group (“2030 Water Resources Group”) and its landmark report, “Charting our Water Futures,” was launched in October 2009.

In the period 2010–12, interest shifted from defining the issue of water security and its implications to finding solutions and practical action for alleviating its impact. At the Forum’s annual meeting in 2010, a new action-focused phase of 2030 WRG was launched that aligned itself with the Forum’s Water Initiative. In this way, the analytical capability of 2030 WRG was coupled with the transformative, multi-stakeholder approach of the Forum.

A goal was set of demonstrating in three countries how this new global partnership could encourage governments to accelerate reforms for managing sustainable water resources in order to benefit long-term development and economic growth. The partnership would provide best-in-class economic analysis, convene interested stakeholders and offer access to global best practices from business, academia, and the public sector to find solutions. Jordan, Karnataka State in India and Mexico initially asked to participate and after 24 months Mongolia and South Africa were also keen to join the initiative.

2030 WRG was able to add value by establishing partnerships with the countries in question and real results have been achieved, including:

- 1. Shaping the agenda for discussion of water resources:** Analysis prepared by 2030 WRG has been used by the partnership countries to assist in

development of new water strategies and for the revision of existing protocols. Mexico's national water strategy titled "2030 Water Agenda" and launched by former President Calderon in 2011, as well as Jordan's revised "Water for Life" strategy, each significantly leveraged analysis conducted by 2030 WRG.

**2. Establishing new models for collaboration:** 2030 WRG has helped partner countries create and formalize new groups that bring public and private interests as well as experts' knowledge to bear when decisions are

being made about strategic priorities and project ideas. South Africa's new "Strategic Water Partners Network," which is chaired by the Department of Water Affairs and co-chaired by SABMiller on behalf of private-sector interests, is an example of this new collaborative model. Stakeholders from all sectors are part of this network and its working groups.

It was also a goal to make the partnership platform model a part of the broader global architecture within which nations could collaborate on water resource issues. At the Forum's annual meeting in 2011, a

decision was taken to move the 2030 WRG program within IFC and to intensify the work that it already had under way in order to add momentum to its efforts. This was achieved in 2012 and the Forum continues to give support to the 2030 WRG through its Water Initiative.

2030 WRG entered a new phase in July 2012, expected to run through June 2014, during which it will expand its portfolio of government partnerships from five to eight or more. 2030 WRG has refined the criteria for country engagement, and begun discussion with several governments for possible future partnerships.



# GUEST CONTRIBUTIONS

**Mr. Jan Eliasson**

*United Nations Deputy Secretary-General*

Water, so fundamental for life, is central to development. Yet its social, economic and environmental value is often taken for granted or overlooked. A dependable supply of safe drinking water underpins economic growth, can improve public health, reduce childhood mortality and empower women. Water fosters rural livelihoods, grows food, produces energy, and ensures the integrity of ecosystems and the goods and services they provide. Water is a true multiplier, not only across Millennium Development Goals, but also across the entire United Nations agenda.

That's why UN Member States adopted a General Assembly resolution in 2010 recognizing that safe drinking water and sanitation are a human right; they reconfirmed this at the 2012 Rio + 20 Conference on Sustainable Development. The inclusion of access to safe drinking water and basic sanitation among the MDG targets helped the world to focus on pressing challenges. As the 2015 MDG deadline approaches we should accelerate investment and innovation.

Yet governments can rarely, by themselves, provide all of the financing and human capacity we need. Public-private partnerships like those catalyzed by the 2030 Water Resources Group will play a complementary role in building and maintaining water and sanitation systems. Evidence such as the examples documented in the pages of this report shows that such partnerships improve both service quality and operational efficiency.

The United Nations continues its efforts to bring together all partners—governments, civil society, the private sector, the philanthropic community—in a spirit of common cause and commitment. Progress in the field of water and sanitation makes a real and concrete difference in the lives of people. Let us work together, help the 2030 Water Resources Group to leverage resources, focus efforts where they will make the most difference, and make this crucial investment in a better future for many millions of people around the world.

**Jim Leape**

*Director General, WWF International*

Water is essential for life. It underpins economies and societies worldwide.

Businesses cannot exist without this precious resource—and yet so often it is taken for granted and squandered. Policymakers, too, make decisions about issues ranging from food and energy to commerce and climate, often without any regard for the essential resource that we cannot do without: water.

But water resources are under immense pressure. Increased income levels are leading to growing demand for water-intensive products like meat, sugar and cotton. This is driving over-extraction of water and the pollution of freshwater ecosystems. The result is rivers running dry, lake and groundwater levels dropping and freshwater species becoming endangered.

If we hope to build a sustainable and just future for a global population of 9 billion or more, we had better get serious about protecting the sources of water on which we all depend. This means keeping rivers flowing with the quality and quantity of water necessary to maintain functioning ecosystems—and to meet people's needs far into the future.

But while water is everyone's right, it is often nobody's responsibility. Who should ensure water resources are managed wisely in order to meet the needs of people, businesses and nature? The crisis of water governance spans political, social, economic and administrative institutions, from international bodies to local water user associations.

The 2030 Water Resources Group can help break down barriers and highlight mutual interests among diverse stakeholders, filling in where effective incentives and institutional structures for cooperation are lacking.

This role is vital.

With demand for food, water and energy projected to grow between 30 and 50 per cent by 2050, addressing these linked and competing interests requires comprehensive solutions. A water-resilient economy requires coherent and mature discussion between government, communities, civil society and the private sector around the management of water.

The 2030 Water Resources Group is helping ensure the environment is strongly represented in this discussion—and that water management reflects the needs of people, nature and businesses alike.

# JORDAN

“We are working with the 2030 Water Resources Group...to help us understand demands for water across the economy and with this type of knowledge...we will review and revise our national ‘Water For Life’ strategy, and find it easier to plan for the solutions to meet the country’s National Agenda aspirations.”

*HRH Prince Faisal of Jordan  
Chairman of the Jordan Royal  
Water Commission*

## Our challenge

Many nations fear future water scarcity. Jordan crossed that threshold decades ago, and ranks among the ten most water-deprived countries on earth. The international level of water poverty—the share of water required by each person each year for all uses, including food—is 1,000 cubic meters. The average Jordanian’s share is 145. And yet Jordan can meet or even exceed its ambitious efforts to grow and achieve ‘middle income’ country status by 2030, by finding water.

It will find water through more efficient use of agricultural water. It will find water even though population growth will double urban thirst, industry’s thirst will quintuple, and energy needs mushroom to the breaking point. Another word for efficiency is productivity: doing more with less. To be sure, Jordan already invests a fifth of its total investments in water infrastructure, such as the Disi-Amman Conveyance, Kufranja Dam, deep aquifer pumping, wastewater treatment and a potential US\$14 billion desalination/hydropower scheme harnessing a 400-meter drop between the Red and Dead Seas. However, supply projects are non-renewable, expensive, and can’t close the 284 MCM water deficit gap on their own. But if combined with increased efficiency and reduced demand, perhaps they can.

## Our partners

The Government of Jordan invited 2030 WRG to help develop a broader picture of its water supply and demand needs, taking into account its economic growth strategy while helping it to identify solutions to technical issues and set a course for its economy that is consistent with available water resources.

The partnership between 2030 WRG and



Jordan began at the Forum’s annual meeting in 2010 when Jordan’s Minister of Planning and International Cooperation invited 2030 WRG to help deal with its water issues. We reached out to government officials who held water-related and other portfolios, to USAID Jordan and other bilateral development agencies, and later to the Jordan Business Alliance on Water, a private-sector initiative that brought stakeholders together. Together we began assessing Jordan’s future water supply and demand, setting priorities for technical solutions to problems it faced, identifying economic choices the country might have to make and the impact that doing so would have and taking steps to speed up needed reforms.

## Our catalyst

2030 WRG’s objective was to provide analysis that would help Jordan make strategic decisions and to be an agent for faster reforms to deal with the country’s water needs.





**Photos:** (Left) Dead Sea water level has fallen by approximately 25 meters in less than 50 years. (Below) Boy washing hands, Amman, Jordan.



The proposed solution incorporated three major initiatives. First, increase the efficiency and productivity of water use as a priority to save 400 million cubic meters of water. Secondly, gain flexibility by initiating more consideration of economic choices to be made in agriculture, which uses 60 percent of all water but employs three percent of all workers. For example, a shift toward production of vegetables rather than trees or installation of drip irrigation systems saves water and thereby creates value. Third, seek relatively cost-effective supply-side projects, such as wastewater recycling, to make better use of existing resources.

### **Our outcomes**

The 2030 WRG analysis was welcomed by the Ministry of Water and Irrigation of Jordan, the senior leadership of the Ministry of Planning and International Cooperation, the Ministry of Agriculture and USAID-Jordan. It was used during the revision of

Jordan's national water strategy, "Water for Life," which is now in its final stages of completion and approval. The initial analysis and the revised strategy will continue to be influential while new measures are put in place, a process that is being coordinated by USAID's Institutional Strengthening and Support Program (ISSP). A key 2030 WRG recommendation urged establishing a cross-ministerial council to become a forum for debating key issues and offering strategic advice to help ensure water security for Jordan's continued economic growth, social development and environmental protection. This body, called Jordan's National Water Council, has now been set up and endorsed by the King of Jordan.

### **Our future**

2030 WRG has fulfilled its initial goals for the partnership with Jordan by developing an analysis that was used in developing the country's national water strategy and

in shaping a plan for implementing that strategy. 2030 WRG remains ready to support Jordan in future water reform efforts, whether at a strategic level or in identifying concrete projects that can be tackled jointly by public and private sectors as well as by civil society.

# SOUTH AFRICA



**“To close the water gap in South Africa, I am convinced that open, constructive dialogue and joint collaboration with all stakeholders is the only way forward. The Strategic Water Partners Network of South Africa is exactly the platform we need to forge the partnerships to achieve the impact and results that we need in order to ensure South Africa’s continued growth and development. This leadership and effort, as already demonstrated by this group, serves as a model for collaboration moving forward.”**

## **Edna Molewa**

*Minister of Water and Environmental Affairs of South Africa*

## **Our challenge**

South Africa’s water scarcity could rapidly get worse. Driven by rapid growth, unsustainable use, wetlands degradation, physical and commercial losses, water demand escalates even as supply sharply contracts. Population growth is doubling industry and energy water use. A growing middle class consumes a third more per capita. Nature requires a greater share, especially since climate change may reduce rainfall by 3 percent. By 2030 the 2030 Water Resources Group projects a water deficit of 2.7 to 3.8 billion m<sup>3</sup>, roughly one sixth of the country’s current use.

Facing this 17 percent gap, the South Africa Department of Water Affairs (DWA) studied supply and demand for major river systems, metropolitan areas, growth centers and smaller towns and villages. To stave off imminent shortages, DWA began to consider demand management, groundwater development, urban water re-use, and the high-end security that desalination offers coastal centers. In short, scarcity means the resource costs more, and a rising cost nudges

water toward higher value uses, pitting industry vs. agriculture vs. energy vs. cities vs. nature.

## **Our partners**

Recognizing the potential of the 2030 WRG, South Africa invited 2030 WRG to partner with it. Under the leadership of Edna Molewa, South Africa’s Minister of Water and Environmental Affairs, a partnership was declared in May 2011. Six months later the Strategic Water Partners Network of South Africa (SWPN) held its inaugural meeting in November 2011. The SWPN leadership group represents a unique and progressive multi-stakeholder platform, chaired by the DWA and co-chaired by South African Breweries, representing the private sector. Beyond 2030 WRG the diverse collaborative partners include the Forum, The Coca-Cola Company, Anglo American, Nestlé, DBSA, ABSA, SANLAM, General Electric Company, Eskom, Water Research Commission, National Planning Commission and the NEPAD Business Foundation, WWF, and SALGA.

## **Our catalyst**

South Africa was already advanced in its analytics and had set its priority focus areas. The government requested 2030 WRG to help set up a neutral and transparent multi-stakeholder platform through which the government could engage and collaborate with private-sector companies, donor agencies, NGOs, development and commercial financiers to co-design projects and secure public-private financing to help meet the government’s strategic objectives. It is important to note that the SWPN is a vehicle endorsed by the DWA and Minister Molewa through which to engage with the private sector.



### **Our outcomes**

In its first phase, SWPN focused its activities to ensure delivery of tangible results, action and replication. It established three working groups for each priority, led by a private-sector company and supported by other companies, donor agencies, government departments and finance institutions. Nestle leads the group on water-use efficiency/leakage reduction. The Coca-Cola Company leads another group focusing on the agricultural supply chain. Eskom heads a third group on effluent partnerships for wastewater treatment and reuse.

2030 WRG aligned these working groups and overall strategy with the National

Planning Commission's growth path for South Africa. To date, the working groups have identified seven national projects on water conservation and efficiency and on effluent partnerships to explore in deeper detail.

### **Our future**

Working groups are developing their project designs and will present them at the Forum's meeting on Africa 2013 that is to be held in Cape Town, South Africa. 2030 WRG will continue to support the three working groups as they develop and refine their recommendations. It may also leverage its network to bring

### **Preliminary outcome of the SWPN working groups**

Our incentive-based "No Drop" regulatory system scores municipalities using several criteria to encourage and reward plugging water leaks and reducing waste in every basin. The second project aims to refurbish the giant, aging Vaalhaarts irrigation scheme, which loses massive volumes of water, waterlogs soils, and threatens 400,000 households if it fails. Water saved will be allocated to emerging farmers, helping boost public and private-sector support. The project could be replicated for many equally deteriorated irrigation schemes across the country. Our third project recasts the problem of water pollution by treating it as a potential economic opportunity. The country's gold, coal and copper extraction houses could clean up contaminated acid mine drainage (AMD) to potable standards, and pay for this process by selling the treated water to municipalities. We will help overcome legal and institutional constraints to treatment, allowing mines and downstream users to benefit.

relevant expertise to the South Africa Strategic Water Partners working groups if requested. Finally, 2030 WRG will continue to work with the Government of South Africa and the SWPN to develop an action plan and help to move the recommendations to implementation.

# INDIA AND KARNATAKA

“To implement the initiatives identified by the 2030 Water Resources Group, the Government of Karnataka aims to design a series of catalytic pilot projects. I am confident that with these projects, we can meet the incremental demand on water by 2030.”

**Basavaraj S. Bommai**  
*Minister of Water Resources  
of the State of Karnataka, India*

## Our challenge

India needs food for 16 percent of humanity, living on 4 percent of the earth’s land mass but having only 1 percent of its fresh water. Food security is seen as necessary for national security but competition is growing within all sectors for water. In the State of Karnataka, for example, energy production, private industry and software technology firms generate more jobs and wealth with far less water than food-growing requires and this helps escalate conflicts over allocation of existing resources.

India’s farmers deserve great credit. A crop-boosting “Green Revolution” rescued many of the poor from mass starvation. But the prodigious use of water and energy required to do so took a toll in the form of exhausted soils, depleted groundwater, saline intrusion, dying rivers and blackouts because energy production was curtailed by water shortages. Several major water basins are now closed to further withdrawals, affecting millions. Political strains hamper any serious efforts to reallocate water resources away from agriculture or to import cheaper virtual-water crops because farming employs 60 percent of India even if it only generates 14 percent of GDP. Water security is important for jobs and for life itself.

## Our partners

Some now urge a “Blue Revolution” to boost investment in techniques and tools that increase India’s agricultural productivity and use water more efficiently. That is the focus of the partnership between 2030 WRG and the State of Karnataka. The relationship between available water resources and the competing need for it from food producers, companies that generate energy and private industry is

acute in Karnataka. The model developed for Karnataka could be replicated elsewhere in India.

2030 WRG found willing allies to collaborate on measures to promote growth through more efficient use of water resources. The Water Resources Department of the state of Karnataka wanted to develop water-use guidelines including key recommendations for actions to increase water security. These would be applied first to agriculture and then to urban and industrial sectors. The International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) and International Water Management Institute (IWMI) added to this effort by developing a framework for designing pilot projects in the agricultural sector.

Nationally, the India National Planning Commission sought 2030 WRG’s advice in 2011 on broader strategic issues. 2030 WRG hired the Council on Energy, Environment and Water (CEEW) to carry on this effort and the result was a National Water Resources Framework Study. A roadmap for carrying this work forward has been developed and it will be used as input to India’s 12<sup>th</sup> Five Year Plan.

## Our catalyst

There were three objectives in Karnataka: analyzing how to meet economic aspirations for the next two decades; finding practical options for overcoming gaps between water supplies and demand and doing so at a costs that was effective; promoting policy reforms to improve water-use efficiency.

The 2030 WRG-Karnataka partnership estimated future water requirements along with options and costs for dealing with the anticipated supply-demand gap. The analysis was buttressed by field observations and

comment from multiple stakeholders. To assess the opportunities for increasing water-use efficiency in agriculture, 2030 WRG deployed a team that discussed options with farmers, state and federal officials, and private companies. At 2030 WRG workshops, technical solutions were discussed ranging from drip irrigation to high-yield seeds. Also discussed was the possibility of bringing to bear so-called enablers, like agricultural extension services or master planners to spread the message about techniques for improving water-use efficiency.

### Our outcomes

2030 WRG suggested several measures to state officials for implementing water-use reforms, including scaling up micro-irrigation, diversifying crops and introducing methods for improving the productivity of agriculture. The partners found that water could be better managed at the distributor level and that significant gains would come from de-silting existing dams, reducing saline intrusion and improving canal operations. Huge improvements in efficiency could be achieved from reforming methods used to grow water-intensive crops like rice and sugar. 2030 WRG engaged ICRISAT to develop a Detailed Project Report to guide the design of pilot projects.

Making progress on water-use reforms calls for involving all parties that share an interest in the topic. Thus, educating farmers, ensuring that institutions are able to operate efficiently and that economic incentives and funding is available to promote reforms also is important. 2030 WRG explored in more depth the case for rejuvenating and revitalising Water User Associations (WUAs) to improve delivery systems.



**Photos:** A new and efficient irrigation scheme inaugurated using less water for irrigation than before.



2030 WRG was invited to become a member of the state's Advanced Centre for Integrated Water Resources Management, a semi-governmental think tank that advises various ministries of Karnataka, conducts policy research and analysis and helps the Water Resources Department to implement its vision 2030.

### Our future

2030 WRG will help Karnataka's water resource officials develop a comprehensive plan for improving water-use efficiency, starting with two pilot projects in the agriculture sector. The goal is to boost productivity through better use of water resources by, for example, improving agricultural practices through micro-irrigation, making project management more effective by revitalizing WUAs and stressing the potential financial advantages that stakeholders gain from using water more efficiently. 2030 WRG and Karnataka water resources officials will host a workshop for experts in the field to help develop plans for introducing larger-scale projects in the agriculture sector.

At the request of Karnataka water resource officials, 2030 WRG will also assess issues related to water use in the industrial and urban sectors. Demand for water is growing for power production, iron and steelmaking, the pulp and paper industry, for sugar processing and for mining and refining activities. Still more demand is likely to come from emerging industries including information technology, automobile production and biotechnology and engineering industries. 2030 WRG will set out how best practices from other sectors might be applied in developing a strategy that takes in the needs of all water users.

Nationally, 2030 WRG is initiating discussions with stakeholders in India to establish a countrywide platform for discussion of water issues, possibly by creating an Indian "Strategic Water Partners Network" that would build upon 2030 WRG's experience in South Africa. Finally, 2030 WRG's aim is to replicate the Karnataka lessons across other states in India.

# MEXICO

**“The international experience of the 2030 Water Resources Group helped Mexico in the field of water policies and a space for partnerships between civil society and the public and private sectors to enhance transformation in the management of water resources. 2030 WRG’s contribution has been successful helping to improve the national initiatives to meet the challenges around water, especially analyzing the possible economic incentives that promote the efficient use of water. We are looking forward to the continuation of our partnership.”**

**Dr. David Korenfeld Federman**  
*Director-General, CONAGUA*

## **Our challenge**

Vital parts of Mexico have been collapsing under the weight of unsustainable water use. Some collapse is literal: over-pumping of aquifers beneath the nation’s capital and other cities has caused the ground to sink as deep as 10 meters because of the resulting vacuum below. In nearly half of the 82 irrigation districts, infrastructure is collapsing from deterioration and lack of investment. In an economic sense, water scarcity has eroded potential value from the country’s GDP. Agriculture remains the prime driver behind high water use, with 77% of allocations. But over the last decade, the average Mexican’s domestic water use has tripled and industrialization has soared.

Yet wasteful consumption is only half of the crisis. Equally problematic is the unsustainable means by which water is obtained. In 100 out of 650 aquifers water is ‘mined’ by extraction faster than it can be replenished, posing a threat for the water needs of future generations. Higher water pricing would reduce demand but austerity-driven measures would need to be handled judiciously and efficiently.

## **Our partners**

In 2009, 2030 WRG launched a partnership with CONAGUA, Mexico’s National Water Commission, when 2030 WRG supported a cost curve analysis that took into account climate change scenarios. We presented the results in December 2010 at a session titled “Dialogues for Water and Climate Change” during the 16th Conference of the Parties on Climate Change (COP 16) in Cancun. 2030 WRG’s work provided essential input to Mexico’s 2030 Water Agenda, an ambitious program to achieve sustainable water resources management that was launched in 2010.

At the end of January 2012, during the annual meeting of the Forum, 2030 WRG became a partner with the Inter-American Development Bank (IDB) by formalizing a non-exclusive memorandum of understanding for cooperation in Mexico and across Latin America. Discussions on areas for joint efforts are in progress.

In October 2012, 2030 WRG opened a dialogue with the Mexican Water Advisory Council to consider how to construct a stakeholder platform to assist in making the decisions needed to manage water resources on a sustainable basis. Discussions are under way to make the partnership formal and develop plans for action.

## **Our catalyst**

Political decisions must stand on a solid foundation. At the time, former President Calderon valued our earlier analytical work that aimed to assess the economic impact of climate change on Mexico’s water resources. Initially, the 2030 WRG-CONAGUA partnership set a goal of developing a computer-based tool that could be used by CONAGUA to support the case for water reforms and create a rationale for considering water resource management as an economic issue. Such an economic tool might also be applicable for other countries, which could plug their own data into the tool.

Cooperation proceeded in two phases: First, 2030 WRG hired an expert to design a generic structure, mathematical architecture, and empty theoretical version of the water/economy model. Next, a workshop was organized that brought together CONAGUA and Mexican and foreign experts to discuss the functionality and scope of the tool as well as its ability to identify economical incentives and financial instruments to improve water use efficiency.



By September 2012, CONAGUA began to populate the tool with Mexico's data while 2030 WRG agreed to further test it and encourage its use.

2030 WRG will continue to work with Mexico, using it as a regional base to launch the tool and make its potential known throughout Latin America. The 2030 WRG-IDB memorandum creating a non-exclusive framework of cooperation provides a basis for collaborating to address regional water stress issues. 2030 WRG-Mexico collaboration will also allow 2030 WRG to draw upon and leverage relevant expertise.

### **Our outcomes**

CONAGUA's request principally sought 2030 WRG's help in designing a computer-based tool to quantify the cost and benefit of different decisions related to water resources. The new tool helps CONAGUA to inform choices and find opportunities by analyzing policy options for dealing with water issues, such as how user prices can

have an impact, how varying rate levels impact water use and how different levels of taxation can create incentives for the industrial and commercial sector to use water more efficiently.

The fact that the tool offers a transparent way to assess the impact of alternative policies related to water use means that it has potential to encourage informed discussion and healthy debate about how to decide upon priorities. For example, it can help investment decisions by identifying opportunities and risks that companies or development banks may face if they become involved in water management. It also can be useful for assessing potential gains from using incentives to encourage greater water-use efficiency and sustainable water production across regions while using different technologies. It can indicate potential returns that might be produced or that might be created in the form of incentives by different levels of pricing for water rights.

Findings from the initial analysis helped

CONAGUA shape 38 initiatives that are part of Mexico's effort to manage its water resources. 2030 WRG and CONAGUA reinforced their partnership through memorandums of understanding pledging cooperation across various initiatives linked to Mexico's 2030 goal for achieving sustainable water resources management. CONAGUA requested 2030 WRG's help in developing policy related to water use in order to help create incentives for supporting sustainable water resources. The computer-based tool helps legislators arrive at policy decisions that will shape a new tax law and initially target large industrial water users. CONAGUA and 2030 WRG will organize a workshop in the first quarter of 2013 to discuss this new economic tool with experts and stakeholders in Mexico's bid to better manage its water resources.

### **Our future**

2030 WRG and CONAGUA will share their economic tool, both within and beyond the country, to demonstrate its usefulness in identifying incentives that can lead to better use of water resources and for encouraging investment in water-use efficiency. In 2013, 2030 WRG and other stakeholders will identify suitable pilot projects, and organize an implementation workshop. In addition, we will continue to work together on shared priorities and aim to demonstrate the value to be gained from monitoring and evaluating the impact of improved policies for water management. Over the longer term, management capacity must be built among the Mexican-based stakeholders so that they can eventually take over the work currently being done by 2030 WRG.

# MONGOLIA

## Our challenge

At a distance, Mongolia appears to have adequate water to handle the needs of its urban, industrial and agricultural sectors. A closer look reveals a more textured reality. Extremes in seasonal runoff, local stress and chronic deficits threaten economic development in key sectors. Rainfall varies widely across regions, leading to dangerously high groundwater dependence. The steppes make cross-country water conveyance difficult and costly. Climate change multiplies stress, with an 18 percent increase in heavy rainfall in humid areas and shrinking ice cover

**“We are excited to move forward with the 2030 Water Resources Group-Mongolia partnership and work together with its diverse network of shareholders and expertise to help us achieve our economic growth potential to improve the livelihoods of all Mongolians, while ensuring the protection of our environment for a sustainable and green development pathway.”**

### **Sanjaasuren Oyun**

*Minister of Nature, Environment and Green Development of Mongolia*

elsewhere. There has been a reduction in groundwaters' ability to recharge and flows are deteriorating in the Khurkh and Onon Rivers. The capital city, Ulaanbaatar, runs short during winter months and suffers from pollution. Strong water demand by mining industries in the water-scarce Gobi region is another complication while urban water supplies and rural food production security are becoming vulnerable. In the coming two decades water use is expected to grow by 333 percent when water supplies are shrinking. Even so, if the country imports global best practices for the efficient use of water

resources, Mongolia will have enough water to export its cultural, mineral, and agricultural wealth to the world.

## Our partners

At the Forum's annual meeting in 2011, the President of Mongolia invited 2030 WRG to explore a sustainable pathway for water security. We began working directly with government experts and other stakeholders from public, private and civil society sectors including a local, highly respected private-sector champion with an extensive network, Newcom. The President of Mongolia and 2030 WRG agreed to form a Mongolian Water Alliance. A high-level "Declaration of Partnership" was signed in Ulaanbaatar, Mongolia, formalizing collaboration between the Minister of Nature, Environment and Tourism of Mongolia and 2030 WRG.

## Our catalyst

2030 WRG reviewed Mongolia's water challenges, drawing on available data and interviews with public officials as well as with private local and international institutions. The facts are as follows:

- Ulaanbaatar seeks to become a world class, knowledge-based city, supported by vital infrastructure, a clean environment and cultural and natural resources that draw global tourism. Water tests those ambitions. By 2030, 2030 WRG projects a 244k m<sup>3</sup>/day deficit, while tanneries pollute rivers, wastewater treatment is ineffective, no one recycles and the Tuul River shrinks.
- Coal, copper and gold mining could unlock exponential economic growth but that will be jeopardized if Mongolia





ignores the severe regional limits imposed by aridity. Mining is water intensive and South Gobi groundwater is subject to excessive demand. Worse, industrial growth escalates energy and domestic water demands.

- Mongolia's quest for food-production security is undermined by widely variable water supply and by desertification. Frozen investments in irrigation killed off its ability to export crops while achieving economies of scale for agriculture requires more efficient use of water through drip irrigation and scheduling, optimum tillage, better fertilizer balance, pest control and post-harvest losses. Consideration should also be given to reallocating supplies of water between agriculture, industry and other uses in the interests of using the resource efficiently.

### **Our outcome**

2030 WRG's diagnostic review and workshops raised awareness of water issues, increased the desire to collaborate and set a path for action. Issues to be addressed include how to enforce existing norms for water use, conservation and demand management, tariffs, usage incentives, transfers of water and new water storage facilities. The planned new 2030 WRG-Mongolia partnership will focus on two key issues: mining in the South Gobi desert, and water supply in Ulaanbaatar City.

### **Our future**

Mongolia and 2030 WRG will work together to assess the implications of projected growth in demand for water against available supply and will do so in a way that highlights the need for action. 2030 WRG is making preliminary plans for a

more detailed analysis of the mining sector's water use as well as the costs and options involved in meeting Ulaanbaatar city's water needs. 2030 WRG will coordinate its efforts with other water-related initiatives supported by the World Bank, ADB and donors in Mongolia. 2030 WRG-Mongolia will share best practices in water-use efficiency and seek partnership projects that can bring financial incentives to bear in larger-scale efforts. We will also explore avenues for working with the National Water Committee and with the River Basin Authorities, new entities that are still being established.

# CATALOGUE OF GOOD PRACTICES

The The 2030 Water Resources Group provides tools that help countries analyze water availability and identify the most cost-effective levers to harmonize urban, industrial and agricultural withdrawals in order to allow natural renewal. Most of these levers involve efficiency and reallocations toward higher use. But what approach works best, for which stage of a nation's development, under what demographic pressures and in which climatic conditions?

Water use is local, and there are no universal solutions. Yet there are lessons to learn, advisors to seek, suppliers to identify and specific outcomes to consider. So we looked at the full range of practices in several regions when it comes to water-use transformation.

The result referenced nearly 60 organizations around the world. It looked at drought tolerance and micro-irrigation in India and flow measurement in the U.S.A. It considered leakage control in South Africa, wastewater recycling in Australia and industrial efficiency in Bangladesh. All nine projects of the highlighted were implemented and all demonstrably improved the efficiency or productivity of water use by saving water and/or increasing yield. All of these projects could be transferred and adapted in other settings without creating any negative effects.

In January 2012, at the Forum's annual meeting, 2030 WRG presented a pilot version of *A Catalogue of Good Practices in Water Use Efficiency*. It did not attempt to be prescriptive. Rather, the catalogue simply lays out the menu of opportunities that have been tested, with certain outcomes. We show what has happened before but it is up to governments and watershed authorities—

along with their citizens and stakeholders—to develop strategic priorities and concrete implementation plans.

This catalogue offers governments a learning tool, a source of advice and a way to focus exchanges with constituent water users. No one has a monopoly on the truth nor do good ideas ever stop emerging. That's why we made it an open-source instrument for all who may offer effective, practical yet innovative solutions, existing or new. We will gradually expand it to cover the range of water-use options and invite expert knowledge from the international water community.

Governments and other stakeholders have requested this knowledge base. The work fits squarely with 2030 WRG's goal of increasing government and business access to local and international good practices. The drivers for improving efficiency in water use include legislation, water security, risk management, environmental and health damages, potential cost savings and job-creation possibilities and the desire to be more competitive. We know from our work on the relationship between water use, energy and food production and climate change that creating efficiencies that reduce demands for water will also save energy, which in turn saves additional water, which is available for agriculture, environmental flows and climate adaptation.

“The 2030 Water Resources Group is innovative in its power to bring people from different backgrounds together. This initiative will contribute to the transparent and equitable planning and management of water resources. It draws to a large extent on the know-how from the private sector. This is why it stimulates additional private-sector investments. The next stage will be to expand first positive results to least-developed countries, providing a significant contribution to poverty reduction.”

***Martin Dahinden***

*Director-General of the Swiss Agency  
for Development and Cooperation*



# LOOKING AHEAD

“IFC, the largest global development institution focused exclusively on the private sector, is committed to building shared prosperity and eliminating poverty. We are pleased to be a part of the 2030 Water Resources Group because we know that innovations spurred by the private sector can help industries and municipal services use water more effectively, and provide families with access to clean and affordable water.”

*Jin-Yong Cai*  
Executive Vice President  
and CEO, IFC



## Expanding portfolio of countries

2030 WRG will select at least two new countries to work in during 2013, and another two or more in 2014. Discussions have begun with public and private stakeholders about the possibility of working with developing countries like Peru, Tanzania, other states in India, China or Bangladesh.

Countries that are selected for 2030 WRG engagement must meet a well-defined and rigorous set of criteria that are set out in the following paragraphs.

Government commitment must be clearly evident in the form of high-level involvement, readiness to share program costs and

willingness to provide a key interlocutor with authority to bring other government officials to the table. As well, governments must be willing to engage other stakeholders in constructive, transparent dialogue in order to build trust and increase chances that reforms will be put in place. Information about policies under development, progress on implementing reforms and the outcome of monitoring and evaluation activities must be readily shared by the government, 2030 WRG and all stakeholders in the country.

2030 WRG's portfolio of country engagements is enriched when it encompasses varied geographic locations and diverse income levels. 2030 WRG needs to know if, where



and how we add value. We may fill a gap or create synergies with other players, we can leverage or connect important partners and sometimes open doors that have been closed for others. Government commitment, or buy-in, is vital but we also value the willingness of private-sector players and civil society to serve as leaders.

Accurate data is essential so creating a fact base that can be used for analytic purposes is a core objective. We are least effective if forced to start from scratch. A minimum threshold of data helps because gaps can then be filled in later. Where data exist but are scattered, 2030 WRG can bring them together in a comprehensive fact base.

2030 WRG encourages private-sector participation as a stakeholder in platforms constructed to deal with water issues. But where water is a very sensitive issue, and where appropriate, civil society may need to take a leading role. A responsible NGO or a well-regarded think tank, or group of experts on water issues, can lead and initiate dialogues while business interests company(ies) mobilizes private sector players.

All of these criteria are equally important. 2030 WRG will use our scarce resources judiciously, make sure that we implement core 2030 WRG programs and establish proof of concept, avoid duplication with activities of other players while exploiting synergies and ensure that 2030 WRG-supported action plans are put into practise

### **New knowledge products**

Every country must overcome unique challenges to achieve water security, yet some water-use patterns are universal. 2030 WRG has begun to produce a series of knowledge products, or reports, that will offer guidance about how to increase water-use efficiency and increase capacity to manage the resource.

Firstly, we will expand the previously mentioned *Catalogue of Good Practices*, including more examples from around the world of concrete examples where various actors, in agriculture, industry or municipalities (or as a result of collaborations between those sectors) have made concrete achievements to use water more effectively. The catalogue will provide facts and figures on how much water has been saved by the interventions, what the costs were, how it was financed, and who the involved actors were.

Secondly, we also plan to initiate a study on the use of various economic instruments like water use fees, taxes, emission fees and tradable water rights in resource management. Our examples will come from multiple sectors and might achieve varying levels of success or failure in each region. But by making these studies broadly available and understandable, readers can gain valuable insights from the lessons learned. Each water manager may draw her own conclusions, based on a situation, about what may work, what won't, and why.

Thirdly, 2030 WRG will complete a study on the various tools made available by hydro-economic analysis such as marginal cost curves, benefits and risks that can be developed to show the full range of options available for gaining the most water at the least expense and exposure to risk. We will review hydrological models that can simulate or project the varying economic benefits from altering allocations of water among competing sectors, like shifting from agriculture to energy, or from biofuels to natural gas. We will show good examples and what we can learn from the use of these models.

# REACHING OUT

Transparency is a prerequisite in any international activity that addresses water resource scarcity in a country or a region, but is probably even more important when that scarcity is addressed through a Public-Private-Civil Society Partnership. 2030 WRG has very high ambitions when it comes to disseminating our activities and results in an open and transparent way. The first step has been to develop a WEB page, [www.2030WRG.org](http://www.2030WRG.org), where our work, and our results will be showcased. It will be filled with more information as we move ahead. We also plan to produce regular newsletters that will be distributed to anyone interested in joining our mailing list.

From the start 2030 WRG's capacity, network, and approach have been in high demand. As we began to show the direct and inexorable connection between water resources management and economic growth, people found our message compelling, whether the forum involved conservation, commerce or

sustainable development. We gained clarity, credibility and international visibility through a series of high-profile events, engaging with new and diverse partners right from the start. These events helped us quickly define what 2030 WRG stood for and how we added value through a platform for innovative collaboration. To connect with more and even higher-level decision-makers from various groups, we chose face-to-face meetings to make our case to the right audience, in the right way, at the right time.

To 2030 WRG's advantage, water security keeps rising up on the global agenda. Starting in 2010, from **Davos** to **Rio de Janeiro** to **Cape Town** in alignment with the Forum's Water Initiative, 2030 WRG emerged as a content expert among high-level decision makers in the water sector. Our other advantage is in our core partners. The Forum's experts, partners, and events helped us build our network and lay out 2030 WRG's value proposition. From July 2011 to November 2012, 2030 WRG participated in

the following events on water security:

## **21–27 August 2011**

*Stockholm, Sweden*

At Stockholm during International Water Institute's World Water Week, 2030 WRG shared its approach, showcased country partnerships, and sought feedback from academic experts during, "Collaborative Pathways for a Water Secure Future."

### **14–16 September 2011**

*Dalian, China*

At the Annual Meeting of the New Champion, hosted by the Forum, 2030 WRG discussed China's water security challenges, exemplified by Shanxi Province, engaging the interest of the Department of Agriculture, to collaborate with 2030 WRG.

### **9–11 October 2011**

*Abu Dhabi, United Arab Emirates*

At the Summit on the Global Agenda, hosted by the Forum, the 2030 WRG session gathered experts on the Forum's Global Agenda Council on water security to discuss how best to advise and be a thought partner for the new entity.

### **11–12 October 2011**

*Copenhagen, Denmark*

At the Global Green Growth Forum, hosted by the Danish and South Korean governments, 2030 WRG organized a high-level session, "Securing Green Growth by Unraveling the Water-Food-EnergyNexus," where senior businesses and government leaders discussed how water enables growth and multi-stakeholder platforms catalyze water transformation at various levels.

### **21–23 October 2011**

*Dead Sea, Jordan*

In a session on Economic Growth and Job Creation in the Arab World, hosted by the Forum, 2030 WRG's high level session on water showcased the Jordanian country

work, mobilized private-sector support and engagement for our process, and explored how to ensure socioeconomic stability in the Middle East.

### **12–14 November 2011**

*Mumbai, India*

At the India Economic Summit, hosted by the Forum, 2030 WRG's high-level session, "Implementing India's Water Vision 2030" brought together national, state, Indian and multi-national business leaders, academics and civil society to discuss emerging 2030 WRG analysis, best practices, and potential pilots to shape a water strategy that works.

### **16–18 November 2011**

*Bonn, Germany*

At Germany's Water, Energy and Food Security Nexus session, 2030 WRG and the Forum organized high-level sessions on how the Heads of State at the Rio+20 Summit, can best unlock and manage green growth.

### **28 November–9 December 2011**

*Durban, South Africa*

At the 17th Conference of the Parties (COP17), UNFCCC, with the Government of South Africa and the Forum, 2030 WRG addressed "Water and Adaptation: National plans to meet future water needs for economic growth" in Mexico, Jordan, and South Africa.

### **25–29 January 2012**

*Davos-Klosters, Switzerland*

At the Forum's annual meeting, in a session "Changing the Political Economy for Integrated Water Reform", 2030 WRG presented its progress and impact to date, discussed the next stage of work, unveiled a prototype of the 2030 WRG Global Catalogue of Good Practices, and sent off 2030 WRG to its new IFC home and leader Anders Berntell.

### **12–17 March 2012**

*Marseille, France*

At the 6th World Water Forum, a gathering 35,000 people from all sectors, the 2030 WRG hosted an open side event, inviting stakeholders to learn about the 2030 WRG approach and model, the newly launched global entity hosted at IFC, and preliminary thoughts for the next stage of work.

### **16–18 April 2012**

*Puerto Vallarta, Mexico*

At the Forum's meeting on Latin America 2012, 2030 WRG's session brought together global and regional leaders to identify top opportunities for collaboration in Policy Development; New Models of Partnerships; and Enhancing agricultural practices through sharing best practices, investing in farmer education and training in the use of water-efficient technologies.

**23 April 2012**

*Washington DC, USA*

At the World Bank Spring Meeting, our 2030 WRG inaugural event convened a session under Lars Thunell. 2030 WRG country partner governments were represented through Estrellita Fuentes Nava of CONAGUA and Minister Jafar Hassan of the Ministry of Planning and International Cooperation of Jordan.

**9–11 May 2012**

*Addis Ababa, Ethiopia*

At the Forum's meeting on Africa 2012, 2030 WRG highlighted our Strategic Water Partners Network as a cornerstone of our approach, and a leading example on how to engage and foster cooperation and joint solutions for water.

**26–31 August, 2012**

*Stockholm, Sweden*

At SIWI's World Water Week, our open side event "Public-Private Partnerships for Water Resource Management" shared recent developments, country partnerships and strategic directions with partners like José Luis Luege Tamargo, DG of the National Water Commission of Mexico (CONAGUA), Trevor Balzer, COO of South Africa's Department of Water Affairs, and Andre Fourie, Head of the Sustainable Development, South African Breweries (Pty) Ltd.

**8–9 October 2012**

*Copenhagen, Denmark*

At the *Global Green Growth Forum, 2030 WRG's session, "Water: Action in Developing Countries,"* participants explored how national water partnerships help the least developed economies through best-practice economic analyses.

**12–14 November 2012**

*Dubai, United Arab Emirates*

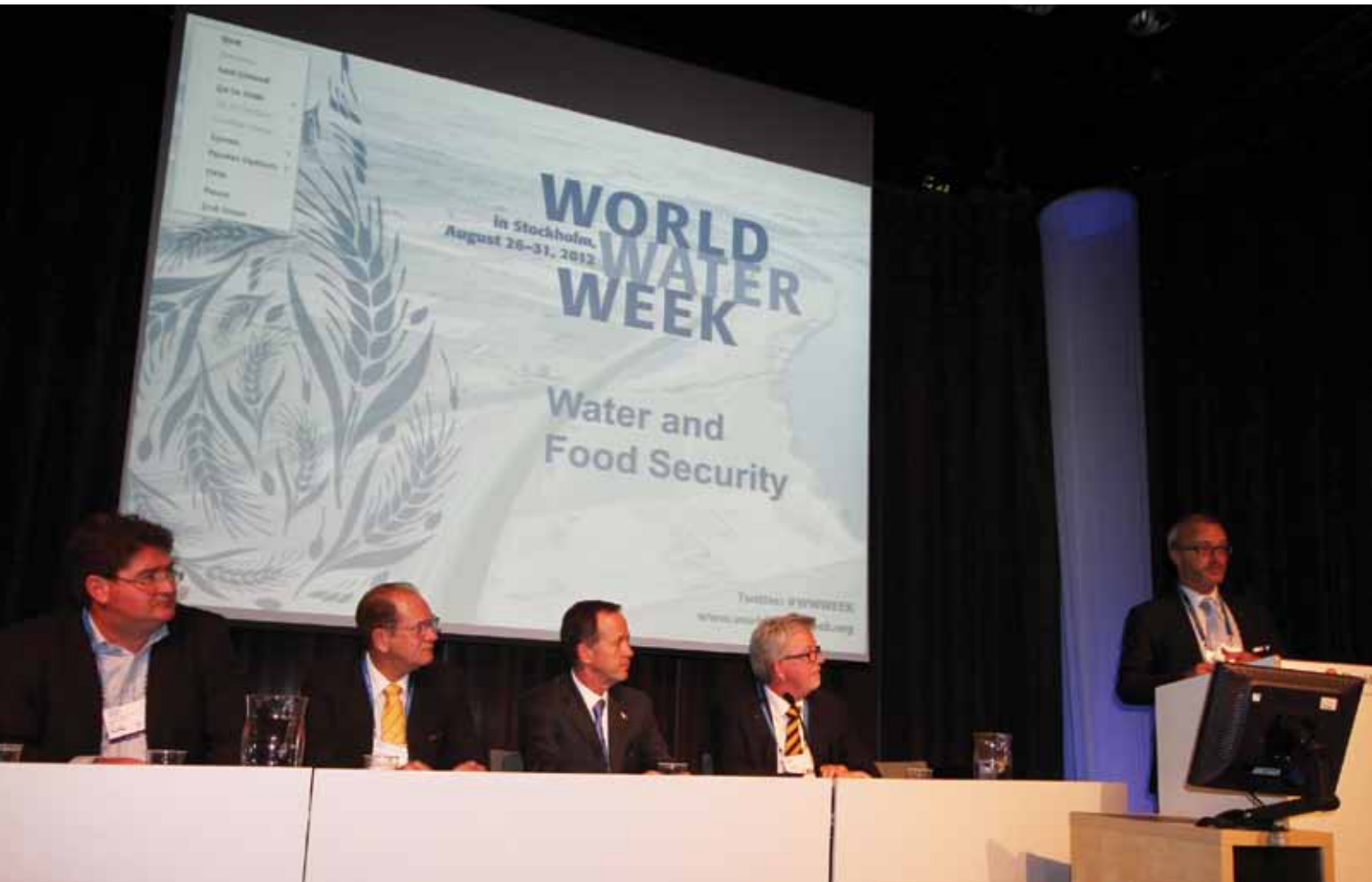
At the Summit on the Global Agenda, Anders Berntell represented 2030 WRG on the Forum's Global Agenda Council on Water Security, helping define its scope of activities for 2012–2014 and focus on water valuation and economics. We began to engage with the council to support and contribute to 2030 WRG's global knowledge products, such as financial instruments.

**6–8 November 2012**

*Gurgaon, India*

At the Forum's meeting on India, a 2030 WRG session, "Transforming India's Water Challenge: From Vision to Implementation" explored the key elements and path toward implementation of India's new National Water Policy 2012 and learned about the activities and outcomes of the 2030 WRG Karnataka partnership.





**Participants from left to right:** Andre Fourie, SAB, South Africa and Co-Chair of the SWPN; Trevor Balzer, DWA, South Africa and Chair of the SWPN; José Luis Luege Tamargo, former Director General of CONAGUA, Mexico; Anders Berntell, 2030 WRG; Henrik Riby, Sida, Sweden; at the World Water Week in Stockholm.

# GOVERNANCE

The 2030 Water Resources Group is hosted by IFC at its headquarters in Washington, D.C., but has a tripartite system of administrative governance made up of a Governing Council, Steering Board and Secretariat.

Foremost is the Governing Council, comprised of individuals drawn from the World Economic Forum, private sector partners, governmental development agencies, multilateral development banks, and water-security focused civil society including NGOs, academic and environmental institutions. On the Governing Council, these individuals collectively provide management guidance to and stewardship for the 2030 WRG. The Council appoints Steering Board members, reviews and approves plans and budgets, oversees funding contributions and comments on annual reports on 2030 WRG performance and impacts.

## **Members of the Governing Council are:**

*Peter Brabeck-Letmathe (Chair), Chairman of the Board, Nestle*

*Jin-Yong Cai, Executive Vice President & CEO, IFC (International Finance Corporation)*

*Helen Clark, Administrator, UNDP (United Nations Development Programme)*

*Martin Dahinden, Director General, SDC (Swiss Agency for Development and Cooperation)*

*Charlotte Petri Gornitzkqa, Director General, Sida (Swedish International Development Agency)*

*Robert Greenhill, Managing Director & Chief Business Officer, World Economic Forum*

*Donald Kaberuka, President, AfDB (African Development Bank) (Invited)*

*Muhtar Kent, Chairman of the Board & CEO, The Coca-Cola Company*

*Haruhiko Kuroda, President, ADB (Asian Development Bank) (Invited)*

*Rachel Kyte, Vice President, Sustainable Development Network, IBRD (International Bank for Reconstruction and Development)*

*James Leape, Director General, WWF (World Wide Fund for Nature)*

*Edna Molewa, Minister of Water and Environmental Affairs, South Africa*

*Luis Moreno, President, IADB (Inter-American Development Bank) (Invited)*

*Indra K. Nooyi, Chairman and CEO, PepsiCo*

*Richard Samans, Executive Director, GGGI (Global Green Growth Institute)*

*Ursula Schaefer-Preuss, Chairperson, GWP (Global Water Partnership)*

The Steering Board's equally balanced group of Council-appointed members provide oversight for the management of the 2030 WRG. The Board has authority to: review and submit annually to the Governing Council the Strategic Plan and Budget; supervise the Secretariat and approve its plan, budget and proposed country programs; oversee funding and resource development within countries; comment on annual performance reviews and impact assessments of 2030 WRG's work.

## **Members of the Steering Board are:**

*Dan Bena, Senior Director of Sustainable Development, PepsiCo*

*Anders Berntell, Executive Director, 2030 WRG*

*Ania Grobicki, Executive Secretary, GWP*

*Jose Luis Irigoyen, Director, Sustainable Development Network, IBRD*

***Usha Rao-Monari*** (Chair), Director,  
Sustainable Business Advisory, IFC

***Francois Muenger***, Head of Water  
Initiatives Section, SDC

***Herbert Oberhaensli***, Vice President,  
Economics and International Relations,  
Nestle

***Stuart Orr***, Manager, Freshwater, WWF

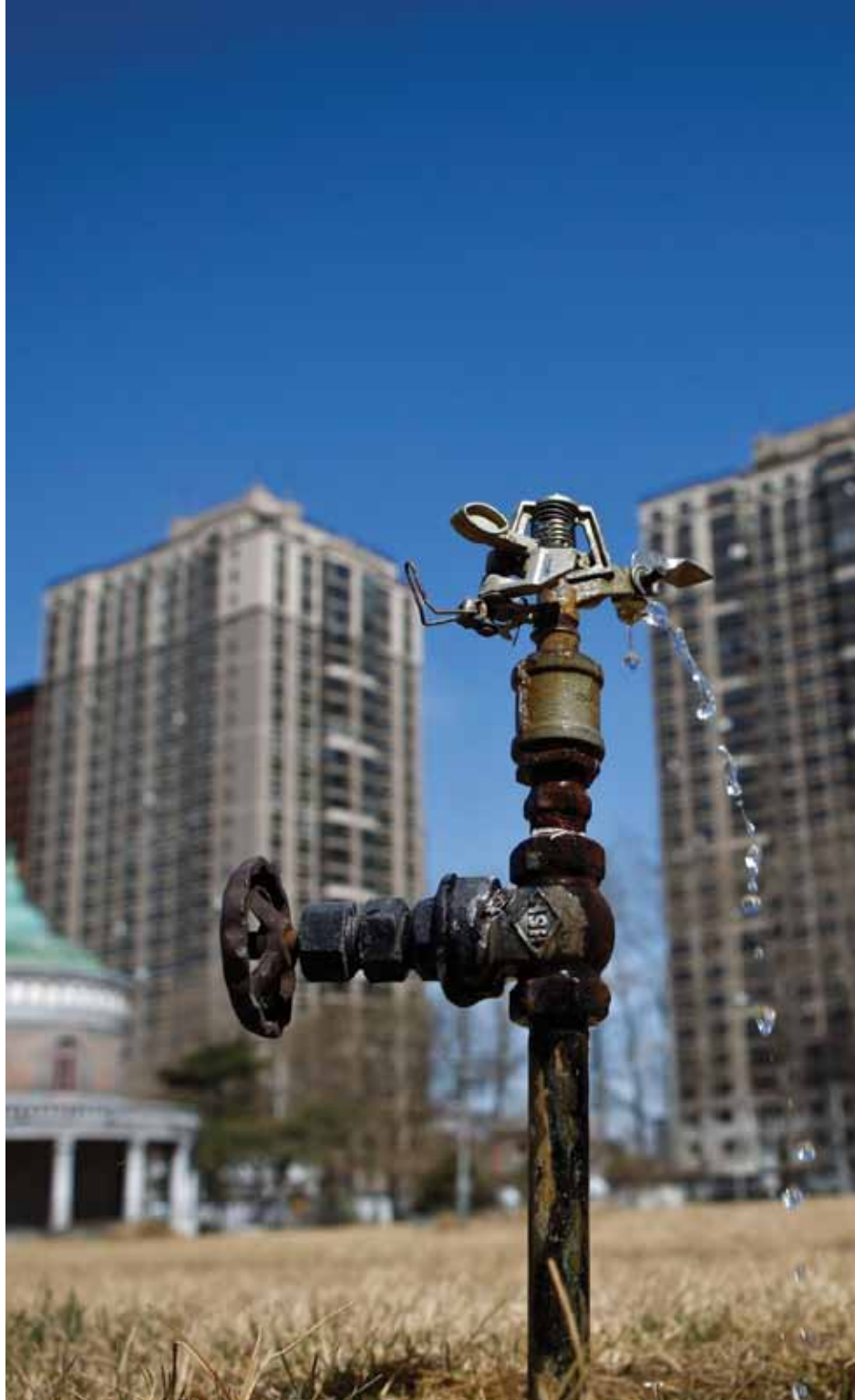
***Beatriz Perez***, Chief Sustainability Officer,  
The Coca-Cola Company

***Dominic Waughray***, (Vice Chair),  
Senior Director & Head of Environmental  
Initiatives, World Economic Forum

The Secretariat follows a relatively lean central staffing model, leveraging a wide network of experts and support staff from IFC, IBRD, the Forum, SDC and our partners in their Headquarters and in our partner countries. 2030 WRG staff engage extensively with the government, business and expert networks and convening platforms maintained by its partners.

In addition to the operational activities, the Secretariat organizes fund-raising outreach efforts and manages contracts with service providers and consultants who help 2030 WRG implement programs. It also prepares reports, events, outreach, and engagements which lead to the 2030 WRG's stakeholder forum globally and at country level.

While 2030 WRG is hosted by IFC, it will continue to operate as a collaborative, broad-based and neutral platform which brings together public, private and civil society expertise to create needed transformation in the water sector.



# DONORS, PARTNERS AND FUNDING

2030 WRG is a unique global public-private initiative, with the heart and soul of a start-up venture.

Many leaders see 2030 WRG as a potentially transformative catalyst, able to bring interested parties together to deal with the issue of better managing scarce water resources. Their contribution of funds to 2030 WRG makes it possible to bring to life its business model and plans for action to deal with water issues.

The earlier work of 2030 WRG, including the work in individual countries, was supported by a small group of companies and organizations, in particular IFC, the Forum, The Coca-Cola Company, PepsiCo, Nestle, SABMiller, the Inter-American Development Bank (IDB), the Swiss Agency for Development and Cooperation (SDC) and USAID. The 2030 WRG is very grateful for the strong support it has received from this group in the past.

2030 WRG will continue to operate with financial support from a group of international and bilateral organizations and private-sector companies. These partners have created a seed fund of about \$12 million to let 2030 WRG engage with countries on water-related issues, develop global products and cover expenses of the Secretariat for two years.

Most of the future funding has been committed between July and December 2012. 2030 WRG's first round of major funding partners include the World Bank Group via IFC, the Swiss Agency for Development and Cooperation (SDC), Swedish International Development Cooperation Agency (Sida), The Coca-Cola Company, PepsiCo and Nestle. Thus, the proportion of funding is 50/50 between public and private sources, which is also our ambition. IDB is partnering with 2030 WRG

in Latin America. SABMiller is committed to support our work in particular countries. Other partners close to agreeing on financial support directly or in parallel to 2030 WRG are Global Green Growth Institute (GGGI), Asian Development Bank (ADB), African Development Bank (AfDB) and companies in different industrial sectors. This core group will be augmented by additional and more diverse groups of donors particularly at country level. International and bilateral organizations as well as companies are welcome to join as partners of 2030 WRG at any time.

2030 WRG has begun to work with other international water initiatives that recognize both the critical challenges posed by water and the value of private-sector involvement to address it. Those members have found that doing good work on water resource management is an effective way to do well for their shareholder value. They see the risk of water scarcity but they also see the opportunity.

One such organization is the World Business Council for Sustainable Development. WBCSD works globally to raise awareness among businesses about the risks posed for industry by water constraints while pointing out that more efficient resource management and conservation can lead to greater productivity.

Another organization is the UN Global Compact's CEO Water Mandate, which is starting to work with individual companies in the watershed where they operate. This offers a useful and practical synergy.

From a policy perspective, 2030 WRG works 'upstream' with countries and the private sector to find effective policy framework approaches to water efficiency.

A third initiative is the Water Futures Partnership, initiated by SABMiller, WWF and GIZ, which also is addressing water scarcity challenges on the local watershed level.

The 2030 WRG is convinced that by combining our approaches we advance shared goals of building an international movement of committed companies, both leaders and learners.

When working in individual countries, it is

of utmost importance to avoid any overlap or duplication with ongoing activities, and instead utilize the potential synergies between the already ongoing work by other partners. The 2030 WRG will therefore work in close collaboration with international and bilateral organizations but also with organizations such as GWP, UNDP, WWF as well as NGOs and CSO in those countries.

We thank all the partners with whom we work, in addition to those cited immediately above, particularly our partner governments,

companies working with us at the country level and colleagues in Forum, IBRD and IFC. Bilateral donors in various countries also have supported us, particularly USAID in Jordan and GIZ in South Africa. Other partners, such as Global Green Growth Forum in Denmark and GGGI in Korea, have given us superb opportunities to showcase 2030 WRG's ongoing work.



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# CONTACT

**2030**

**WATER**

**RESOURCES**

**GROUP**

The 2030 Water Resources Group is housed at the IFC  
2121 Pennsylvania Avenue  
Washington, D.C. 20433 USA

[www.20302030WRG.org](http://www.20302030WRG.org)

For further information, please contact  
Carmen del Rio, Communications Officer  
[cdelrio@ifc.org](mailto:cdelrio@ifc.org)