







OECD-FICCI-ADB-2030WRG Seminar on Water Risk and Stewardship 20-21 August 2014, New Delhi, India

Summary

Water security is on the political agenda in India like never before. The Seminar on Water Risk and Stewardship was jointly convened by the Organisation for Economic Co-operation and Development (OECD), the Federation of Indian Chambers of Commerce and Industry (FICCI), the Asian Development Bank (ADB) and the 2030 Water Resources Group (2030 WRG). The seminar arose from the recognition of the scale of the water challenge in India and its importance to India's development, impacting key issues, such as food security and economic development. The seminar was convened to provide a platform for policy dialogue and knowledge sharing among Indian stakeholders (public and private sectors, at federal and state level; and civil society) and the international community. It was also an opportunity to explore avenues for further co-operation. At the seminar, the Minister has requested that the summary record be sent to her, on which to build potential follow-up action.

In her inaugural address, **Sushri Uma Bharati, Honourable Minister of Water Resources and Ganga Rejuvenation** highlighted five priorities to improve water security in India: (1) pursuing the River-interlinking Plan to help control floods and droughts, taking into account the potential impacts on the river ecosystems, (2) launching the "Year of Water Conservation" in the year 2015-2016 to stimulate a mass movement, (3) developing the Ganga Rejuvenation Project as a role model for all other river development projects in India, (4) driving the action plan for cleaning the river Yamuna with the support of Delhi state authorities, and (5) addressing the impacts of climate change on water resources in India.

Key messages

• Many water risks in India are well-documented; in particular the alarming rate of groundwater depletion, heavily polluted water bodies, and lack of access to water supply and sanitation, but this evidence base could be better used to inform policy and stewardship action.

According to ADB's water security indicators, India's level of water security is strikingly low, as compared to other countries in the region. OECD's work on water security illustrates the cost of water insecurity. This includes costs related to increased energy use for groundwater pumping as water tables decline, foregone revenues from farming or industry due to water over-abstraction, health and productivity costs related to poor water quality, as well as potential impacts on agricultural commodity prices and inflation. Besides these short run costs, water insecurity also has long term consequences for India's economy and development.

Analysis from the Columbia Water Centre reveals how optimal cropping patterns can alleviate water stress, while meeting food production goals, highlighting the importance of demand management at user level to be informed by costs and risks. From the industry perspective as reflected by the World Business Council on Sustainable Development (WBCSD) water risk assessments tools can improve the evidence base for managing water risks, but is not a substitute for good water management itself.

 Water stewardship strategies of leading businesses are making significant progress in reducing their impact on water resources. Some leading industries have achieved remarkable water use efficiency gains as part of stewardship initiatives. They are improving transparency about their water use and urging those in their supply chain to do the same.

There are a number of examples of Indian businesses making significant strides in the measurement of their impact on water resources and improvements in water use efficiency. Tata Group, Jain Irrigation, Coca-Cola, JSW Steel each provided examples of their voluntary efforts to reduce their impact on the resource. Tata Sustainability Group shared their remarkable water stewardship journey, while underlining challenges related to the measurement of water use, and those related to persuading companies to look beyond the fence in their stewardship approaches.

The 2030 Water Resources Group approaches water stewardship using hydro-economic analysis to inform and prioritise actions, convening multi-stakeholder platforms, and developing concrete proposals to improve water security. Centers for International Projects Trust (CIPT) shared stewardship strategies focussed on the water-energy-climate-food nexus, including the acceleration of technologies through innovative approaches (such as low cost technologies to achieve both water and energy savings), crop diversification, co-operation with the private sector and participatory action.

However, voluntary action is far from sufficient to address the scale of water challenges in India. Many companies are reluctant to disclose water use and information about the impact of their operations on the resource. Overall, it is important to recall that water is a shared resource - hence water risks are shared risks. In practice, much more to be done to persuade industry to look "beyond the fence" (their own operations and supply chains) and move the thinking from a focus on "my risk" to "our risk".

It was clear from the discussions that while voluntary action on water stewardship at the company or farm level are a good start, it is far from sufficient to address the significant water challenges in India. Some speakers stressed that despite some recent shocks, industry was still significantly underestimating water risks. The fact that water is not priced as a resource is a major factor driving its unsustainable use, undermining incentives to improve efficiency, and creating a barrier to the broader diffusion of technologies to improve efficiency, like micro-irrigation systems. CDP India has begun collecting data on water use by a portion of the top 200 Indian firms (in addition to carbon emissions data). Many companies are still reluctant to disclose their water use, although pressure from investors or directives from large buyers within the supply chain – such as Walmart or Unilever - have prompted rapid reactions by some firms.

WWF-India highlighted the trend of moving from the water footprint towards focussing on water risks and indicated that most companies are still at the "beginning" stage of the water stewardship journey, and have yet to fully understand the nature of *shared* risks.

• While India's national policies on water are reasonably well-developed, implementation and monitoring have stalled. Some State Governments are proactively reforming water policies, with some promising results. Re-newed attention to water security by the new government under Prime Minister Modi provides a window of opportunity to advance the much needed "paradigm shift" for water management in India.

The discussion of recent and planned water policy initiatives provided valuable insight into the challenges and opportunities to reform water policy in India, including the political constraints. Principal Secretary, Water Resources

Department, Government of Karnataka highlighted that implementation of water policies had been mixed to date, constrained by low capacities and conflicting views among stakeholders. A need for a robust water allocation system to be in place was emphasised, and acknowledged the difficulty of using water pricing as a tool (while not financially costly, it can be politically costly). The Chairman, Central Water Commission, Government of India, stressed the numerous challenges in the water sector and how the National Water Policy 2012 sets out a comprehensive policy framework which aims to meet them. He also highlighted the National Action Plan on Climate Change (NAPCC), which identified the approach to meet the challenges of the impact on water resources due to climate change.

OECD highlighted examples from international experience that can help move from stewardship to water security. These include reforming harmful subsidies in Mexico, improving policy coherence between energy and agriculture in Brazil, addressing water charges and investment in Chile, and water allocation in France. To support the process of water reform in specific countries, the OECD uses a robust evidence and analysis to inform a structured policy dialogue engaging a broad range of stakeholders. The recent report from the Council on Energy, Environment and Water (CEEW) shed light on how collective action can stimulate a "beyond the fence" approach to improve water security. Among the key factors that drive collective action include: communication and co-ordination as well as monitoring and accountability. From the industry perspective, ITC shared lessons from community engagement to reap the benefits of both traditional and scientific knowledge, improve water use efficiency, and community-owned water storage structures. Vishvaraj Infrastructure Limited presented the "4P" model, which includes the public sector for policymaking and capex support, the private sector for investment and service level commitments, importantly "people participation".

Summary of key messages

- Many water risks in India are well-documented, but this evidence base could be better used to inform policy and stewardship action.
- Water stewardship strategies of leading businesses are making significant progress in reducing their impact
 on water resources. They are improving transparency about their water use and urging those in their supply chain
 to do the same.
- However, voluntary action is far from sufficient to address the scale of water challenges in India. Many
 companies are reluctant to disclose water use. Much more to be done to persuade industry to look "beyond the
 fence" (their own operations and supply chains) and move the thinking from a focus on "my risk" to "our risk".
- While India's national policies on water are reasonably well-developed, implementation and monitoring have stalled. Some State Governments are **proactively reforming water policies**, with some promising results. Renewed attention to water security by the new government under Prime Minister Modi provides a window of opportunity to advance the much needed "**paradigm shift**" for water management in India.

Way forward

The OECD-FICCI-ADB-2030WRG Seminar on Water Risks and Stewardship in India provided a unique opportunity to draw on the experience of the government, the private sector and CSOs to share challenges and consider solutions. The key messages of the seminar will contribute to knowledge sharing both within India and in global policy dialogues on water security. It also provided a solid basis for further collaboration on water security in India.

The partners and participants reaffirmed their commitment to accompany policy initiatives from the government and reforming states. Robust analyses, including economic analysis can support policy discussions and highlight policy options that contribute to growth and poverty alleviation, in an equitable and sustainable way. International experience can also contribute, to inspire policy options and the accompanying measures that can make reform happen. The OECD, FICCI, ADB and the 2030 Water Resources Group stand ready to support and facilitate the water security agenda of Indian authorities. The upcoming Indian Water Week in January 2015 can provide a milestone to continue the dialogue and move ahead along the reform path.

Proceedings

Inaugural session

The welcome address was provided by **Didar Singh** (Secretary-General of FICCI), who emphasised how water is now on the agenda like never before.

To highlight the rationale and objectives of the seminar, the four convening partners provided opening remarks – Naina Lal Kidwai (Immediate past President FICCI, Chairwoman, India, Director HSBC Asia Pacific), Xavier Leflaive (Head of Water Unity, Environment Directorate, OECD), Rana Hassan (Principal Economist, India Resident Mission, Asian Development Bank), and Anders Berntell (Executive Director, The 2030 Water Resources Group). The seminar arose from the recognition of the scale of the water challenge in India and its importance to India's development, impacting key issues such as food security and economic development. The seminar was convened to provide a platform to bring together a broad range of stakeholders for knowledge sharing and the exchange of experiences in understanding water risks and stewardship.

In his keynote address, the director, writer, environmental activist, **Shekar Kapur**, reminded us of the power of storytelling by narrating various stories of water Each time he came back to the same statement: *'Hum, Tum, Paani, Ek Kahaani'* ("you, me, water, one story") -- meaning that everything in our lives revolves around water and that all of our life stories are connected.

In her inaugural address of **Sushri Uma Bharati, Honorable Minister of Water Resources and Ganga Rejuvenation**. She highlighted five key points:

- 1. River-interlinking plan would be carried out taking into account the potential impacts on the river ecosystems. She noted that the interlinking of rivers will help to control floods and droughts.
- 2. She announced the year 2015-2016, would be the "Year of Water Conservation" and social media would be used to launch mass participation.
- Regarding her priority project of cleaning and developing river Ganga, the Minister said that she wanted to
 make project Ganga a role model for all other river development projects in India. Her aim is to make Ganga
 a pollution-free, clean river in the next three years and work is being done at a fast pace to achieve the
 target.
- 4. Cleaning up the river Yamuna is also underway and the Ministry is working with Delhi State authorities in driving the action plan forward.
- 5. Addressing the impact of climate change on water resources of India is of utmost importance.

Sushri Bharati also invited the recommendations of the seminar to be presented to her Ministry for deliberation and taking action on the proposed plans.

Session 2: Building a common understanding of water risks and risk sharing

This session looked at various approaches to understanding and responding to water risks. Overall, the session highlighted the importance of measurement (indicators and data) as a basis for better understanding water risks and that there are diverse approaches and tools available. While improvement the understanding of water risks through robust risk assessment an important first step, the evidence base needs to be used to spur action. Highlights from the presentations included:

- Upmanu Lall (Director, Columbia Water Centre) put water risk into an economic context and shared results
 from a recent water risk analysis. The analysis revealed how optimal cropping patterns can alleviate water
 stress while meeting food production goals. It also highlighted the importance of demand management at user
 level to be informed by costs and risks and the influence of government procurement policies on prevailing
 cropping patterns.
- Ian Makin (Principal Water Resources Specialist, ADB, retired) situated India's level of water security with the
 broader regional context. According to water security indicators from the ADB's Asian Water Development
 Outlook (2013), India's level of water security is strikingly low (rated as "hazardous"), as compared to other
 countries in the region. He highlighted the link between poor water governance and persistent water security
 challenges.
- Kathleen Dominique (Environmental Economist, OECD) shared key messages from OECD's risk-based approach to water security and provided illustrations of the cost of water insecurity in India. Examples include costs related to increased energy use for groundwater pumping as water tables decline, health and productivity costs related to poor water quality, as well as potential impacts on agricultural commodity prices and inflation. Besides these short run costs, water insecurity also has long term consequences for the India's economy and development.
- Joe Phelan (Director, World Business Council on Sustainable Development) and Mangesh Gupte (Head, CDR, ACC Cement Ltd.) From the industry perspective, leading businesses are active in developing company-wide water risk assessments. A focus on direct operations is a key first step, but for some industries water use is most significant in other parts of the value chain (e.g. supply chain and in product use). While water risk assessments tools, such as the India Water Tool, can improve the evidence base for managing water risks, they are not a substitute for good water management itself.

Session 3: Water Stewardship Strategies

This session provided lessons from experience with water stewardship strategies from the perspective of industry, an international organisation, CSO and the research community. Overall, it was clear from the discussions that water stewardship efforts to measure and reduce water risk at the company or farm level is a good start, but that water risks are shared risks and stewardship efforts need to go beyond individual actions to deal with collective action. Highlights from the presentations included:

Anders Berntell (Executive Director, 2030 WRG) provided an overview of the 2030 WRG's approach to
working with countries to develop the evidence base for dealing with water risks through hydro-economic
modelling and establishing multi-stakeholder platforms to promote transformative action. Ongoing work in
India includes projects in Karnataka and Maharashtra as well as possible re-engagement at national level
focussing on the Ganges river basin.

- Alka Upadhyay (Tata Sustainability Group) recounted Tata's water stewardship journey and their experience
 working with the water footprint to understand water use in company operations and the supply chain as well
 as the impact on the watershed. She highlighted challenges related to measurement, but also the challenges
 related to persuading companies to look beyond the fence in their stewardship approaches.
- Suresh Babu (Director River Basins and Water Policy, WWF-India) highlighted the trend of moving from the
 water footprint to water risks. He indicated that most companies are still at the "beginning" stage of the water
 stewardship journey, and have yet to fully understand the nature of shared risks. He observed that the trend is
 moving from a focus on water footprints to a focus on water risk, which allows for a clearer understanding of
 the impact of water use. Further, he stressed the need to move from risk assessments that move from "my
 risk" to "our risk".
- Romit Sen (Deputy Director, Centres for International Projects Trust) focussed water stewardship to address
 the water-energy-climate-food nexus in India. Concrete examples included the acceleration of technologies
 through innovative approaches (such as low cost technologies to achieve both water and energy savings),
 crop diversification, co-operation with the private sector and participatory action.

Session 4: Industries' initiatives in water stewardship – achieving water use efficiency

This session provided different perspectives on industries' activities to improve water use efficiency and the experience of CSOs in promoting water stewardship and improving transparency about water use. Several companies shared their experience in achieving water efficiency gains as a part of stewardship efforts. However, the discussions highlighted that while these gains are important, improvements in water use efficiency alone is not sufficient to achieve water security, by any means. There is a clear need to address the dimension of shared risk, beyond the impact of a specific water user. This aspect has been largely absent from discussions about water issues to date.

- Asim Parekh (Vice-President, Technical, Coca-Cola India) recounted initiatives taken to reduce the company's impacts on water. He indicated that Coca-Cola has managed to achieve a positive net impact on water in their operations in India.
- Surinder Makhija (Strategic Advisor, Senior Vice President, Jain Irrigation) highlighted the capacity of micro
 irrigation systems to help reach the National Water Policy target of 20% water efficiency improvement. He
 also stressed that the lack of water pricing was a significant barrier to their diffusion.
- SMR Prasad (Associate Vice President, Environment Management, JSW Steel) highlighted the critical nature
 of water to steel production, but also that the cost of water was miniscule. Improvements in water use
 efficiency have been achieved, but production is also set to expand.
- Damandeep Singh (Director, CDP India) stressed that water data is sometimes considered "top secret" and
 companies can be reluctant to disclose their water use. However, pressure from investors or directives from
 large buyers in the supply chain such as Walmart or Unilever can spur quick responses.
- Bhavan Prasad (Director, Business and Industry Engagement, WWF-India) emphasised that industry
 continues to actually underestimating water risks despite some recent, visible shocks. She stressed that
 water is not priced as a resource and this is major factor in why there is a low incentive to improve efficiency.

Session 5: Policy framework and incentives for improved water stewardship

This session looked at how policy reforms can help to improve the incentives faced by water users and shift from water stewardship to improving water security. It provided insight into the challenges and opportunities to improve water policy, including the political constraints, as well as lessons from international experience. It also highlighted stewardship initiatives by the private sector that can help curb demand for scarce freshwater resources. Finally it examined the drivers of collective action needed to gather and inspire stakeholders to act.

- Kapil Mohan (Principal Secretary, Water Resources, Government of Karnataka) highlighted that the implementation of water policies had been mixed to date, constrained by low capacities and conflicting views among stakeholders. Not only is water stress increasing every day, but the sensitivity to that water stress is also increasing. Integrated Water Resources Management (IWRM) at basin scale was proving to be a useful approach and shared plans to set up a Centre for IWRM in Karnataka, which may develop as a national source of expertise on the issue. He also noted the difficulty of using water pricing as a policy tool, as it can be politically costly, if not financially costly. There are efforts to change this, but Mr. Mohan stressed that first, a robust water allocation system needs to be in place.
- A. B. Pandya (Chairman, Central Water Commission, Government of India) provided an overview of the numerous challenges to water security in India, with only 4% of the world's renewable water resources and 18% of the world's population and water demand set to outstrip supply. He stressed the need to attach a value to water and highlighted various schemes, such as providing financial incentives to improve irrigation efficiency and the programme to restore and renew water bodies. He also noted that the National Action Plan on Climate Change had been adopted to meet the challenges of impacts of water on climate change.
- Xavier Leflaive (Head of the Water Unit, Environment Directorate, OECD) highlighted examples from international experience that can help move from stewardship to water security. These include reforming harmful subsidies in Mexico, improving policy coherence between energy and agriculture in Brazil, addressing water charges and investment in Chile, and water allocation in France. To support the process of water reform in specific countries, the OECD uses a robust evidence and analysis to inform a structured policy dialogue engaging a broad range of stakeholders.
- Sanjib Bezbaroa (Vice President, Corporate EHS, ITC Limited) presented experience with community-based training to improve water use efficiency for irrigation and the recharge of groundwater, noting that over 1 200 water users' groups had been formed to date. He also emphasised that while stewardship initiatives were important, we need to stay focussed on the main goal of improving water security.
- **Dr. Arunabha Ghosh** (CEO, Council on Energy, Environment and Water) shared findings from recent work examining the key factors that drive collective action. Drawn from a number of case studies, important factors include: communication and co-ordination as well as monitoring and accountability. The presence or absence of a threat or opportunity can also be a determinative factor in collective action.
- Arun Lakhani (Vishvaraj Infrastructure Limited) presented the "4 P's" approach to drive a social process to
 reduce demand for freshwater. One approach encourages private investment to provide treated wastewater
 for industrial use. Mr. Lakhani advocated the "4P" model, which includes the public sector for policymaking
 and capex support, the private sector for investment and service level commitments, importantly "people
 participation".

Valedictory Address

Dr. Mihir Shah (President, Bharat Rural Livelihoods Foundation and Former Member, Planning Commission) provided an inspiring valedictory address. He highlighted the timeliness of the seminar, especially considering that the impacts of climate change will make improving water security in India even more challenging. He emphasised that India is poised to embark on a much-needed "paradigm shift" for water resources and water stewardship is at the heart of this transformation. He recounted the unprecedented multi-stakeholder process to develop the 12th 5-year Plan and which provides a roadmap for the future. He advocated for agreement on a nation-wide set of principles for water management, including the adoption of the Public Trust doctrine of water resources, noting that private ownership of groundwater resources was an invitation to over use. He made the case for the government to put in place mandatory water audits for industry, to at least require them to measure and disclose their water use and provide a credible plan for reducing their water use in their "own enlightened self-interest". He also highlighted that importance of an accountable water regulator. Finally, he stressed the importance of a clear incentive structure, the centrality of involving people, and above all, the importance of partnerships to bring together all stakeholders, for *genuine* water stewardship.