

## Moving ahead on blended financing mechanisms and pricing water in India<sup>1</sup>

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### Summary of concept note

In the context of the initiative *Blueprint for Water Accounting in India*, anchored with the Ministry of Water Resources, River Development and Ganga Rejuvenation (MOWR), and supported by 2030 Water Resources Group (2030WRG) and the India-EU Water Partnership (IEWP), the Task Force on cost recovery was asked to develop an initial concept note on cost recovery principles and financing elements across sectors, in coordination with NIPFP and OECD.

The current concept proposes a phase-wise approach on the topic, starting with a focus on blended finance through an assessment of existing public-sector spending on water resources management, along with recommendations on how additional sources of finance can be leveraged.

### Pricing water and innovative financing mechanisms as a driver for sustainable growth in India

The Initial Concept Note on Costs Recovery in the Water Sector highlights several costs of water: i) resource cost (costs of water development/ collection, treatment and supply/ distribution); ii) environmental cost (costs associated with depletion and degradation of water); iii) opportunity cost (costs associated with not allocating water for best alternative uses and across generations); and iv) cost of resource recovery (cost of pollution abatement, water reclamation).

Similarly, several pricing instruments can be combined to cover these costs: i) tariffs for water supply and sanitation services are meant to recover resource cost; they apply to bulk water production as well; ii) abstraction charges are designed to signal the opportunity cost of using water (they are higher when water is scarce or competition to access it is fierce); and iii) pollution charges make pollution costly and recover the cost for downstream or future users.

Under-pricing or not charging full cost pricing of water leads to inefficiency in production and distribution, which in turn reduces productivity of water in terms of gross value addition. It follows that pricing for water is not merely an environmental issue. It is essentially an economic issue: under-pricing leads to lost opportunities for economic and social development, through wasting water that could have been

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available for valuable uses; misallocation of water to low value uses while more valuable uses are deprived of access; additional cost to treat polluted water before it can be used again, thus affecting productivity of agriculture or industries; etc.

India's total water productivity is very low and even lower than in developing countries in Sub-Saharan Africa. It follows that improvements in water pricing can lead to significant economic and social benefits in India. In particular:

- It can avoid wasteful use of water, where it is scarce.
- It can allocate water where it creates most value for Indian communities.
- It can save public funding, which can have a larger benefit in other domains.

### **A programme of action to make water pricing reform happen in India**

The economic case for well-designed water pricing is robust and well-known in India. A number of initiatives have been taken at federal, state and local level to design and implement prices that make economic, social and environmental sense.

The note focuses on how to move this agenda ahead and ignite change at scale. It focuses on three streams of work and one method.

#### ***A note on method***

Indian authorities and partners have developed a lot of knowledge and expertise on water issues in India and on options for reform. OECD experience in making reform happen suggests that a momentum for change can benefit from a neutral platform where policy issues are discussed, informed by robust analytics and international experience.

The OECD, often in partnership, has worked directly with a number of countries to support National Policy Dialogues, helping to make water reform happen. National Policy Dialogues are a structured process for stakeholder engagement supported by robust and tailored analytical work and lessons from international experience. National Policy Dialogues have been undertaken in a range of countries focussing on various elements of water policy reform, including financing and pricing, governance, allocation, water security and private sector participation.

- NPDs are demand-driven. They focus on a set of policy issues, in combination with related governance ones: policy reforms only materialise when supported by appropriate institutional arrangements.
- NPDs take time. An NPD process typically takes 18 months or more. While it is result-oriented, it takes the time needed to engage with relevant stakeholders, to produce the new knowledge required to advance discussion and move the policy agenda forward and to build a consensus towards reform. The process brings ownership. It is as important as the policy options that it delivers.
- NPDs involve a range of stakeholders. They are involved from the start, to share information and knowledge, to propose options, or voice concerns. Engagement is more than consultation. It requires a peculiar setting.

The OECD has gained experience supporting policy dialogues on water-related issues, in a range of contexts, most recently in the Netherlands, Brazil, or Korea. See some illustrations below.

2030 Water Resources Group is supporting national- and state-level water sector transformation in multiple countries through the convening of Multi-Stakeholder Partnerships (MSPs). Such MSPs are addressing issues of long-term water resources management for economic growth through a cross-sectoral approach, including among other topics, the following:

- Development of a framework for water valuation, taking into account the economic and ecological value of water;
- Water governance improvements for water resources planning and project implementation;
- Support for water sector investments prioritization, based on cost-, benefit- and risk assessments of water projects.

In India, 2030WRG has signed a Memorandum of Understanding with MOWR to support a number of areas, including water accounting and water governance improvements. In addition, 2030WRG has established MSPs in the states of Karnataka and Maharashtra, working on the topics of agri-water and urban-industrial water security. A partnership with the state of Uttar Pradesh is currently under development.

### ***Phase 1. Follow the (federal) money***

Inappropriate pricing and charging for water increases the costs of managing water in India, as water users receive no signal that water is scarce, that pollution is costly. In essence, this situation contributes to future liabilities as raising water demand will have to be met through additional infrastructure (dams and reservoirs), exposure to flood risks will require additional investments in flood protection, and degraded water will generate higher treatment costs for users downstream and for future generations. In India, as in most developed and developing countries, the situation is compounded by the fact that water infrastructures are primarily financed through public funds.

It follows that under-pricing of water in India leads to inefficient use of public funding. Significant amounts of public funding are spent on water management, the operation of water services, and the development and maintenance of water infrastructures, as well as water technology finance. That money does not deliver expected benefits, because – among other issues - the lack of a robust system for pricing and charging water sends contradictory signals to water users and ends up increasing needs for public spending in water management.

To overcome this situation, it is proposed to monitor how federal public spending contributes to efficient water management in India, and to explore how it could be best blended with other sources of funding (either state budgets, or commercial finance). The project would document where federal money goes in the water sector, and where it benefits from synergies with other initiatives at state or local level.

Work would be taken in two directions. On the one hand, the project would explore how federal and state funding can be used in coordinated ways so as to maximise the benefits for the community. It would document where synergies are missing or could be enhanced. Such synergies are topical in a country where water is a state issue. On the other hand, the project would analyse how federal and state funding can be used to mobilise and attract other sources of finance, in particular commercial finance. The analyses would lead to a better understanding of how to use each source of finance wisely, where it creates most value, with a view to use federal funding to crowd *in* (instead of crowding *out*) other sources of finance. Sectoral implications of such financing (e.g. agriculture, urban, industry) would be explored for more targeted recommendations.

The outcomes would be twofold. On the one hand, the project would demonstrate the benefits of synergies across levels of government and identify opportunities to make them happen. Second, it would pave the way for smart blending of different sources of finance for investment in water security. Ultimately, the project would support a robust allocation of federal funding for water that enhances its leverage and effective contribution to improved water management in India.

The work would build on a pilot-methodology tested by the OECD to track private finance into renewable energy in South Africa (the “investor perspective”). The methodology would be adapted to measure the leverage of public federal finance in water infrastructure. The work would also build on discussions that take place in the Roundtable on Financing Water, a joint initiative by the OECD, the World Water Council and the Netherlands. While the discussions are relevant at national level, data collection would be undertaken in a couple of pilot states. This is proposed to tie into the ongoing water accounting work of the 2030WRG and IEWP with MOWR, as well as potentially align with current state-level engagements of 2030WRG.

Key activities and timelines for this phase include:

- Kick-off workshop on cost recovery and blended finance workstream
- Interim findings of public sector funding allocation in the water sector
- Roundtable with financial institutions, multi-lateral development partners, bilateral agencies and donors on blended financing mechanisms
- Final report on public sector spending and opportunities for blended finance
- Initiation of pilot engagements for blended finance in 1-2 states

Other phases of potential support are outlined in the annexure.

ANNEXURE:

### ***Phase 2. Consider setting up abstraction charges***

Water abstraction charges are not an end in themselves, but they can help make the best of available water, allocating it where it creates most value for the economy and society. They can raise revenues to cover the costs of managing the resource, thus saving scarce public funds. However, the same factors make any discussion on water abstraction charges particularly difficult and sensitive: social and competitiveness issues are exacerbated when people and industries are vulnerable, and trust in public policy and governance erodes.

Hindsight from international experience can inform policy discussions in India:

- Low abstraction charges do not deliver visible benefits to water users, hindering users' willingness-to-pay and making any further increase of charges challenging.
- Priority should be charging those who abstract or pollute most (although in the longer term, a fair and inclusive approach is required). Such a strategy maximises benefits for water management and revenue raising, and minimises the cost of setting and managing charges.
- While sophisticated methods can fine-tune the level and structure of abstraction charges, proxies are helpful to get started and send sound messages to water users.
- Charges should be designed and implemented in coordination with other policy instruments, such as water allocation regimes, water quality standards, or the promotion of best available technologies.
- Revenues generated through charges can fund expenditure programmes, which are commensurate with revenue raising capacities and deliver visible benefits to water users.
- The potential impacts of water charges on the affordability of water bills and on the competitiveness of industrial and agricultural users should be documented. They are better addressed through targeted accompanying measures, eventually financed through recycling some of the revenues generated by water charges, than through blanket exemptions or discounts.

A policy dialogue can help make the case for setting abstraction charges that contribute to water policy and wider sustainable development objectives in India. It provides a platform to share knowledge about the state of play and to make the case for reform of water abstraction charges. It also sets the stage to voice concerns (e.g. about the social consequences, or the impact on the competitiveness of selected industries) and discuss options to address them.

The project would follow a pragmatic and action-oriented approach. The point is not to make a generic statement about the potential value of water abstraction charges in India, but to explore:

- Which instrument is appropriate in particular contexts.

- How to design the abstraction charges, i.e. i) the level of the charge; ii) the structure of the instrument (e.g. respective shares of fix and variable elements); and iii) the process to set the charge.
- How to manage the revenues from water use charges. The capacity to spend the proceeds of the charges wisely, in ways that create value for water users (including the environment) is a condition for the efficient operation of water charges. It drives users' willingness-to-pay.
- How to govern water use charges. Several governance issues are critical to make water abstraction charges deliver: e.g. scales at which charges should be set and managed; co-ordination; engagement with stakeholders; ownership of the various sectors potentially affected by water charges.

The expected outcomes include: i) an outsider view of how the existing water abstraction charges perform, and where the main policy and governance gaps are; ii) a clear understanding of how water abstraction charges can contribute to water policy and to wider policy objectives in India; iii) robust recommendations regarding the design of water abstraction charges, disbursement mechanisms for the revenues they generate, and accompanying measures to facilitate their deployment; and iv) tailored recommendations on water governance mechanisms that contribute to making the best use of water abstraction charges in India.

### ***Phase 3. Towards robust water allocation mechanisms***

Water allocation describes the process and tools involved in sharing water resources amongst different water users. Well-designed allocation regimes strike a balance between competing requests, for instance between water security for water users and flexibility for water resource managers to respond to changing circumstances. They can also encourage water users to invest in and adopt innovative practices.

Fostering sustainable water resources management requires water allocation modalities that fit with the development strategy, and are flexible enough to adapt to future challenges. In this context, providing Indian water policymakers with knowledge and evidence on water allocation schemes, good practices in other countries, and potential benefits associated with the transition towards more appropriate water allocation mechanisms can contribute to address water-related tensions in India, to realise foregone benefits that result from misallocation and to set economic and social development on a more sustainable path. It comes naturally with a discussion of water abstraction charges as both issues are intimately interconnected.

To help guide decision-making related to water allocation in India, the project would:

- Review allocation mechanisms in place, assess their consistency and provide a typology across states.
- Explore alternative options for water allocation based on international experience and best practice. This implies an in-depth overview of alternative methods such as priority ranking of water uses, setting specific rules, or valuing water and related services. Specific attention also has to be paid to requisites (e.g. water users association; data availability) and incentives to make alternative allocation mechanisms deliver. Particular attention will be aid to infrastructures, their availability and how they match with alternative options for water allocation.
- Suggest an action plan to move forward and transition to new water allocation schemes. Customised policy recommendations would be provided in terms of allocation criteria (business as usual/times of crisis), institutional arrangements needed to set and endorse rules, apply criteria and monitor them and requisites and accompanying measures to be contemplated.

## **Illustration. Selected OECD Policy Dialogues on water**

### *National Water Policy Dialogue in the Netherlands*

Two-thirds of the Dutch territory, more than half of the population and two-thirds of the economic activity, are at risk of flood. As a result, water management has long been a national security issue for the Netherlands. Due to this unique situation, and centuries of concerted effort and dedicated ingenuity to “keep feet dry”, the Dutch have become a global leader in water management.

However, in the face of broader administrative reforms, fiscal tightening and increasing water challenges due to climate change, a number of key questions have emerged: how fit is the current system to meet future challenges? Are the current water governance and institutional arrangements effective and resilient? Is the Dutch society willing and able to pay the rising costs of water management? Can the Dutch “polder” approach effectively address issues related to the quality of the rivers and lakes, and cope with increasing risks of both floods and scarcity in the country?

To shed light on these questions, the OECD-Netherlands Policy Dialogue on Water Governance was set up. The report *Water Governance in the Netherlands: Fit for the Future?* flags issues that could shape an agenda for future water policies in the Netherlands.

### *National Water Policy Dialogue in Brazil*

Water is abundant in Brazil, but unevenly distributed across regions and users. Brazil faces at the same time severe droughts and an overabundance of water. For example, the 2015 drought in the São Paulo region occurred at the same time the Amazon region suffered severe flooding. Future economic, demographic, and climate trends make these issues more critical, as they affect rainfall variability, availability and demand, and increase the number of people and assets at risk. The OECD report *Water Resources Governance in Brazil* captures the main messages and sets an action plan. It was launched in December 2015 in Brasilia.

The OECD and the National Water Agency (ANA) have engaged in follow-up work, with a focus on the design and reform of water abstraction and pollution charges, so that they contribute to water policy objectives and to broader policy priorities, including sustainable growth and adaptation to climate change. A final report is due at the end of 2017.

### *Water policy dialogue in Korea*

In 2016, the OECD and the Ministry of Land, Infrastructure and Transport (MoLIT) embarked on a policy dialogue aimed at advancing the water agenda under the responsibility of MoLIT, to ensure that water management contributes to a sustainable and creative economy in Korea.

The main objective of the policy dialogue is to contribute to a reform agenda that enhances water efficiency in Korea, by promoting innovation while minimising the need for additional infrastructure. The policy dialogue focuses on three key areas: i) economic instruments under the remit of MoLIT and K-water; ii) the promotion of innovation, in particular the smart water management initiative; iii) water allocation regimes. The dialogue unveiled specificities of water management in Korea, in particular the well-entrenched objective to supply water under the same conditions across the country. This explains why charges for water or river water and tariffs for multiregional services do not reflect local conditions. The report will be released in September 2017.

A new dialogue started in 2017, spearheaded by the Ministry of Environment, leading a whole-of-government approach. The dialogue focuses on the management of the water-food-energy-land nexus, and on the role of basin organisations. These are very exciting times to review water policies in Korea, as the government reorganises responsibilities in this domain and reorients policies towards making the best use of available resources and assets, with less emphasis on augmenting supply.