

Governance challenges and suggested tools for the implementation of the water-related Sustainable Development Goals

Organisation for Economic Co-operation and Development [OECD]

Introduction

The Sustainable Development Goals (SDGs) to be adopted in 2015 will create a unique momentum for countries to advance on a variety of issues critical for political, socio-economic and environmental development. In particular, the current proposal for a dedicated water goal (n°6) calls for ensuring the availability and sustainable management of water and sanitation for all. This would provide an opportunity for policy makers and stakeholders to mobilise collective efforts, create shared global understanding and commit to action to improve water management for people and the environment. The water-related goal aims to shift the paradigm focused on solving individual situations and begin connecting the dots between actors, policy fields and scales to address water challenges in a systemic way.

Implementing the water-related SDG will require countries to translate global goals into concrete actions on a number of water topics: access to drinking water and sanitation; water resources management; water quality and wastewater treatment; and water-related disasters. However, to do so and achieve the targets set by the SDG up to 2030, countries will have to address a number of governance gaps related to water policy design, regulation and implementation.

These gaps are particularly acute in the water sector due to its intrinsic characteristics: it is both a local and global public good; it is much more fragmented than other natural resources area and infrastructure sector; it has many externalities on other domains critical to poverty alleviation (energy, agriculture, urbanisation etc.); and it is at the crossroad of public health, revenue distribution and territorial development.

1. Governance Challenges: 7 governance gaps hindering a water SDG implementation

In practice, governments face 7 categories of governance gaps when it comes to managing water. These gaps should not be considered in isolation as they can mutually reinforce each other, and can be more or less acute from one country to another.

1. **Administrative Gap.** Water cuts across administrative boundaries, be it local, provincial or even national. Hydrological perimeters often do not coincide with

administrative ones and raise the question of the relevant scale at which water resources and services should be managed. The international community has been advocating for basin (rivers, aquifers, lakes) and many countries have set up river basin organisations in the last decades. The question of their effectiveness in achieving intended outcomes (and supporting the implementation of a water SDG) is legitimate and requires thorough assessment of their capacity (expertise, financial resources, staff) to carry out their duties properly.

2. **Policy Gap.** Water-related tasks are fragmented across authorities and levels of government which raises the question of vertical and horizontal coordination for effective implementation of a water SDG. A whole of government approach that goes beyond “silos” is needed not to jeopardize the implementation of the water SDG. This implies often a full-fledge national strategy and commitment at the highest level to tackle the water challenge, which also embarks local authorities and the broader range of stakeholders in the implementation.
3. **Information Gap.** Information is power. Information is the new currency. Improving access to WSS and managing WRM more effectively requires precise, accurate and up-to-date information on water demand and availability, users’ registry, water permits, water risks, who pays for what, the status of networks and infrastructure, but also in terms of who does what and who is held accountable for what. In practice, many countries are still lagging behind and a huge asymmetry of information exists between authorities, end users, service providers and other stakeholders, be it voluntary or not. Though progress has been made in terms of hydrological data and water information systems have spread across the globe, much remains to be done in terms of socio-economic and financial data to guide decision-making in the water sector.
4. **Capacity Gap.** Capacity in terms of human resources, expertise and infrastructure remains a major challenge. Designing and implementing water policies with a view to reach the SDG targets requires resources and knowledge. In many countries, water managers (service providers, river basin organisations, and other authorities) do not have the proper means to carry out their responsibilities in the sector. Implementing a dedicated water SDG requires transferring these resources and providing the needed technical and financial assistance for those in charge to deliver effectively.
5. **Funding gap.** Increasing the number of people with safe access to drinking water and sanitation and meeting more and more stringent environmental regulations will require financial resources. Three ultimate sources of revenues exist in the sector: taxes, tariffs and transfers from international development. The share of these is a political choice, taking into account issues of economic efficiency, social equity, environmental sustainability and affordability constraints. The call for sustainable

cost recovery requires increasing attention on user's fees for sustainable water management. In many countries bill collection is a primary issue to tackle before increasing tariffs. ODA flows also raise absorption capacity in recipient countries.

6. **Objective gap.** The multiplicity of stakeholders in the water sector makes it vulnerable to lobbying, and risks of capture which can freeze decision-making. If a water SDG can certainly be conceived as a universal, aspirational goal, its effective implementation will require managing a number of trade-offs between diverging objectives, interests and priorities. Decisions taken in other sectors like agriculture (e.g. subsidies to farmers) can work against water policy while not incentivising rational use of water resources. Similarly, those who take decisions about spatial planning (urban dwellers, property developers) generate future liabilities for which they do not always bear the costs. These split incentives have to be managed for a holistic implementation of a water SDG. These implies flanking measures and compensation mechanisms, where need be, to transition.
7. **Accountability gap.** Many countries are going through a crisis of trust in their governments. The Arab spring has been an emblematic example in the last few years. Often, the capacity of governments to deliver quality public services at an affordable cost is an indicator of accountability vis-à-vis citizens. Issues of transparency and integrity are also important in a sector that has a high degree of monopolistic behaviour. Implementing a water SDG will require an enabling and regulatory environment that allows monitoring and assessing progress in a transparent and inclusive way. Engaging all stakeholders at different levels from information to partnerships or co-decision according to the needs, also stands as a prerequisite for effective buy-in and accountability.

2. Governance implementation challenges in the main themes

These governance challenges can affect the implementation of the SDG water-related targets to a lesser or greater degree depending on the water management function. For example :

Drinking water and sanitation (targets 6.1 and 6.2):

- The **lack of capacity**, in particular at sub-national levels, represent an important obstacle to meeting current and future demands. The World population will grow to around 9 billion by 2050, with rapidly increasing proportion living in urban areas. These socio-economic and demographic trends raise important challenges for countries and cities to mobilise the infrastructure, expertise and competent staff necessary to ensure the provision of safe drinking water and sanitation.

- **Knowledge** and **know-how** may also be needed to develop innovative approaches (be it technical or non-technical) to water service provision in light of growing demands.
- In addition, **insufficient or inadequate funding** can also be an important challenge: countries will be expected to mobilise substantial financial resources to build and maintain new networks, replace and modernise existing water infrastructures and ensure the performance of service provision.

Water resources management (targets 6.4 and 6.5):

- The management of water resources is an issue particularly sensitive to the question of **scale**. The mismatch between administrative limits and hydrological boundaries can lead to local actors (e.g. municipalities) placing their own interests ahead when designing and implementing water resources management policies and strategies, rather than integrating the needs of the river basin and aquifers.
- Managing water resources efficiently can also be hindered by **diverging interests** between urban and rural areas for example, or between up-stream and downstream regions. This can hinder the water-use efficiency across sectors and prevent the adoption of convergent objectives for sustainable withdrawals and supply of freshwater to address water scarcity.

Water quality and wastewater treatment (target 6.3).

- Ensuring good quality level for water requires collective and co-ordinated actions across actors and sectors. It is as such particularly sensitive to **sectoral fragmentation**, which can hinder collective efforts to reducing pollution, eliminating dumping, minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater, and increasing recycling and safe reuse.
- Meeting water quality targets can also be hampered by **limited enforcement** in addition to
- **A lack of accountability and transparency** in complying with existing standards for quality and wastewater treatment, in particular when governments do not have the capacity to monitor their performance and civil society is not fully engaged to hold them accountable.

Risk management related to disasters and climate change (target 6.6).

- **Inadequate information** production and sharing for what concerns meteorological and hydrological data is an important obstacle to managing the risks related to extreme event and global warming. Often, countries deal with data scattered across various sources (scientific, institutional, etc.) which hamper a common understanding of the risks and exposure to natural disasters such as droughts and floods.

- It results in the **absence of common frame of reference** regarding safety measures and levels of risks and different levels of knowledge and awareness across actors.

Diagnosing these governance challenges in each water-related area and the extent to which they affect the capacity of countries to achieve the water goal will be a critical step in the SDG implementation process. A range of tools can provide guidance to move away from silo vision to create a new scenario for development and sustainability in the water sector.

3. Needed actions on Governance in relation to each theme

Overcoming governance gaps to the SDG implementation will require taking actions on several fronts:

- **Capacity building** will be critical at the individual, institutional and societal level. It will require providing the enabling environment (institutional and legal arrangements) to strengthening knowledge transfer and skill development, in particular to empower local actors and citizens.
- Developing more **integrated approaches** to water resources management will help address the needs of all actors, including the environment, at the appropriate scale. It can help reduce path dependency and encourage the formulation of innovative and forward-looking water strategies across policy fields and territorial and institutional levels.
- Fostering **nexus approaches** (e.g. between water and energy, water and food) can contribute to adopting a coherent mix of policy instruments across water-related policy fields, support discussion among different users (e.g. domestic, industrial, agricultural) and devise coordinated strategies in addressing pollution issues.
- Strengthening safety **regulation** dealing with water-related risks will be instrumental to better plan, development and monitor mitigation measures and ensure resilience of societies and the environment. This will imply sound enforcement and compliance mechanisms, **accurate and consistent data** and better disclosure of information to the public.
- A **systemic approach** is also needed to better cope with risks and ensure a water secure world. Water risks are often interlinked and spill over other policy sectors (drought in agriculture, flood in land planning, modified freshwater systems for hydropower, etc.). More holistic decision making process regarding water security management can help in achieving win-win outcomes across various sectors.
- **Stakeholder engagement** and effective partnerships are powerful means to prevent conflict, manage trade-offs, raise awareness and build inter-sectoral

complementarities at the right scale, reducing also the cost of water management. Stakeholder engagement can also help to address territorial and institutional fragmentation in the water sector, align divergent objectives and move away from path dependency. Participatory mechanisms can contribute to overcome disparities in service provision and help policy makers to focus on inequity. The implementation of the water goal will therefore require the coordination of actors across ministries and between the national, regional, local and basin levels to create multi-dimensional, multi-generational and trans-scalar approaches.

- **Global knowledge** and **operational experience** need to be better interconnected in order for good practices in the water sector to be scaled-up and replicated, and also to learn from experiences in other sectors facing similar challenges (e.g. other sectors exposed to risk like energy or agriculture.)
- **Place-based approaches** to the implementation of the water SDG will be critical to articulate a universally applicable goal with countries dealing with different water challenges (scarcity, floods, critical pollution, ageing or inexistent infrastructures). Diverse organisational and financial resources will be needed to match countries' priorities and needs. Implementation strategies regarding the water SDG should therefore remain **flexible** and **adaptive** to changing circumstances, as well as **resilient** and **forward-looking**.
- The water targets provide countries with common goals, benchmarks and standards for progress, not only aspirational but also to mobilise concrete actions. As such, countries need robust evaluation systems to track the effectiveness of their institutions in delivering the expected outcomes of the water goal and measure what needs to be improved. Promoting the use of **monitoring, evaluation systems** and **indicators** is therefore fundamental for information sharing, transparency and accountability. Countries may be nervous about extensive monitoring systems while others may lack the capacity to adopt advanced indicators for assessing progress. Creative suggestions for these monitoring and assessment challenges will be needed and could include developing reviews based around specific challenges (drought prone areas, declining river basins, etc.) to facilitate best practices for evaluation, developing more monitoring capacity at the various level, or developing new monitoring concepts.

The OECD *Principles on Water Governance* under development will provide guidance for governments to strengthen institutions' implementation capacity in order to reap the economic, social and environmental benefits of good governance, in partnership with the broader range of stakeholders, within and outside the water sector. As such, they can serve as a framework of reference against which governments can use to assess how they are performing in setting the enabling environment for reaching the water-related goals.

4. Suggested governance tools to support the water SDG implementation

To move forwards on these actions and set the enabling environment for the effective implementation of the water SDG, governance tools and good practices already exist in the water sector.

There are a wide variety of guidelines, instruments, and publication that support better governance in the water sector. In an effort to compile these resources, an [Inventory](#) was prepared by the OECD and gathers more than 100 governance tools, water and non-water specific, around 4 thematic building blocks: stakeholder engagement; performance and governance of water supply and sanitation; basin governance; and integrity and transparency. The key is to scale up their implementation and tailor them to specific contexts.

The Zaragoza conference will provide an opportunity to include more tools to be identified, raise awareness and commit a wide range of stakeholders to action while scaling up good practices and developing concrete guidance.

Examples of tools for the different themes

<i>Themes</i>	<i>Examples of tools</i>
<i>Cross-cutting theme: Effective water governance</i>	<ul style="list-style-type: none"> - <u>OECD Principles on Water Governance</u>: set of 12 principles on water governance that provide the overarching framework for local and national governments to deliver, in partnership with the corporate sector and broader range of stakeholders, sound public policies with clear, tangible and outcome-oriented policy goals at an appropriate scale aiming to address current and future water challenges - <u>OECD Indicators on Water Governance</u>: set of policy indicators to track the effectiveness of institutions in delivering water policy outcomes, with the ambition to “measure” what needs to be improved. The indicators target different scales (from local to national), help assess the performance of water institutions (<i>vis-a-vis</i> intended policy goals), and build the economic case for effective water governance.
Drinking water and sanitation	<ul style="list-style-type: none"> - <u>Suez Environnement Stakeholder Engagement Toolkit</u>: methodology and software to help Suez Environnement utility managers build stakeholder dialogue “road map” and design action-oriented strategies that fit both with the operator’s and stakeholders’ expectations. - <u>WaterLex Toolkit for Development Practitioners of the</u>

	<p><u>Right to water and sanitation</u>: guidance for development cooperation agencies and civil society organisations integrating human rights in water and sanitation strategies and projects</p>
Water resources management	<ul style="list-style-type: none"> - <u>UNESCO/GEF/World Bank Groundwater Governance global framework for action</u>: set of policy and institutional guidelines, recommendations and best practices to improve groundwater management and governance at local, national and transboundary levels. - <u>Brazil's Water Management Pact</u>: National Water Agency's cooperation strategy across government levels which supports states in identifying future challenges and defining a management typology to address them, including through dedicated funding. - <u>EDF Multi-purpose project</u>: relates to hydropower, irrigation and drinking water through water saving convention between the energy providers, irrigators and river basin organisations.
Water quality and wastewater treatment	<ul style="list-style-type: none"> - <u>Veolia Innovation Accelerator</u>: initiative to support green growth around the world by promoting the development and deployment of leading clean technologies in partnership with entrepreneurs such as related to industrial wastewater management, wastewater treatment, and innovative systems and existing wastewater treatment plant optimization - <u>ERSAR regulatory system</u>: 16 wastewater performance indicators to carry out audits and encourage transparency in water and sanitation utilities - <u>UNESCO-IHE Online Course on Water Quality Assessment</u>: training on integrating the different steps of the monitoring cycle, from the information needs, monitoring network design, field and laboratory procedures up to data collection and processing. It is designed for professionals actively involved in water quality monitoring and management (environmental agencies, consultants, environmental or water management officers in local, regional or national governments, NGOs etc.)
Risk management related to disasters and climate change	<ul style="list-style-type: none"> - <u>CEO Water Mandate integrity risk assessment in stewardship initiatives</u>: “risk score” which evaluates the severity and frequency of integrity risks, and mitigating measures to reduce the likelihood of this risks occurring

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| | <ul style="list-style-type: none"> - <u>Dutch Delta Programme</u>: joint endeavour between central and sub-national authorities in charge of managing water , in close co-operation with social organisations and business to protect the country against flooding and ensure freshwater supply over the next 100 years - <u>World Resource Institute's Aqueduct Water Risk Atlas</u>: methodology and best-available data to create high-resolution, customizable global maps of water risk |
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5. Stakeholder's contribution to the implementation of the water related SDG

The implementation of the water SDGs raises important governance challenges that governments cannot tackle alone. Whether the water-related goals are successfully reached may depend, in a large part, on their abilities to engage the wide range of stakeholders concerned with the water-related goal. Engaging a broad range of stakeholders provides them with opportunities to be part of the solution and share views and priorities, raise awareness on water risks and costs, foster production of services and policy, manage trade-offs related to water allocation, and prevent or solve conflicts over water use.

However, there is a high degree of fragmentation of players and decision-makers in the water sector, which roles and responsibilities are not always clear and tend to overlap. Identifying who can do what to support the implementation of the water SDGs is an important step to capture the contribution that each category of actors can make, but also to bring attention on how they interact with each other and how they can develop mutually-supportive initiatives to hit the water-related targets in the different themes.

Governments set-up the institutional landscape within which water is managed and can play a critical role to translate the global water SDGs into national policy frameworks and agendas for water, mobilise dedicated funding and set incentives to hit the targets. **Business'** contribution in implementing the water goals can take the form of investments in infrastructures and innovative technologies to improve water efficiency and better manage water-related risks. **Civil society** encompasses a variety of players, from local informal to more formalised community-based organisations and NGOs, and includes unheard voices such as women, youth, indigenous communities and the poor. They can contribute to the implementation of the water SDGs through advocacy, information-sharing on local realities and needs, social mobilisation, and local development through capacity building, awareness-raising. **Academia** can contribute to produce and share technical and scientific information and evidence to build a sound knowledge-base in support of the formulation of policies, decisions, strategies and tools for the implementation of the water-related goals.

The Zaragoza conference will provide an opportunity to discuss in-depth how governments, business, civil society and academia can contribute to the implementation of the water-related SDGs during dedicated parallel sessions. Rapporteurs from each session will share

the main governance messages on tools and lessons learnt for implementation from their respective discussions as part of a concluding session to be chaired by the OECD.

6. Questions for the discussion

- ✓ What implementation *challenges* need to be addressed by improved Governance?
 - ✓ What would be the best/key Governance tool/s to be used to contribute to the effective implementation for each of the different targets of the *water related SDGs*?
 - ✓ What are some *obstacles* you have diagnosed when implementing the specific tools for the different themes? What are *solutions* you have identified to overcome them?
 - ✓ What are the *conditions for success* to replicate and effectively implement the tools in a different context (geographic, hydrologic, institutional, etc.)?
 - ✓ How do you see the *role of your stakeholder group* (i.e. business, government, academia, civil society) in overcoming the obstacles and implementing the tools? And in scaling-up and/or trickling down good practices to foster better implementation in support of the water related-SDGs?
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