

Plenary: Opening and Setting the Scene: State of the Art on Implementation Challenges and Tools – Discussion openers and questions

Session Summary Report, 15 January 2015

Discussion Openers on Tools for implementation

Tools on capacity development – State of the Art

Jose Gesti, Water and Environment specialist at UNICEF, presented the tools on capacity development related to WASH. He highlighted the importance of the Joint monitoring Programme by WHO and UNICEF in providing the information to track progress towards achievement of the MDGs. Examining the current baseline for the WASH sector, on a global basis the water MDG target was met already in 2010 but when it comes to the use of improved drinking water, Sub-Saharan Africa does not reach even 50%, holding the greatest challenges. The situation for the sanitation sector is even worse, with 46 countries worldwide having less than half of their population with access to an improved sanitation facility and 75% of the people practicing open defecation living in middle income countries. Additionally, inequalities and discrimination in access to water are very sharp and of very different natures: race, colour, sex, language, religion, political opinion, social origin, disabilities, location or economic activity (rural-urban), etc. To improve access and reduce inequalities beyond 2015, implementation and monitoring considerations should include: 1) to secure, absorb and target sustained international and national financing; 2) to expand efforts in neglected rural areas; 3) to support sustainability, including the operation and maintenance of existing infrastructures and services; 4) to renew the focus on WASH beyond households; and 5) to strengthen action in the crucial area of hygiene promotion.

UNICEF has promoted a series of tools to support implementation in this line:

- The Handbook on realising HRTWS developed by the UN Special Rapporteur on Human Rights to Water and Sanitation, which has the aim to provide more concrete and comprehensive guidance and to clarify what the implications of these human rights are for stakeholders' work and activities.
- Sanitation and Water for All Partnership is a global partnership of over 90 developing country governments and multiple stakeholders working together to catalyze political leadership and action, improve accountability and use scarce resources more efficiently, as well as to provide a transparent, accountable and results-oriented framework to increase coordination and visibility of the WASH sector and reinforce the capacity building efforts.
- 'Sustainability pathway' approach promoted by UNICEF gathers the main actors for WASH development in a country to identify the main bottlenecks and develop an action

plan to remove them. This is done with the use of the WASH Bottleneck Analysis Tool (or WASH BAT).

- The Code of Practice for Cost Effective Boreholes. This is an important tool to capacitate government officials and development partners to understand key principles for cost-effective groundwater development.
- The *Toolkit for the Professionalization of Manual Drilling in Africa* provides guidance on how to assess the market and capacitate local entrepreneurs to make manual drilling a professional sector in support to reduce the restrictive groundwater pumping costs.
- Building capacities through demand approaches such as the Community Led Total Sanitation (CLTS) to end open defecation and the *Water Safety Plan* framework for safe drinking water or the *Manual for Handwashing promotion*; and supply approaches like the 'Sanitation Marketing'.
- Other approaches include promoting WASH in schools and health centers.

Tools on governance – State of the art

Aziza Akhmouch, Head of the OECD Water Governance Programme, presented OECD's work to diagnose the main challenges and bottlenecks on governance that were preventing tools and messages reach member states and translate into implementation initiatives on the water sector. The barriers identified were clustered in seven main gaps of multi-level governance: objectives, policy, administrative, financial, accountability, capacity and information; which are also at the core of some of the intrinsic characteristics of the water sector that differentiates it from other policy areas, such as its nature of water as a global and local common good, the fragmentation within the sector, etc. These gaps were common to all the countries analysed regardless of their water availability of institutional setting, but the specific obstacles related to the administrative mismatch or the hydrological barometers rarely coincided between countries, which raised the question of which is the most appropriate territorial level for water to be managed and how the basin water governance systems can integrate the management of all relevant water territories depending on the water function at stake. There is also very asymmetric and fragmented information on the different stakeholders and different types of data (meteorological, hydrological, economic and financial data). Important challenges were those related to capacity deficiencies, especially within the public administration not only in technical aspects but also in the adoption of new policy approaches to decision making. The funding gap is motivated by a lack of decentralization of funds following the decentralization of water governance; the accountability gap has to do with integrity and transparency deficiencies; and the policy gap with the creation of silos between different policy areas that have contradictory impacts for the water sector itself. On the whole there is a systemic, interactive and mutual dependency between sectors and goals that equals the discussion on if there should be a dedicated water goal, which should never forget that in any case synergies with other domains will always need to be look at.

Filtering these challenges through the themes that will be addressed in the Conference, the main challenges identified for the WASH sector include the lack of hard and soft capacities in institutions and the insufficient or inadequate funding to build/maintain/modernise networks and ensure performance of service provision, both in developed and developing countries. Challenges within the WRM sector are the mismatch between administrative and hydrological boundaries and diverging interest between urban/rural and upstream-downstream areas. Within the Water Quality sector the main challenges included sectoral fragmentation, limited enforcement of water quality targets and lack of accountability and transparency in complying with standards. Finally the Risk Management sector faces inadequate information and lack of a common framework on safety measures. As a

transversal issue, the need to reinforce and catalyse innovation by the governments in all the sectors is of great importance.

To fill these gaps, the OECD has developed a 'Principles on Water Governance' and a toolkit to drive a process of action towards good water governance that can be monitored through governance performance indicators. It is aimed to be an active and continuously updated tool.

As a final point, the best practices that have been pilot checked also need to be checked against their ability to be replicated, which involves the development of indicators to measure it. Some governance and political aspects have been left aside from evaluation due to the apparent incommensurability, while they can be assessed from a perception based point of view. A lot of work is being done by UN-Water to prepare water governance indicators and it can help make the cycle between the identification of challenges and the learning curve to improve positive.

Tools on financing and economic instruments – State of the Art

Hanna Leckie, consultant at the OECD Division of Climate, Biodiversity and Water, presented the OECD perspective on the value of financing and economic instruments to achieve SDGs, the new evidence of water security as a driver for growth and OECD experience with pricing for water sustainable and financing WRM.

An Expert Task force commissioned by the OECD and GWP has confirmed that water security is a statistically significant causal factor for economic growth. Four related key sources of risks were identified: 1) hydrological and runoff variability in both agricultural and non-agricultural based economies; 2) excessive of insufficient water availability; 3) water quality related risks as especially intense for emerging economies; 4) risks to ecosystems and the services they provide.

How to fund the infrastructure, institutional, allocation and river basin mechanisms required to improve water security is one of the major challenges. There are a number of economic instruments that can help assist in financing economic instruments.

- Market instruments like trading mechanisms are effective for reallocating water to the highest values, and new cases of water quality trading are being started in Canada, New Zealand and the US.
- Non market instruments such as abstraction and pollution charges, water pricing, payment for Ecosystem Services, certification and eco-labelling and insurance schemes are mechanisms that contribute to enhance water availability and conservation, reduce pollution, reduce risks and compensate for losses and reduce negative externalities.

In summary, economic instruments can rise revenues, promote efficient uses and allocate water to create more value, provide incentives to explore low cost options and engage stakeholders incentivizing their willingness to pay for water security.

Tariffs are the most effective funding source for the maintenance, operation and refurbishment of water infrastructure, but in many countries funds are insufficient to achieve policy objectives, as it has been the case for the water sanitation sector that will not meet the MDG. Governments rely on taxes that fail to cover investment needs, especially in the last years of financial crisis and extended public debt. In OECD countries rising water tariffs is not a matter of affordability but of willingness to charge, which with the ageing of infrastructure is leading to insufficient economic capacity to face the strong capital investments required for infrastructure replacement, rising exposure to water risks. The variability of water prices in OECD countries shows the lack of willingness to charge. Tools

used by OECD to make a better use of tariffs include benchmarking, applying the 3T's (tariffs, taxes and transfers) as only source of funding and means to repay loans, strategic financial planning, performance-based contracts and private sector participation for water supply and sanitation.

Meanwhile, financing is required in WRM to invest in the upgrade and operation of infrastructures and to operate institutions and facilitate them. However, the sector remains underfunded due to low prices for irrigation water, increasing infrastructure needs, degradation of water quality and ecosystems and needs for adaptation to climate change.

There are a number of tools to achieve the financing gap, notably the OECD Framework for Financing WRM, which includes the principles of 1) polluter pays, 2) beneficiary pays, 3) equity and 4) consistency across adjacent policies; guidance on payment for ecosystem services; and reform of environmentally harmful subsidies.

On the whole, economic instruments are essential for achieving the SDG on water and a robust economic analysis is required to document the costs and revenues and to establish facts to move policy dialogues further.

Tools on technology – State of the Art

Elisa Tonda, acting head at the UNEP Division of Technology, Industry and Economics, started highlighting the acknowledged role of technology as key *means of implementation*, as stated by the Rio+20 document and later by the Open Working Group on Sustainable Development Goals and the Synthesis Report of the UN Secretary General, which reinforce the importance of technology in the Post 2015 Agenda.

Some of the most important benefits brought by technologies include the following:

- Economic development – The spread of appropriate technology in society is a strong catalyst for economic growth, bringing increased investment, jobs, knowledge, skills, productive capacity and transactional efficiency.
- Environmental improvement – technology adoption enables societies to reduce their environmental impacts, reducing the risks and costs of ecosystem degradation or collapse, and to adapt to environmental changes.
- Poverty alleviation – Many technological innovations bring crucial social benefits as well, such as better access to water, improved sanitation, reduced energy poverty and lower health risks.
- Access to new markets – Environmental technologies create opportunities to produce products and services that meet the requirements to access markets with stringent water related requirements.
- Capital investment – Environmental technology adoption often brings both financial investment and new assets, thus creating better investment conditions and attracting foreign investors.
- Resource productivity – As natural resource scarcity continues to grow, prices are likely to rise in future, driven by higher demand and lower supply. Environmental technologies enable societies to improve their resource productivity, meaning that more economic value is derived from less input of energy and materials, thus resulting in real cost savings to the economy.
- Collaborative partnerships – Building social capital is as important for development as economic or technological capital. Technology development and dissemination typically adopts a multi-stakeholder approach that builds trust and legitimacy.
- Sustainable solutions – Environmental technologies can provide a cost effective way to

tackle global challenges, through technological solutions in developing countries and economies in transition that have a much higher social and environmental return on investment.

Water technologies implementation challenges include knowledge and skills, cost competitiveness, public awareness and professional education, social legitimacy, access to information, IPR enforcement, cultural barriers and absorptive capacity.

The expectations of for this conference from a technological point of view include the potential contribution to the recommendation for a global technology facilitation platform and other specific recommendations on the water technology dimension; and the potential to provide coherent and synergistic contributions to the 2015 international processes. The last expectation is the provision of experience on key success factors to replicate the development, transfer and/or adoption of water technologies.



Discussion panel: from left to right Aziza Akhmouch, Elisa Tonda, Jose Gesti and Hannah Leckie.

Response panel: tools for improving WRM, WASH, Risk and Water Quality and Ecosystems

Tools for Water Resources Management (WRM)

Jean Marc Faures gave FAO's highlighted the relevance of the fact that for the first time water is included within the SDGs beyond the water supply and sanitation sector, including all the important issues related to management, scarcity, pollution, etc. The acceptance by countries of a set of targets on water resource management will ease the efforts to implement sustainable management, stakeholder engagement initiatives and constructive discussions. A similar phenomenon has occurred with goal 2 and food security issues.

He pinpointed some aspects introduced in the opening presentations in relation to WRM aspects. First, whereas to date WRM issues have found a difficult link to WASH aspects, the borders seem to be getting clearer and aspects of multiple uses, eg. for productive activities

or infrastructures are increasingly seen. Second, he emphasized the need for policy coherence to be able to handle the cross-sectoral dimension of water management, although considerable progress in the communication between sectors can be perceived. Third, in the finance arena he highlighted that the main challenges are in the implementation of the already pretty well defined economic principles and instruments. Finally, in relation to technologies he noted that the greatest positive effects on water from technology changes may come from the outside: from interlinked sectors like agriculture.

Tools for WASH

Nathalie André and Didier Allély (WHO) highlighted the relevance of the information included in WHO's GLAAS report, which looks at the problem analysing all the sanitation cycle, including not only containment but also treatment, disposal and potential waste re-use. She also put an emphasis on the great disparities and inequalities between and within countries, and between rural and urban areas, and how that will influence the implementation of tools on WASH. They subscribed the importance of hygiene and of taking WASH beyond households to schools, health care facilities and to rural areas.

The financial issue was highlighted as the biggest challenge, both in terms of getting the huge upfront investments required in the WASH sector and of distributing the burden of cost recovery among the different users in an equitable way. Additionally, it is difficult to get an accurate picture of the financing of the sector in most of the countries due to unclear accountability. Coming up with a methodology that allows a detailed picture of the real financial situation will be essential to identify the gaps and inefficiencies and not only increase but also optimize funds allocation and management in the WASH sector. Governments will have to play an essential role in monitoring the financial performance of the sector and the availability of monitoring systems that are simple and understandable could be facilitating and encouraging incentives.

Tools for Disaster Risk Reduction

John Harding (UNISDR) explained that risk management frameworks are currently being discussed and issues related to the SDGs and the alignment of the different processes are also emerging, which is very positive. He noted that an advance in the definition of water related Disaster Risks has been seen through a broader consideration beyond droughts and floods and structural and non structural measures, including a wider spectrum of aspects of risk. He identified two main challenges for Risk Reduction Management. First the need to change the perception that disaster risk management is an externality: risks will be increased or reduced depending on the investment decisions that are made everyday, regardless of whether they are made by the public or the private sector, including investment decisions on sanitation, access to water, etc. Therefore there is need to influence both private and public investments decisions to achieve successful results in risk reduction in the future. The second challenge is for countries to decide on tools implementation: how to make decisions on which of the wide range of possible risk reduction policy options or strategies to choose. Governments need tools to help them make these decisions and include them in their economic forecasts, considering not only the economic but also the environmental and social dimensions. Meanwhile, there will always be residual risks that cannot be prevented and will have to be dealt with through insurance schemes, catastrophic loss mechanisms, etc.

There is strong commitment to implement risk disaster reduction policy strategies and tools but further efforts to assess the cost of water risks would help push investment and develop financial strategies in advance.

Tools for Water Quality

Thomas Chiramba gave UNEP's views on water quality and ecosystem protection aspects. Water quality underestimation is the main constrain, as it limits the availability and diffusion of knowledge on the state, data, needs and tools. The main challenges for water quality and ecosystems include the needs for financing of hard and soft infrastructure, the institutional capacity to deliver both standards and regulations and sampling and analysis methodologies (including water quality and ecosystems accounting, data coverage and representativeness and model ground-truthing). To overcome these challenges, reinforcement of the following aspects should be needed: financing for wastewater management, especially in developing countries; upgrade of infrastructure; better regulation and enforcement, particularly of waste water for irrigation; inter-agency coherence and coordination; and transparency and accountability. Some upcoming opportunities include the capacity of UN agencies for the acquisition and analysis of water quality data (GEMS Water, GEMSAT, etc.) and the development of new technologies such as real time data capture field sondes, electronic data transfer, satellite driven remote sensing or accounting and valuation of ecosystem services. There is a need to disseminate and scale up successful initiatives and find ways to foster country investments on water quality.



Response panel: from left to right Jean Marc Faures, Thomas Chiramba, Nathalie André and Didier Allély

Final messages: the way forward

There is need for policy coherence and coordination at national and international level to create a favourable framework for the implementation of tools.

The aspects of disparities and inequalities keep being main burdens to balance social and economic growth and achieve the SDGs.

The financing aspect is a transversal issue that can constrain or impulse the progress on implementation of the rest of tools. Economic instruments are essential for achieving the SDG on water and a robust economic analysis is required to document the costs and revenues and to establish facts to move policy dialogues further.

Dissemination of knowledge on tools and successful strategies is key to advance on implementation: How can tools be implemented if there is no knowledge of their existence?