

Plenary: Multistakeholder dialogue on tools for implementation of the water related Sustainable Development Goals

Session: Implementation challenges and lessons on the main themes of the water related SDGs

Session report, 17 January 2015

Introduction

The session was chaired by Joakim Harlin, UNDP, Coordinator of UN-Water Working Group on SDGs. Among the main messages emerging from this session, Harlin highlighted the fact that we are really approaching the moment of taking action, because the magnitude of the risks, disruptions and competition among various uses is really growing. The discussions held during the conference are of critical importance to gain insights on the challenges ahead that enable the development of a coherent framework of action to support the implementation of the SDGs.

The panellists of the session reporting on the different themes and regions were:

- Water resources management: Jean Marc Faures, FAO
- Risk Management: John Harding, UNISDR
- WASH: Jose Gestí, UNICEF, and Nathalie André, WHO
- Environmental protection and water quality: Thomas Chiramba, UNEP
- Latin America: Caridad Canales, UNECLAC
- Asia: Hongpeng Liu, ESCAP
- Europe: Natalia Nikiforova, UNECE

1. Lessons learnt on the different themes addressed during the conference

During the first part of the session, theme coordinators made a brief summary of the outcomes from the different stakeholder sessions regarding the four main water topics addressed during the previous days: water resources management, risk management, WASH and water quality.

Water resources management

Jean Marc Faures began outlining that in most stakeholder sessions it was agreed that managing water resources and particularly addressing challenges like water scarcity, requires using different lens. Water scarcity it is not just a physical problem i.e. lack of sufficient resources, since very often it also entails other institutional, governance, economic and technical failures. Because of the multiple drivers, addressing water scarcity requires the

development of many different approaches (technical but also institutional or economic), applicable at a wide range of scales.

All parallel session agreed that most of the solutions to address water scarcity are linked to a better management of water in agriculture. Increasing water use efficiency and appropriate water pricing of water for food are important solutions but not the only ones. Further engagement is required with farmers and the agricultural sector to see explore alternative options to reduce water consumption.

Technology and information technologies have a big role to play in addressing water scarcity, but this is just 50% of the solution. Most the case studies presented during the parallel sessions and addressing water scarcity highlighted that stakeholder engagement with those that will adopt the technology is a must for success. Building this social dimension of technology includes capacity building, knowledge share but most importantly building trust.

Faures concluded his intervention by highlighting that probably the biggest challenge to address water scarcity precisely relays in the task of engaging with stakeholders and building the necessary trust to find common solutions. He recalled that "*Everyone agrees that engaging is necessary but this is often easier said than done*". Different actors would normally have different interests, they speak different languages and finding a common agreement and building trust requires a lot of time as many of the cases studies presented have shown.

Risk Management

John Harding outlined that in all sessions it was emphasized the need to increase coherence across the large number of risk related terms that are being used and assessed (eg. resilience, climate change adaptation, disaster management, risk governance, etc). The list of terms is wide, as well as the approaches to deal with them and the sectors and areas involved. Therefore, it is critical to set up some coherence when dealing with risk management and SDGs, particularly if we want to define realistic, attainable and understandable targets in relation to risk management.

From the business session Harding remarked two main challenges in relation to risk management. First, in what refers to water stewardship, the corporate sector is aware that they can't lead this initiative on their own, and they need to find ways to engage with other stakeholders, local communities and also river basin organizations to promote a better stewardship of water resources. Otherwise, they won't be able to increase their resilience in the light of any risk. Two, despite the interest of the corporate sector is showing in developing climate smart resilient business, it is not always easy for firms to develop 'business cases' under a high degree of uncertainty.

From the civil society session, Harding noted that local and gender empowerment are important aspects that need to be taken into account when addressing risk management. As long as the community and women are not involved in the design of the risk management strategy, the risk won't decrease. One positive message emerging from this session was that climate change adaptation was found as a very useful strategy to start making things differently, bringing people together to increase coordination among stakeholders.

In the Academia the discussion spin mostly around risk governance. Yet there are very interesting pilot projects being developed in countries like The Netherlands, that can be used as demonstration studies and extrapolated elsewhere. The Academia also acknowledged that one big challenge still pending is bridging the communication gap existing with governments, as they feel they can provide very useful information decision making in regards to risk management.

WASH

Jose Gesti and Nathalie André provided a summary of the main challenges that surround the implementation of WASH goals in the different sessions, and the specific barriers that some stakeholders need to overcome in order to improve their contribution to WASH implementation.

Many of the parallel sessions emphasized that implementing WASH goals requires adopting a Human Right to Water and Sanitation approach (HRWS). The challenge here is that is not totally clear how this can be done. Governments have the greatest role in protecting, ensuring and fulfilling this right, but often they fail. Other stakeholders like civil society, academia and even the business sector can also support the implementation of the HRWS but they can't assume the role of governments. Civil Society very often plays a critical role in defending the HRWS of local communities and the business sector, that was totally absent during the negotiation of the MDGs, is not also taking a leadership position with the implementation of the SDGs. Examples of the role from the corporate sector include the development of guides to support and respect the HRWS but a growing question is whether they can also take a more active role in the implementation itself of the HRWS.

It is commonly agreed that public funding is absolutely necessary to achieve universal access. But is also been agreed that this doesn't mean that water services can be served for free as this might put at risk the financial sustainability of the WASH services. From an ethical and equity point of view, this raises another important challenge, and is whether those than can't pay for the services, will be disconnected from the WASH services.

Another important challenge regarding WASH refers to the financing aspects. During the government session it was made clear that annually countries will have to spend around USD 20 billion /year to achieve universal access. However, middle income countries alone are already spending USD 50 billion. The question is whether the money is being well allocated or if this is a miscalculation. The answer to this is yes, there is a clear miscalculation since budget is not only required to build the services but also investments are required to ensure operation and maintenance. In the case of middle income countries part of the spent budget is allocated to regions and places that are already served. This implies that there is a need to recalculate budgets to ensure the universal access and most important the sustainability of the WASH services in the long run.

The civil society and the Academia also claim that they are plain an important role in supporting the implementation of the SDGs, but their contribution can't be for free. Donor agencies and governments should share part of the budget pie, since both groups can definitively make a contribution. Civil society can play their role in facilitating participation, local empowerment and engagement, while Academia can provide guidance on what are the

best technological solutions and approaches for implementing WASH goals. In comparison with governments and businesses, both groups have a good understanding of local realities and needs.

In the discussion surrounding sanitation it was also noted the difference views that exist between northern and southern countries. While in the north sanitation is associated with connection to a sewage system, in the south sanitation goals are less ambitious and focus on improved sanitation. This disagreement requires exploring options to set similar targets across countries.

Also in relation to sanitation, economic development is not enough to ensure implementation of WASH services. Today nearly 1 billion people still defecate in the open air. 3/4 of this population lives in middle-income countries, evidencing that the social development doesn't follow the growth rate as economic development.

Finally, hygiene was also mentioned as the barely discussed and forgotten target. While much emphasis has been given over the past years and during the conference to access and sanitation, hygiene is still a pending subject. Reasons are diverse and related to the different understandings countries have on what is hygiene and what possible approaches can be developed to improve it. Promoting the washing of hands is one out of many aspects related to hygiene that should be more deeply discussed towards the implementation of the SDGs.

Environmental protection and water quality

Thomas Chiramba provided an overview on the discussions that were held around water quality and ecosystem protection in the different sessions. In his view, the discussion regarding water quality was intense but little or nothing was said in relation to environmental protection. Now that we are moving towards the implementation of the SDGs and sustainability is a key component, it is time to start encouraging the discussion on how to address the challenge of sustainability in addition to the one on development.

Examples presented in the different sessions on water quality evidence there is a wide range of tools and scales at which this challenge can be addressed. Moreover, examples presented from throughout the world showed that improvements can be achieved in a relative short period of time. This evidence provides us with a positive message, because it implies that it is feasible to define and set a target on water quality.

In relation to technology, Chiramba also emphasized that despite the richness of tools, a common problem is that often these tools are not fit for the purpose required and need to be adapted to the contexts where they are transferred to make them effective.

Governments are not alone in the race of implementing and attaining SDGs. Many stakeholders, including civil society, academia and business sector are willing to take a very active role. However, enabling conditions are required for them to participate. Academia claim that their current evaluation system disincentive scientists to work in applied science and thus by providing with the appropriate conditions, they could participate more actively in providing evidence base solutions. Business, on the other hand, argues that the world is becoming competitive and their interests are profit driven. Therefore, governments should

create the spaces and opportunities for business to contribute to the process but also realize that firms require benefits from it. Civil society can play a major role in raising awareness on water pollution problems, engage with local communities to foster water quality plans, but this is a very labor intensive activity and requires support from governments.

Lastly, examples from all over the world have shown that enforcing stronger regulation has been able to foster innovation in order to comply with the requirements.

2. Lessons learnt on themes from the different regional sessions

The second part of the session, regional coordinators provided a brief overview on the implementation challenges regarding the different water goals in their regions and take home messages.

From Latin America and the Caribbean

Caridad Canales made a brief summary on the specific challenges LAC has to face in the years to come in order to implement the SGD as well as of those challenges with are common across other regions.

One of the main challenges LAC has to address is the persistent high inequality that prevails in the region. LAC is a middle income region but has one of the largest inequality levels of the world. This inequality translates also to the access to water services e.g. disparity between rural and urban coverage. As Canales noted, addressing this water gap is very important because it can also help people to lift out of poverty.

In relation to the existing gap between water services and coverage in urban and rural areas, Canales remarked that solutions that have worked out in urban environments do not necessarily work in rural areas. Unfortunately there is no one size fits all solution and when addressing and managing the water problems in the rural areas it is crucial to take into account the social, economic and geographical context. As mentioned in many other sessions, solutions need to be adapted and tailored to the local settings where they are going to be implemented.

In relation to water scarcity, Canales recall on the need to improve water governance in the region. LAC is a water abundant region however due to poor management and lack of services, some areas face important water stress problems, which in turn generate a growing number of social conflicts among water users. It is water the lack of water governance what generates these social conflicts rather than any physical scarcity.

Alongside with this idea of improving water governance, an interesting point raised during the LAC session refers to the need to promote greater participation. Civil society is asking the word to participate in finding solutions to the different water challenges in the region, and governments need to be bold and facilitate their participation.

LAC has made significant progress through the last 1.5 decades. This means that the region is not starting from zero in the implementation of the SDGs, since a lot of lessons as well as progresses has been achieved during the period of the MDGs.

Lastly, a pending challenge is to understand to what extent the 36 million people living in the region that still don't have access to water, are the same persons than the 31 million people without energy access or the nearly 40 million people still suffering hunger. The question and big challenge here is to understand to what extent being deprived from some basic services eg. access to water and energy is a driver of failing to achieve other goals.

From the Asian-Pacific region

One common feature of the Asian-Pacific region is its high disparity, both in economic and geographical terms. Such disparity poses important challenges for implementing the SDGs. It has already been difficult when dealing with the MDGs, now when introducing the sustainability dimension the challenge increases. Pending challenges not totally fulfilled with the MDGs, is sanitation. There is still a huge gap in sanitation coverage and the disparity in coverage also is very large when comparing the situation in the urban-rural context. Thus, efforts are required to reach goals already set for the MDGs.

Another important challenge for the region is to promote the further development of legislation to address water security, both in terms of improving access to water but also to improve water use efficiency. Large efforts have been done upon in the Asian Pacific region to develop a coherent monitoring system of water security, including a wide range of indicators. Access to the data as well as the indicator development has been challenging but it has helped to have a baseline to monitor future progress. In fact, the reporter of the Asian and Pacific session, Hongpeng Liu, remarked that face to the development of the SDGs, a very important challenge that needs to be addressed is the problem of data availability at scales that allow countries to track progress. Also, the indicators that will be finally agreed in relation to the water goal, need to be coherent, measurable and easy to monitor.

Europe and Pan-European region

Natalia Nikiforova summarized the main outcomes of the UNECE region and she remarked that some global challenges like climate change, population growth, increasing water demand are also specific challenges for the UNECE region. One important message that came out from the regional session was that is crucial to promote and foster cooperation to implement and attain the SDGs. And this cooperation is required at a wide range of levels i.e. bilateral, but also at the basin level, across sectors, regions etc. She highlighted the case of central Asia and how cooperation here has been critical to foster development and sustainability as the great majority of their water resources are transboundary. There are some experiences and tools that can guide partly this process of fostering cooperation across regions e.g. UNECE water convention on the protection and use of transboundary watercourses and international lakes.

Finally, Nikiforova also remarked that UN agencies need to play a very important role in supporting member states with the implementation of the SDGs. One important mean is by providing clear messages and simple indicators, allowing countries to realize and see that is feasible to attain the SDGs.

Annex 1. Enforceability of water and sanitation as a Human Right- Roles of different actors¹

The function of judges

The role of judges and prosecutors has been key in terms of enforcing the human right to water and sanitation. To this effect, it has been referred as a 'judicialization of the implementation of the right', especially when it refers to pollution issues that limit access to 'safe water'.

As a departure point, the need to develop national policies in order to ensure adequate acknowledgment of the human right to water and sanitation was pointed out, bearing in mind that this is an international right. To this effect, the importance of ensuring universal access to justice, without any discrimination, was highlighted, in order to enable authentic enforceability of the rights. In some countries, the human right to water is even included in the Constitution, facilitating to a great extent the development of policies within the national legal framework. Yet, in other countries, the human right to water and sanitation is not explicitly stated in the Constitution; however, this does not prevent compliance with this human right, as an international right.

The roles of different actors

Companies (as users and providers of water services), local, regional and national governments (as those holding the responsibility for respecting, protecting, and implementing the right), as well as non-government organizations (as drivers of the processes to enforce the right) have a renewed framework which reinforces their political and social actions since the approval of different resolutions on the human right to water and sanitation, both within the scope of the Human Rights Council, as well as of the United Nations General Assembly. Many water using companies are actively promoting this right (in particular with their workers and the communities where they are located in developing countries), or are involved in processes towards respecting and resolving the human right to water and sanitation. Local, regional and national governments face the challenge of defining and implementing administrative and legal mechanisms that ensure social participation, and NGOs increasingly attach a greater weight not only to their role as project implementers, but also to their role strengthening the capacities of those holding the rights so that they may demand their enforcement and supporting enforceability processes at the national and international level.

Civil society should get actively involved in strategic litigation

In the absence of national or regional laws that regulate clearly which water uses and which sanitation conditions are considered a human right, civil society was invited to get actively involved in what is known as strategic litigation, that is, to work together with lawyers, judges, prosecutors and academia to document cases where the right is violated, to encourage the development of jurisprudence that reinforces the protection of the human right to water and sanitation. It is important to note that this also involves risks. Along this line, several examples of court rulings related mainly to the protection of water resources in several basins of Latin-American countries were presented: the Mendoza ruling in Argentina, the Bogota river basin in Colombia, and rulings in Spain on legal certainty in the sector and consumers.

Promotion of a new culture of Human Rights

In order to increase awareness among citizens in relation to the framework of promotion and protection of human rights, which is still limited, all sectors were encouraged to work in the area of awareness raising, putting a particular emphasis on the human right to water and sanitation. This entails putting in place a focus based on human rights, raising awareness

¹ Conclusions of the Zaragoza Conference Side Event on the Fulfilment of the Human Right to water and sanitation. The

among citizens about the rights they have and that they may demand at the legal level, but also at the political level, to all levels of public administration.

Collaboration among actors

It is necessary to promote collaboration among actors in the legal, public, and social domains, as the only path to move forward towards effective mechanisms to enforce the human right to water and sanitation, with the intention to ensure its progressive implementation, in a non-discriminatory and universal manner.

Annex 2 Wastewater reuse in the framework of sustainable management².

Keeping the depletion of conventional resources in mind, new water supply sources are desalination (with over 100% growth in the last decade), reuse (with close to 200% growth during the same period), and savings. Right now, 0.18% of water demand in the world is covered by reused water, and the possibilities of expansion are enormous. Although examples of reusing treated wastewater are growing (Namibia; Singapore, California, etc.) except for some social resistance, urban wastewater can have very different uses.

Reclaimed water is seen as a new source of water resources, unconventional and alternative, with a reliability far superior to that of conventional sources. Moreover, this water quality exceeds the quality of many conventional sources, and it can be set depending on the needs. Regeneration and water reuse appear as a new strategy, complementary to the already used ones, to attend to the water demands. But reuse strategy is complex and has multiple dimensions (technical, public health, economic and financial, regulatory, institutional management, environmental, territorial planning, industrial, public perception and policy on integrated management of resources).

Regeneration of water has two motivations. The first is to provide new supply sources of local character, so that self-sufficiency is favoured. The second motivation is to facilitate the management of treated water, offering alternatives to discharge to the environment, and even enabling the 'zero discharge'.

In relation to the uses of reclaimed water, the range is very wide:

- Agricultural irrigation and gardening
- Urban uses: toilets, fire, street cleaning, car washing
- Industrial uses: refrigeration, processes
- Recreational uses: ornamental lakes
- Preservation and environmental improvement: wetlands
- Groundwater recharge: infiltration and injection
- Improvement of water supply reservoirs
- Increased water supply

Despite this promising future, water reuse is facing various challenges, such as the adoption of consistent terminology (regenerate / reuse / recycle) and the development of specific legislation. Other challenges that the reutilization must overcome are to assure its sustainability, the adoption of a quality brand and to incorporate it into the integrated management. Furthermore, it is necessary to add the importance of achieving public acceptance through information and participation.

Many of these challenges will be overcome by offering a quality of reclaimed water equal to or greater than that of water for public consumption (ensuring the perception and acceptance of users), adopting a total quality control similar to purification, promoting demonstration projects and risk assessments and promoting national and international collaboration.

Practical examples of reuse

There are different practical examples of reuse were presented and other possibilities to recover contaminated substances (organic material, phosphorus, nitrogen). Successful

² Conclusions of the side event on New sources: Wastewater reuse in the framework of sustainable management. The seminar was organized by the Institute IMDEA Water, the University of Alcalá and the Consolider Tragua Network (TRAGUANET). The seminar was attended by members of the Consolider Tragua Network (TRAGUANET). More information <http://www.consolider-tragua.com/>

projects to reuse water were set as practical examples in entertainment, industry, and aquifer recharge:

- Reuse as 'source' of water in Madrid, by Pedro Miguel Catalinas. Madrid City Council. He described the Plan for Water Reuse in the centre of the city (with a capacity of 37,600 m³ / day), indicating the design criteria regarding water quality required reused and the composition of the distribution network.
- Direct water reuse in Windhoek (Namibia), by Joan Sanz. Veolia. A single case of direct potable reuse in the Goreangab Water Reuse Plant, in Windhoek, Namibia.
- Injection barrier at the Llobregat delta, by Lucila Candela. Polytechnic University of Catalonia. The hydraulic barrier scheme consists of injecting municipal treated water through wells to conform a pressure ridge along the coast, therefore stopping the seawater from entering the aquifer.
- Irrigation of golf courses in Gran Canaria, by M^a del Carmen Cabrera. University of Las Palmas de Gran Canaria. This golf course is irrigated with reclaimed water for over thirty years. Researchers conducted a multidisciplinary study of the affection of this irrigation to the soil, to the non-saturated zone and to the aquifers.
- Water reuse in the paper industry, by Ángeles Blanco. Complutense University of Madrid. This research team, in collaboration with the Canal de Isabel II Gestión and a paper company, conducted a pilot study in a WWTP to treat the effluent through a system of multi-barrier membranes, obtaining suitable reclaimed water for consumption as fresh water in the paper mill.
- Water reuse in combined cycle plants, by David de la Fuente. Gas Natural. This company recycle (in the combined cycle plants) the equivalent to the production of urban waste water of a population of 141.000 people.