



Stockholm World Water Week 2016

Water and job opportunities seminar

Sunday August 28, 2016

Seminar report

In September 2015, world leaders adopted an ambitious and challenging agenda for sustainable development: 17 goals and 169 targets to be achieved by 2030 without leaving anyone behind. This agenda provides an unprecedented opportunity for the sustainable development, management and use of water resources in the broadest sense.

The interrelated character of the SDGs means that policy measures to achieve universal access to water and sanitation can and should also promote sustainable growth and decent work in other sectors as well as within the sector.

Since water is an enabler of economic activity leading to more and better employment, national employment policies and investments in infrastructure are important elements of any strategy to improve the functioning of water supply and consumption chains.

Water is also key to economic development. With 75% of jobs directly or indirectly dependent on water, the risk to economic growth from water is increasing, putting 45% of global GDP potentially at risk in 2050. Maintaining countries' growth potential requires water-related technology promotion and private sector investment. Particularly for rural economies that are water-stressed, including rain-fed agriculture, collective action for water solutions is required to bring farmers out of poverty and develop sustainable livelihoods.

Increasingly, stakeholders recognize the importance of multi-stakeholder value chain approaches to sustainably address water-related challenges: leveraging collective action approaches including buyers, financial institutions, and government agencies, is an effective way to drive water sustainability and de-risk millions of livelihoods along the value chain. However, visibility of corporate water stewardship as well as a fundamental recognition of the true value of water are important underpinnings to ensure the success of collective approaches

Furthermore, in order to meet the ambition of the SDGs, it is of pivotal importance to build an appropriate human resource base. Assessments show that the human resource base is under-sized, its composition is unbalanced and gender-biased, and job incentives and career opportunities are insufficient. Educational systems, themselves often dysfunctional, show a disconnect with the real professional and technical needs in practice. The developing world alone will need an additional 3.3 million professionals to achieve universal coverage of drinking water supply and sanitation services.

Organisations and donors therefore need to invest and innovate in order to prevent a human resource crisis in the water sector. Collaboration and sharing of best practice is necessary to develop the sector's workforce and to help organisations encourage, attract and retain staff. Standard and benchmark setting, competency frameworks and targeted action by associations of professionals all have important contributions to make to strengthening the human resource base of the water and sanitation sector.

Individual session reports

Session 1 - Water and Jobs: A Critical Nexus for Growth (led by ILO)

Less than 1% of the global workforce is employed in the water and sanitation sector, but over 75% of jobs are water dependent. The interrelated character of the SDGs therefore means that policy measures to achieve universal access to water and sanitation can and should also promote sustainable growth and decent work. Since water is an enabler of economic activity leading to more and better employment, national employment policies and investments in infrastructure are important elements of any strategy to improve the functioning of water supply and consumption chains. Investments in infrastructure means increasing access to clean water, thereby reducing time spent to collect water.

Engaging young women in the water sector can unlock a great potential to improve water and sanitation in the future. Girls are key to economic development, both in the family and in society. Prioritizing girls in this matter so that they can remain healthy, attend school and enter the workforce makes sense, not just from a human rights perspective, but economic sense.

The development potential locked away in girls, especially in Africa is enormous, and their access to jobs and education are key to development and poverty eradication. In this regard, their access to safe Water within a reasonable distance, improved Sanitation and Hygiene are essential pieces that need to be in place in order to achieve this.

Investments in improved water and wastewater management systems can generate high economic returns to society, exceeding costs for interventions, saving lives and creating jobs and welfare. We ought to consider the possibilities of addressing these investments and goals with a specific focus on girls' and women's particular needs and specifically focusing on Menstrual Hygiene Management, an often overlooked subject. In addition, it is crucial to draw on local workforce as much as possible in order to maximise local employment impact and increase capacity.

Experiential learning and voluntary associations of workers and young professionals are effective means to promote universal access to water and sanitation through decent work. For example:

- citizen science is a useful means to increase awareness around the water and sanitation thematic;
- hand pump mechanics associations can be an effective way to generate rural employment, increase sector efficiency, capacity building and infrastructure maintenance;
- youth networks are a helpful tool to draw more young people towards the water sector, and to contribute to ensuring the professional future of the sector;
- creating ownership in human resource development programs in development cooperation helps to ensure knowledge transfer.

Session 2 - The Driving Force behind Water Security: Competent Professionals (led by IWA)

In September 2015, world leaders adopted an ambitious and challenging agenda for sustainable development: 17 goals and 169 targets to be achieved by 2030 without leaving anyone behind. This agenda provides an unprecedented opportunity for the sustainable development, management and use of water resources in the broadest sense. The dedicated water Goal 6 is complemented by references to water-relevant targets in several other goals. The hydrological cycle, in all its aspects from freshwater resources, to water supply and wastewater management, will be central to sustainable development in the coming 15 years. Never before in human history have governments committed themselves to make such strides on water issues.

Reaching these goals requires resources. Discussions on means of implementation have focused on financial needs, but have largely ignored the other critical requirement: human capital, people – whether newly trained, or retrained, professionals to manage water and deliver water-related services sustainably, or a contingent of technical people with skills and know-how built up through technical and vocational training. By 2030 the human population on our Planet will have reached 8.5 billion, people for whom we will have to create an effective workforce to manage water resources and deliver water and sanitation services on a daily basis.

IWA's "An Avoidable crisis" report shows that we know shockingly little about the current status of the human resource capacity. However, whilst data are scarce, 15 country assessments by and large show that the human resource base is under-sized, its composition is unbalanced and gender-biased, and job incentives and career opportunities are insufficient. Educational systems, themselves often dysfunctional, show a disconnect with the real professional and technical needs in practice. The developing world alone will need an additional 3.3 million professionals to achieve universal coverage of drinking water supply and sanitation services.

The Seminar stressed the need to:

- Create the evidence base to underpin investments in human resources (HR) – there is a need for concerted action at all levels to collect relevant human resources data and to connect this new information to HR capacity development strategies and action plans.
- Set standards and benchmarks, develop competency frameworks and design targeted action by professional associations. All have important contributions to make towards strengthening the human resource base of the water and sanitation sector.
- Collaborate and share best practice to develop the water and sanitation workforce and to help organisations attract young talent and talent from other sectors (e.g. communications, business etc.), and retain staff through incentives and career opportunities.
- Innovate our education and learning systems so they are better geared towards the development of an effective professional workforce. Time is limited and we need strong collaboration to leapfrog, learn from one another, and jointly innovate education and learning practices.
- Develop national-level HR strategies: Countries need to formulate long-term, national strategic action plans for HR capacity for water and sanitation service delivery. This requires coordinated



action at national level by ministries, education and training institutes, non-governmental organizations and national and international professional associations.

Session 3 - Value Chain Sustainability: The Engine of Growth (led by 2030 WRG)

Water is key to economic development. With 75% of jobs directly or indirectly dependent on water, the risk to economic growth from water is increasing, putting 45% of global GDP potentially at risk in 2050. Maintaining countries' growth potential requires water-related technology promotion and private sector investment. Particularly for rural economies that are water-stressed, including rain-fed agriculture, collective action for water solutions is required to bring farmers out of poverty and develop sustainable livelihoods.

If well-managed, agriculture has an enormous economic growth potential: for example, intensive farming and other climate-smart agriculture measures, as well as a focus towards including manufacturing jobs in agriculture could multiply the employment footprint of the sector. Leveraging simple, market-based, affordable, repairable technologies (SMARTechs) are an additional way of increasing rural water access and creating local employment in the agricultural sector.

On-the-ground realities are often complex. For example, in the state of Maharashtra, one of the three cotton-producing states in India, 64% of the local population is employed in agriculture, and nearly 80% of water consumption is driven by the agricultural sector. Farmers often lack access to irrigation and are therefore very exposed to climate change and water scarcity. Initiatives building awareness on water availability and promoting water conservation as well as long-term irrigation investments are currently underway to render the cotton industry more efficient, less water-dependent and reap the potential for economic development. The Cotton-Water Platform has the ambition of increasing water security and farmer livelihoods for 500,000 of the 3 million cotton farmers in the state.

In Bangladesh, the textile industry is a real pillar of the economy, generating 85% of export earnings and 10% of GDP, and provides employment for 4.4 million people, 80% of which are women. Yet the industry is highly exposed to water risk: groundwater depletion occurs at 1-2 meters every year. Inefficient use of water and lack of awareness of the true cost of water resources is posing a huge problem for the sector and the country. Individual company action needs to be up-scaled: for example, DBL Group in Bangladesh have generated water savings of 1.2 million cubic liters of water. This will not bring any fruitful result unless there is a collective and collaborative approach by industries. A number of collaborative action initiatives are underway to address this problem, such as PaCT (Partnership for Cleaner Textile), ZHDC (Zero Discharge of Hazardous Chemicals), and 2030 Water Resources Group (2030WRG) Greater Dhaka Watershed Restoration.

Increasingly, stakeholders recognize the importance of multi-stakeholder value chain approaches to sustainably address water-related challenges: leveraging collective action approaches including buyers, financial institutions, and government agencies, is an effective way to drive water sustainability and de-risk millions of livelihoods along the value chain. However, visibility of corporate water stewardship as well as a fundamental recognition of the true value of water are important underpinnings to ensure the success of collective approaches.