Joint UNESCO and UN-Water Press Release

Water drives job creation and economic growth, says new UN report

Geneva, 22 March –

An estimated three out of four jobs that make up the global workforce are either heavily or moderately dependent on water. This means that water shortages and problems of access to water and sanitation could limit economic growth and job creation in the coming decades, according to a UN report. The 2016 edition of the United Nations World Water Development Report, *Water and Jobs*, also notes that half of the world's workers - 1.5 billion people - are employed in eight water and natural resource-dependent industries[1].

"Water and jobs are inextricably linked on various levels, whether we look at them from an economic, environmental or social perspective. This edition of the World Water Development Report breaks new ground by addressing the pervasive relationship between water and jobs to an extent not yet seen in any other report", said the Director-General of UNESCO, Irina Bokova.

Launched on World Water Day, and in the context of the 2030 Agenda for Sustainable Development, the report demonstrates the key role water will play in the transition to a green economy.

"This analysis highlights the fact that water is work – it requires workers for its safe management and at the same time it can create work and improve conditions. If the 2030 Agenda is to be a success and we are to build together a sustainable future, we must ensure that work in water is decent and that the water we all rely on is safe," said Director-General of the ILO and Chair of UN-Water, Guy Ryder.

Water as a driver of growth

From its extraction to its return to the environment, via numerous uses, water is a key factor in the creation of jobs.

"Estimating the relationship of water with economic growth and jobs is particularly challenging," the Report states, emphasising that there is a lack of data, particularly when it comes to determining the extent to which jobs are dependent on water. Nevertheless, the report notes a number of studies that find correlations between water related investments and economic growth.

Investment in small-scale projects providing access to safe water and basic sanitation in Africa could offer an estimated economic return of about US$28.4 billion a year, or nearly 5 % of gross domestic product (GDP) of the continent.

Such investments also seem to have a beneficial effect on employment. In the United States, every US$1 million invested in the country's traditional water supply and treatment infrastructure generates between 10 and 20 additional jobs. Meanwhile, the U.S. Department of Commerce's Bureau of Economic Analysis found that each job created in the local water and wastewater industry creates 3.68 indirect jobs in the national economy.

Another study in Latin America found that investing US$1 billion in expanding the water supply and sanitation network would directly result in 100 000 jobs.

[1] Agriculture, forestry, fisheries, energy, resource-intensive manufacturing, recycling, building and transport.

The transition to a greener economy, where water plays a central role, will also lead to more jobs. The International Renewable Energy Agency (IRENA) estimates that 7.7 million people were already employed in renewable energy in 2014.

Water under pressure

Exacerbated by the effects of climate change, there is increasing pressure on freshwater resources. The rate of groundwater withdrawals has increased by 1% per year since the 1980s. Between 2011 and 2050, global population is expected to increase by 33%, from 7 to 9 billion, while food demand will rise by 70% in the same period.

Furthermore, the 5th assessment report of the Intergovernmental Panel on Climate Change (IPCC) forecasts that for each degree of global warming, approximately 7% of the global population will face an almost 20 % decrease in renewable water resources.

This projected shortage will call for non-conventional sources of water, such as rainwater harvesting, recycled wastewater and urban runoff. Use of these alternative water sources will create new jobs in research and technology development and in the implementation of their results. Developments in forecasting techniques, in risk assessment and the use of satellite imaging are some other potential areas where better employment opportunities could lie.

Water and Sanitation, "Help Wanted"

Currently, according to the report, almost 1 % of the total workforce in both developed and developing countries currently work in the water sectors – which includes water management, construction and infrastructure maintenance, as well as water supply and sanitation.

In recent decades, the number of people employed in water supply and wastewater treatment facilities has consistently decreased. The reasons: a lack of interest from new graduates in jobs in the water sector, lack of resources to hire and retain skilled staff, especially in the public sector, and an ageing workforce. In the United States alone, between 30 % and 50 % of the water utilities workforce will reach retirement age by 2020.

Added to these challenges is the difficulty in attracting skilled workers to live and work in rural areas and the stigma associated with the sanitation sector as a whole. In some regions, such as West Africa, it is particularly difficult to attract workers to what is considered a degrading occupation.

Despite these challenges, the market for jobs in water supply and sanitation is promising and there is significant potential for growth. For example, in Bangladesh, Benin and Cambodia alone, nearly 20 million people living in rural areas should gain access to running water by 2025, which is six times the current number, and represents a potential economic impact worth as much US$90 million. Further, a study in Bangladesh, Indonesia, Peru and Tanzania reveals a potential for sanitation services worth US$700 million annually.

The need for investment into aging and inefficient infrastructure is also a potential driver for employment in the sector. An estimated 30% of global water withdrawals are lost through leakage. In London the rate of loss is 25 % and in Norway 32%. In some countries, irrigation practices are either non-existent or outdated and result in poor agricultural productivity. In Africa for example, agriculture is mainly rain-fed and less than 10% of its cultivated land is currently under irrigation, holding back job creation.

The 2030 Agenda for Sustainable Development

Achieving the 2030 Agenda on Sustainable Development will require a keen understanding of key role of water in the world of work. Decent jobs are directly linked to water management, in areas such as providing water supply, infrastructure and waste management; and water-dependent sectors, such as agriculture, fishing, energy, industry and health. Moreover, access to improved drinking water and sanitation facilitates job creation and a healthy, educated and productive workforce which is the foundation for growth.

Creating conditions that improve water productivity and favour the transition to a green economy, training more skilled workers in order to respond to increasing demands for labour in the water sectors are some of the points that the Report brings to the attention of the Governments to appropriately respond to the requirements of the United Nations Sustainable Development Goals – notably number 6, specifically dedicated to water and sanitation.

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NOTES TO EDITORS

About UN-Water and WWAP

The United Nations World Water Development Report, or WWDR, is a UN-Water Report produced by the UN World Water Assessment Programme of UNESCO. The Report is the result of the collaboration between the 31 entities of the United Nations System and the 38 international partners that comprise UN-Water. The Report presents an exhaustive review of the state of global water resources and, up until 2012, was published every three years. Since 2014, the WWDR is published annually, with each edition focused on a given theme. It is launched every year on World Water Day, 22 March, which shares the same theme as the report.