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**WWDR4 – Regional Press Release – ARAB AND WESTERN ASIA**

**Arab region faces ever-increasing water challenges**

Marseille, France, March 12 2012

***As the Arab region is facing multiple water challenges due to population growth, food security demands, overconsumption of water resources, climate change, extreme weather events, and damage to water infrastructure caused by regional conflicts, the United Nations emphasizes a greater-than-ever need for cooperation over shared water resources.***

According to the latest edition of the United Nations World Water Development Report (WWDR4), released today at the 6<sup>th</sup> World Water Forum in Marseille, France, Arab countries are responding to these challenges by improving water resources management, increasing access to water supply and sanitation services, strengthening resilience and preparedness, and expanding the use of non-conventional water resources. However, these measures are insufficient to overcome water scarcity constraints facing most countries in the region.

“While the Arab region has long suffered from water scarcity, several drivers and challenges have increased strains on freshwater resources over recent decades, including population growth, migration, changing consumption patterns, regional conflicts, climate change and governance. These pressures have increased risks and uncertainty associated with water quantity and quality, as well as the realization of policies seeking to promote rural development and food security objectives.” says the Report.

The Report goes on to identify four major challenges affecting water resources management in the Arab region: water scarcity, dependency on shared water resources, climate change and food security. Financial and technical constraints, as well as poor access to and availability of reliable data and information on water quality and quantity are cross-cutting factors that increase risks and uncertainty associated with addressing these challenges.

**Water Scarcity**

Nearly all Arab countries can be characterized as water-scarce, while those more endowed with rich water resources have seen their total annual per capita share of renewable water resources drop by half over the past four decades. This declining trend presents the most significant challenge to the water sector in the Arab region.

“As surface waters can no longer satisfy water needs in some parts of the region, the extraction of groundwater has increased and is threatening the sustainability of many national and shared aquifer systems and increasing the risk of conflict. However, as some groundwater resources are non-renewable, their very use challenges frameworks that seek their sustainable management.”

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According to the Report, “an integrated management framework is necessary where conventional and non-conventional approaches are applied to address water scarcity constraints in the region.”

## **Dependency on shared water resources**

“A big challenge to water resources management in the Arab region is that the major international river systems in the region are shared by two or more countries. The challenge is magnified where institutional regimes are not in place to reduce the risk and uncertainty associated with the management and allocation of water resources under water-scarce conditions.”

“Many Arab countries have thus turned to groundwater to complement dwindling domestic freshwater supplies and increase water for irrigation and development. However, with shallow aquifers under threat of total exploitation, countries are exploring possibilities to develop deeper and farther aquifers, which, in many cases, are part of more extensive regional cross-boundary aquifer systems. Additionally, water conflicts can also exist at the sub-national level between administrative districts, communities and tribes. Tensions emerge in water-scarce environments and stakeholders with competing interests, which are then manifested through local level conflicts.”

In recognition of the importance of reducing conflict, countries in the region have tried to conclude bi-lateral and multi-lateral agreements and establish shared water resources institutions. However, despite efforts to establish formal agreements, those that exist require increased capacity and improved institutional and legal frameworks to support the integrated management of shared water resources, particularly when political will and commitments are absent or insufficient.

## **Climate change and climate variability**

The Arab region is particularly sensitive to climate change and variability as it already suffers from water scarcity; small changes in climate patterns can result in dramatic impacts on the ground. Climate scenarios predict an increase in temperature in the region, which several impact assessments expected to contribute to increased aridity, lower soil humidity, higher evaporation–transpiration rates and shifts in seasonal rainfall patterns.

“The increasing frequency of drought in the Arab region is a very important challenge facing the Arab region. Algeria, Morocco, Somalia, the Syrian Arab Republic and Tunisia have experienced significant droughts over the last 20 years, and the frequency and intensity of these events seem to be increasing. In Morocco, the drought cycle changed from an average of one year of drought in every five-year period before 1990, to one year of drought for each two-year period in the following decade. The Horn of Africa is experiencing one of the worst droughts in decades.”

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## Food security

Agricultural cultivation consumes the largest share of water in the Arab region and is a primary source of water stress. While per capita arable land and permanent croplands account for a small share of land in most countries, agriculture accounts for over 70% of total water demand; in Somalia and Yemen, the share exceeds 90% of total water demand.

“Despite high usage rates, Arab countries are not able to produce sufficient quantities of food to meet basic needs. Accordingly, (these) countries import 40–50% of their total cereal consumption, and this rate reaches up to 70% in Iraq and Yemen, despite the significant size of their agricultural sectors. This situation is likely to worsen with climate change.”

Limited agricultural productivity, continued land degradation and water scarcity have made food self-sufficiency goals unachievable at the national or regional level. As a result, Arab food self-sufficiency policies have shifted towards a broader concept of food security. Governments with the financial resources have been able to pursue alternative measures within the global marketplace to achieve this goal, while others are re-examining their development and trade policies, and even turning to emergency relief to overcome food crises, such as those experienced in the Horn of Africa and Sahel due to drought.

“Long-term leasing of agricultural land in other countries has emerged as another tool for overcoming shortcomings and shortfalls in domestic agricultural production due to water, land, energy or technological constraints. These investments are designed to ensure access to staple commodities and reduce exposure to global food price fluctuations and export bans, which often occur during food crises.” However, the Report cautions that “while these contracts offer the opportunity for mutual benefits, the operationalization of these investments has been controversial where indigenous communities and pastoralists have traditionally used the lands that are being opened to joint ventures or leased to investors by central governments or absentee landowners.”

Reminding the reader that “water flows at the core of Arab culture and consciousness” the Report sends a positive message, stating that “the future will show how assessing these risks and engaging stakeholders in constructive and participatory processes will stimulate action at the national and regional levels to overcome these challenges despite continuing conditions of uncertainty.”

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**Information Brief on the 4<sup>th</sup> edition of the United Nations World Water Development Report (WWDR4)**

The United Nations World Water Assessment Programme (WWAP) is hosted by UNESCO and brings together the work of 28 UN-Water members and partners in the triennial *World Water Development Report* (WWDR).

This flagship Report is a comprehensive review that gives an overall picture of the state of the world's freshwater resources. It analyses pressures from decisions that drive demand for water and affect its availability. It offers tools and response options to help leaders in government, the private sector and civil society address current and future challenges. It suggests ways in which institutions can be reformed and their behaviour modified, and explores possible sources of financing for the urgently needed investment in water.

The WWDR4 is a milestone within the WWDR series. This 4<sup>th</sup> edition directly reports from the regions, highlighting hotspots, and has been mainstreamed for gender equality, which is addressed as a critical issue. It introduces a thematic approach – 'Managing Water under Uncertainty and Risk' – in the context of a world which is changing faster than ever in often unforeseeable ways, with increasing uncertainties and risks. It highlights that historical experience will no longer be sufficient to approximate the relationship between the quantities of available water and shifting future demands.

The WWDR4 also seeks to show that water has a central role in all aspects of economic development and social welfare, and that concerted action via a collective approach of the water-using sectors is needed to ensure water's many benefits are maximized and shared equitably and that water-related development goals are achieved.

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