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THE STATE OF ARAB CITIES 2012

CHALLENGES OF URBAN TRANSITION

WATER SCARCITY IN ARAB CITIES THREATENS FOOD, HEALTH AND ECONOMIC DEVELOPMENT

Kuwait, 6 May 2012: The water and food insecurity of the rapidly-growing cities is one of the Arab region's key defining problems, warns UN-Habitat's new report, *The State of Arab Cities 2012: Challenges of Urban Transition*.

With the exception of Iraq and Southern Sudan, Arab countries have some of the scarcest water resources per capita in the world and currently available groundwater reserves are being depleted at alarming rates. The impacts of climate change are projected to further increase water shortages through more frequency severe droughts that are likely to reduce agricultural production in the region. There is increasing competition for water for agriculture, manufacturing and thirsty cities.

The Mashreq countries have an estimated 80 million cubic meters of renewable water supply but they use 88 million cubic meters annually, steadily depleting their aquifers. Egypt, Jordan and Syria are consuming water at particularly unsustainable levels. Unsustainable water extraction patterns are exacerbated by poor quality water supply systems that suffer from major losses, varying from 35 to 50 per cent.

Algeria, Morocco and Tunisia extract between 47 and 65 per cent more water than is replenished, while Libya withdraws eight times more than is renewed. Desalination and extraction of fossil water from the Sahara could be further exploited but is likely to be prohibitively expensive in countries where the water tariffs are already among the highest in the Arab world. With the Maghreb population growing at 1 to 1.8 per cent annually, the trade off between water for agriculture and to guarantee food security and water for manufacturing and cities is a difficult one. The Maghreb is already a net importer of food and due to climate change it is estimated that food production may soon decline with 10 per cent.

"The Gulf is now one of the world's most water-scarce regions and five Gulf countries rank among the world's ten countries with the lowest per capita renewable water resources", says Dr Joan Clos, UN Under-Secretary-General and Executive Director of UN-Habitat. "But while per capita water consumption has risen since 1960 from between 120 and 336 per cent, depending on the country, and population has grown seven fold, water tariffs in the Gulf Cooperation Council countries are among the lowest in the world, effectively discouraging water conservation. This trend of increasing demand and decreasing supply is unsustainable and will start to affect population health and economic development."

Yemen is the world's most water-stressed country with an annual water share of less than 120 cubic meters per person. Yemini ground water tables are lowering at alarming rates, especially in Sana'a where water supply is now approaching a critical point as the reserves that supply the city will be depleted in ten to 15 years. The water scarcity threatens food security, human health and economic development.

In Jordan too water scarcity has reached critical levels and, with current population growth levels, annual per capita has fallen to less than 120 cubic meters in 2012, well below the international threshold of 500 cubic meters. The capital Amman with 2 million inhabitants has rationed water since 1987 and households only receive water one or two days a week for various durations. Groundwater is severely over extracted while 40 per cent of the water remains unaccounted for. Water delivered by tanker is eight to ten times the cost of piped water, financially stressing many urban households.

In addition, many of the Arab region's major cities, economic centres and transportation hubs are in low-lying coastal areas. Any rise in sea level could be disastrous for many of these densely populated cities as seawater intrusion may affect groundwater and aquifers.

The Arab region is generating much new know-how and advanced technology for water desalination, but the efforts to step up water conservation, reuse of waste waters and improvements in the efficiency in agricultural uses of water is essential for better water management. Unsustainable water consumption patterns, especially in cities, should be rationalized with more realistic water tariffs. Whereas raising water prices may perhaps be politically difficult to accomplish, few other measures will prove as effective in water conservation as charging the true costs of water delivered to the urban consumers.