

## **Water for Cities: Responding to the Urban Challenge in the ESCWA Region**

*In 1993, the United Nations General Assembly designated 22 March as the first World Water Day. This Day seeks to focus attention on the importance of freshwater and advocate for the sustainable management of freshwater resources as well as for finding new ones. Global celebrations for the World Water Day are being held this year in Cape Town, South Africa, and are organized by the United Nations Human Settlements Programme (UN-HABITAT) on behalf of UN-Water. In Beirut, ESCWA is organizing a regional seminar this evening under the auspices of Lebanese Minister of Energy and Water Gebran Bassil, and in collaboration with the German Federal Institute for Geosciences and Natural Resources (BGR) and the Association of the Friends of Ibrahim Abd El Al. ESCWA chose to highlight some aspects of this issue that are of special interest to the region:*

The ESCWA region\* is undergoing the largest wave of urban growth in its history marked by the rapid expansion of cities and the creation of new urban centers. Today, over half of the population in the ESCWA region lives in cities and this figure is projected to reach two-thirds by 2040. This unprecedented urbanization process, combined with rapid population growth, has increased the demand for water supply and sanitation services significantly. This has increased pressure on already scarce water resources, affected the quality of water supplies, and impacted the delivery of water services in urban areas throughout the region.

The rate of urbanization in formal and informal settlements has outpaced the rate of investment and the ability to extend water supply and sanitation networks. This has limited access to water services in parts of the region. Regional reporting on the Millennium Development Goal targets detailing access to water supply and sanitation in 2008 reveals that for the estimated 345 million people who reside in the 22 countries of the Arab region, approximately 57 million people (17 per cent) do not have access to improved drinking water sources, and 76 million people (22 per cent) do not have access to improved sanitation facilities. However, urban residents fare much better than their rural counterparts, with Bahrain, Egypt, Kuwait, Lebanon, Qatar, and the UAE reporting full coverage of their urban population with water supply networks. 88 per cent of the urban population in the Arab region has access to improved sanitation facilities compared to only 64 per cent of the rural population.

However, access to water networks does not necessarily mean access to water services. Existing water networks face increasing strains, which affect the performance of water utilities. Water is being lost in underground networks due to poorly maintained pipes and leaky joints, which become cracked over time or over-stressed by fluctuations in water pressure. These fluctuations are exacerbated by the rationing and rotation of water services to different parts of the network. This can be due to water scarcity or inadequate water storage capacity, which prevents some utilities from supplying water on a continuous basis throughout the city. High energy costs associated with pumping, treating and maintaining the water network on a continuous basis is another reason why services can be interrupted. This not only results in the loss of water from the network, but also in the reduction of revenue for water utilities, which further limits their ability to invest in water services. Cracked pipes also allow for the infiltration of sewage and contaminates into the water supply system, which can cause adverse health effects. Intermittent water supply is experienced in several cities of the ESCWA region including Jordan, Lebanon, Palestine and Yemen.

Rapidly expanding urban areas without adequate sanitation infrastructure can also threaten human health and scarce water supplies. In many Arab cities, municipal and industrial sewage is discharged without proper treatment. This degrades the quality of surface and groundwater resources as well as coastal ecosystems. These challenges are exacerbated by poor urban planning, reduced rainwater infiltration through the soil, and inadequate storm water drainage systems which increase the vulnerability of traditionally dry Arab cities to floods.

The theme of this year's World Water Day "Water for Cities: Responding to the Urban Challenge" draws attention to the water-related challenges facing cities today, and calls for the engagement of all stakeholders in finding and implementing solutions.

ESCWA is working to address these challenges in close collaboration with regional partners. In particular, ESCWA has been mandated by resolution of the Arab Ministerial Water Council to lead the establishment of a regional mechanism to develop and monitor a set of regional specific indicators that will build upon the Millennium Development Goal targets on water supply and sanitation. This initiative was recognized by Heads of State at the Arab Economic, Social and Development Summit in January 2011.

Sustainable Development and Productivity Division at the  
United Nations Economic and Social Commission for Western Asia  
(ESCWA)

*\* The United Nations Economic and Social Commission for Western Asia (ESCWA) serves 14 Member Countries, namely Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, Oman, Palestine, Qatar, Saudi Arabia, Sudan, Syrian Arab Republic, United Arab Emirates and Yemen. ESCWA is also a member of UN-Water and will participate in the global event via videoconference.*