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WWDR4 – Regional Press Release – LATIN AMERICA AND THE CARIBBEAN

Urbanization, globalisation and climate change are creating new challenges to water management in the region of Latin America and the Caribbean.

Marseille, France, March 12 2012

The water-related challenges facing Latin America and the Caribbean are not only due to variations in climate and hydrology or to the scale at which water management must operate, warns the United Nations, but equally or more so are due to differences in the nature and effectiveness of institutional systems, dissimilarities in the distribution and demographic structure of the population, and macroeconomic factors related to international trade.

According to the latest edition of the United Nations World Water Development Report (WWDR4), released today at the 6th World Water Forum in Marseille, rapidly changing external pressures in Latin America and the Caribbean, including economic events, such as international financial crises, political instability and shifting demand for primary resources and commodities add to the more subtle changes related to gradual economic and social change which together create the overall conditions for which water managers must plan. Recently, new uncertainties related to global climate change have been added to this list.

In spite of a slowdown in the rate of population growth – currently 1.3% for the region as a whole, which is expected to fall to less than 0.5% by 2050 – the urban population has tripled over the past 40 years and is expected to grow to 609 million by 2030 (up from about 460 million today). There are many cities with more than 1 million inhabitants, and a recent trend has been the growth of population in medium-sized and small cities.

According to the Report, “Latin America is already the world’s most urbanized developing region, with more than 80% of the population living in towns and cities. There has been a massive shift of population from rural to urban areas and increasingly large inter-city migratory flows, resulting in the establishment of an urban system characterized by a high percentage of large cities (with more than one million inhabitants) and by a high concentration of the population in some countries living in the largest (or two largest) cities. However, urbanization is not the only significant characteristic of changes in the spatial distribution of the population. There has also been the progressive – and sometimes

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aggressive – settlement of what has historically been sparsely populated land in the heart of the region, particularly in the Amazon and Orinoco river basins. These changes have played their part in the new priorities of the governments of the region. The emphasis on urban water problems has arisen from the heavy weight of the urban populations in the political process and, in general, their more active role in politics.”

Economic and social changes have obvious consequences for water use and the demands placed on the resource. “With the exceptions of Mexico and some of the small countries of Central America, the countries of the region base much of their economy on the export of natural resources. The global demand for these products has increased notably in recent years. Moreover, much of the production of these goods is financed by external capital and many of the facilities are foreign-owned. The result is that the major engine of economic growth in the region with heavy demands on the water resources is subject to many factors outside the direct control of the governments of the countries of the region.”

For water management, this dependence on many natural resource-based activities is complicated by their location. The expansion of copper and gold mining in Chile and Peru has mainly occurred in arid areas and has led to competition for scarce water with both export agriculture and the needs of the indigenous population. “International demand has led to a 56% increase in mineral extraction in recent years, and despite the current slowdown in the global economy, it can be expected to continue to expand.”

Tourism demand has increased water stress on many Caribbean Islands. Coffee production uses large quantities of water and its processing can seriously affect water quality. Similar issues arise with many other natural resources.

“The uncertainty in the level and nature of demands of the global market and their changing nature have always complicated water management in Latin America and the Caribbean as local economies expand, contract and adjust according to the fluctuations of the global economy and so change the environment in which management decisions must be taken and policies applied” explains the report.

“As economic growth continues in the region and global demands for its mining, agricultural and energy resources increase, consequently so will the demand for water. For example, water use for energy can be expected to rise throughout the region in line with economic growth. Hydropower produces 53% of the region’s electricity, and installed capacity grew by 7% between 2005 and 2008. Hydropower is expected to

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provide a significant proportion of the new energy demand. Balancing current and future water demands between competing uses (including ecosystems and their services) will become an issue.”

Climate Change

Many parts of the Latin America and Caribbean region have always been subject to a variety of extreme weather events such as floods and droughts, and severe climate variability related to the El Niño-Southern Oscillation (ENSO) phenomenon. The frequency, duration and intensity of extreme weather events are expected to rise with climate change, increasing the need for risk management.

The region’s poorest countries in Central America, the Caribbean and the Andean region, with relatively weak water management capacities, will be at the highest risk from the effects of climate change and extreme events. The most serious example is Haiti, which is particularly vulnerable to extreme events because of deforestation, difficult topography, poverty and a lack of public infrastructure.

“The region’s glaciers are already receding because of climate change. Glacier retreat affects the water supply of an estimated 30 million people in the region. Some 60% of Quito’s (Ecuador) and 30% of La Paz’s (Bolivia) water comes from glaciers. Glaciers in Peru have lost 7 billion m³ of water – a quantity that could supply Lima for 10 years. Droughts already occur regularly, and between 2000 and 2005 they caused serious economic losses and affected 1.23 million people.”

Inadequate hydrological and meteorological observation networks hamper response to extreme events. On the positive side, lessons learned from adapting to the consequences of, for example, ENSO events in the region (e.g. in Peru) and the cycle of droughts and wet years in the drought polygon of North-eastern Brazil, have led to technological innovations that are applicable to water management in the face of climate change, and these have also led to increased human capacity.

Extreme events would seem to bring only costs, as lives are lost and water and other infrastructure is damaged or destroyed. However, if water infrastructure resists serious damage or can be restored quickly, then the key role of water and water-related services is likely to win in public perception and will raise its influence within government.

Although adapted infrastructure is sorely needed, it remains only part of the solution. “There has been a widespread inability to establish institutions that are able to deal with water management issues under conditions of increasing scarcity and conflict. The reasons for this lack of

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improvement include weak management institutions, insufficient operational capacity, informality, absence of self-financing and consequent dependence on fluctuating political support, and lack of reliable information in most areas of water management, including on the resource itself and its uses, users and future needs” says the report.

The good news, according to the Report, is that some progress towards meeting these new challenges is being made. “Isolated advances can be observed in water management institutions, and various countries have undertaken ambitious water management reforms, perhaps most notably Brazil and Mexico, but also, for example, Argentina, Chile, Colombia and Peru. Impressive advances have also been made in some countries in specific water management activities; for example, the high level of development of urban water supply and sewerage services in Chile.”

Information Brief on the 4th 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 4th 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.

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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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