



## **AFED Conference Opens under Hariri's Patronage Arabs to Face Severe Water Shortages by 2015**

**Beirut, 4 November 2010**

The Arab world is facing the prospect of severe water and food shortages as early as 2015, as the annual per capita share will be less than 500 cubic meters. This is below one-tenth of the world's average, currently estimated at over 6,000 cubic meters, according to a report released today by the Arab Forum for Environment and Development (AFED) at the opening of its annual conference in Habtoor Grand Hotel, Beirut.

The report entitled *Water: Sustainable Management of a Scarce Resource* warned that without fundamental changes in policies and practices, the situation will get worse, with drastic social, political and economic ramifications. Water supply sources in the Arab world, two-thirds of which originate outside the region, are being stretched to their limits. Thirteen Arab countries are among the world's nineteen most water-scarce nations, and per capita water availability in eight countries is already below 200 cubic meters annually, less than half the amount designated as severe water scarcity. By 2015, the only countries in the region which will still pass the water scarcity test will be Iraq and Sudan. The Arab region is one of the driest in the world. More than 70% of the land is arid and rainfall is sparse and poorly distributed. Climate change will exacerbate the situation.

AFED's conference is held under the patronage of Lebanese Prime Minister Saad Hariri, represented by Minister of Information Tareq Metri. More than 500 participants from 43 countries were present, including delegates of 50 government agencies and international organizations, 55 companies, 40 NGOs, 42 universities and research centers, and 63 regional and international media.

Also present were Minister of Energy and Water Resources Gebran Bassil, a number of parliamentarians and ministers, Jordan's former Prime Minister Adnan Badran, Sudan's Minister of Irrigation and Water Resources Kamal Ali Mohamed, Sudan's Minister of Environment Joseph Melwal Ding, Member of Water Committee in the Saudi Shoura Council Ali Al-Tkhais, Tunisia's Green Party parliamentary delegation headed by MP Mnajji Al-Khammasi, a delegation from Water and Environment ministries in Iraq, Head of Environment and Sustainable Development Department in the Arab League Jamal Eddine Jab-Allah, Ambassadors of Arab and foreign countries including Syria, Sudan, Algeria, Morocco, Tunisia, Yemen, Spain, Denmark, Netherlands and Mexico.

Deputy Manager of Mexico's National Water Commission Grizelda Medina Laguna also participated, along with a Greek government delegation and a large number of diplomats, businessmen, CEOs and heads of AFED member organizations.

## **Hariri: Institutional and Legislative Reforms**

Speaking on behalf of PM Saad Hariri, Minister Tareq Metri praised AFED report saying: “We look forward to taking its results into consideration and benefiting from its recommendations. Arab countries should develop water management policies and implement programs to ensure the resources can meet life and development needs. Water should be efficiently used in order to reach the highest production possible with the least amount of water. This requires substantial institutional and legislative reforms, in addition to investments.”

Metri also noted: “the Lebanese government has taken key steps to reform the water sector seeking management decentralization, through integrating 21 water authorities in 4 regional public institutions. It has also developed and is currently implementing a 10-year plan to increase water resources, including building dams and mountain lakes. Moreover, the Ministry of Energy and Water Resources seeks to develop a comprehensive long-term strategy in order to increase the effectiveness of water sector in Lebanon, including improving efficiency and preventing over-exploitation.”

## **Saab: Water Crisis is Knocking on Arab Doors**

After welcoming the participants, AFED Secretary General Najib Saab said in his opening statement: “Because the water crisis is knocking on Arab doors, we present to you AFED’s report *Water: Sustainable Management of a Scarce Resource*, hoping that it would contribute, along with the conference discussions and recommendations, in averting the direction of the crisis. Water challenges are one and we should benefit from all experiences to counter them.”

Saab’s statement followed the screening of *The Last Drop*, AFED’s documentary which reflects the nature of the coming water scarcity crisis, amid fast growing population and lack of strategies for sustainable water management.

## **Al-Awadi: Reorienting the Government Role**

President of AFED’s Executive Committee Dr. Abdel Rahman Al-Awadi said: “The main message of AFED’s report is that the Arab world is already living a water crisis that will only get worse with inaction. The problems plaguing water management in the region are daunting, and a sole focus on developing new supplies is no longer viable.”

He stressed: “There is an urgent need for a strategic shift from a culture of developing water resources to one of improving water management, rationalizing water consumption, encouraging reuse and protecting water supplies from overuse and pollution,” adding: “A core recommendation of this AFED report is that before investing large capital into increasing supplies, less expensive investments to reduce water losses and enhance efficiency should be implemented. This means a reorientation in government’s role, from being focused exclusively on being a provider to becoming an effective regulator and planner.”

Al-Awadi concluded: “The state of water resources in the Arab world is precarious and worsening. It is perhaps the most serious challenge facing the region in the coming decades. We hope that this conference contributes to pushing towards adopting sound water policies for a sustainable management of this scarce resource.”

### **Habr: Solutions Require Sound Practices Not Just Funds**

United Nations Environment Programme Regional Director Dr. Habib Habr warned: “The major problem facing the region is the great imbalance between water supply and demand on one side, and lack of policies and strategies required to sustainably manage water resources versus the growing population, and change improper agricultural practices, on the other side.”

Habr said that UNEP is working on regional and national levels in cooperation with UN agencies, the Arab League, research centers and development programs, in order to design and implement projects and programs which fit the region’s economic and social situations. He added: “Solutions do not necessarily require funds, but rather sound practices, like using rainwater. If adopted, such practices would decrease over-exploitation of traditional water resource.”

Habr concluded by expressing confidence that the conference discussions will result in developing a comprehensive plan for sustainable water management in the Arab world.

The opening session was concluded by the Youth Declaration on Water, presented by students from AMSI eco-schools. AFED awarded six Arab schools from Algeria, Morocco, Lebanon, Saudi Arabia, Egypt and Jordan, that won top prizes in the competition on water efficiency, in which more than 200 schools participated.

AFED will support the winner schools in implementing their projects to reduce water consumption.

### **Management, Alternatives and Water Under Deserts**

The first session, chaired by Dr. Mohamed El-Ashry, co-editor of AFED’s Water Report, highlighted facts and findings about water scarcity in the Middle East.

The second session, chaired by Lebanese Minister of Energy and Water Resources Gebran Bassil, suggested sustainable management strategies and alternative methods like desalination and “grey water”.

Bassil said: “Being in an arid area is a potential for conflicts, but the water resource could also be a cause for stability and understanding. All states should cooperate, and those rich in water should assist their neighbors.” He highlighted the water situation in the country, saying that theoretically Lebanon should not face a crisis, but improper management causes scarcity and is reflected in people buying water and in land getting thirsty, especially that there is no desalination nor wastewater treatment. He also noted that a comprehensive water strategy is being prepared and a wastewater plan will be ready by the end of 2010.

A roundtable followed on water in the programs of international and regional organizations, with representatives of ESCWA, WHO and OFID among others.

Another session discussed the role of water research and education in achieving sustainability. It was chaired by Dr. Ali Al-Tkhais, member of Water Committee in Saudi Shoura Council.

A special study *Water From the Desert* was presented by Dr. Farouk El-Baz, Director of the Center for Remote Sensing in Boston University. El-Baz noted that groundwater is one of the most precious resources in the Arab countries, and vast tracts in the region have not been explored for their groundwater potential. This includes the extensive, sand covered plains of the Great Sahara and the Empty Quarter.

The final session discussed water research and education. It was chaired by Jordan's former PM and current President of Petra University Dr. Adnan Badran.

### **Cancun, Efficiency Handbook, Recommendations**

Chaired by Sudanese Minister of Irrigation and Water Resources Kamal Ali Mohamed, tomorrow's first session will tackle governance and reform of water legislations.

AFED will release its Water Efficiency Handbook in a press conference. The Handbook is the first comprehensive guide specifically designed for the Arab world on efficient water use in industries, agriculture and households.

A session will follow on public-private sector partnerships, chaired by Secretary General of the Lebanese Higher Council for Privatization Ziad Hayek. Later, a special high level session will be held to discuss AFED's paper on active Arab participation in the international climate summit in Cancun, Mexico. The guest panelist will be Deputy Manager of Mexico's National Water Commission Grizelda Medina Laguna.

The conference conclusions and recommendations will be released at a lunch in the Grand Serail, hosted by PM Saad Hariri. An open discussion with ministers and report authors will follow in Habtoor Grand.

### **Key Findings of AFED's Report:**

AFED's 2010 report *Water: Sustainable Management of a Scarce Resource* includes 12 chapters in 256 pages. A special study by Dr. Farouk El-Baz, Director of the Center for Remote Sensing in Boston University, tackles exploring groundwater resources in Arab Deserts by satellite images. Here are the key findings of the report:

- Arabs will face, as early as 2015, the condition of severe water scarcity, at which the annual per capita share will be less than 500 cubic meters.

- Thirteen Arab countries are among the world's nineteen most water-scarce nations. By 2015, the only countries in the region which will still pass the water scarcity test, at above 1,000 cubic meters per capita, will be Iraq and Sudan.
- The Arab region is one of the driest in the world. More than 70% of the land is dry and rainfall is sparse and poorly distributed; climate change will exacerbate the situation.
- By the end of the 21st century, Arab countries are predicted to experience an alarming 25% decrease in precipitation and a 25% increase in evaporation rates. As a result, rain-fed agriculture will be threatened, with average yields estimated to decline by 20%.
- Water use in the Arab region is dominated by agriculture, which utilizes about 85% of the water resources, against a world average of 70%.
- Since surface water supplies do not meet growing demand due to population growth and economic development, groundwater resources have been over-exploited beyond safe yield levels. This has resulted in significant declines in water tables and pollution of aquifers.
- With 5% of the world population, Arab countries are endowed with just 1% of the world's renewable fresh water resources, while they have over 50% of the world's desalination capacity. At the projected rate of annual increases, current desalination capacity will be doubled by 2016, using expensive, fully imported and polluting technologies.
- Responsibility for managing water and water services is dispersed across multiple institutions with poor coordination. Moreover, decision making is top-down with no, or ineffective, stakeholder participation.
- The average price charged for water in the region is about 35% of the production cost, and in the case of desalinated water it is only 10%.
- There is an urgent need for a strategic shift from a culture of water development to one of improving water management, rationalizing water consumption, encouraging reuse and protecting water supplies from overuse and pollution.
- The Arab world is already experiencing a water crisis that will only get worse with inaction. However, even though the crisis is serious and multi-dimensional, it can be addressed through policy and institutional reforms, education, research, and public awareness campaigns. Averting the crisis is only possible if Arab heads of state and governments make a strategic political decision to urgently adopt the recommendations for reform.