

AFED Conference on Arab Footprint and Survival Options

Arabs Consume Twice Their Renewable Resources

Beirut, 29 November 2012

Three Arab countries have the biggest environmental footprints in the world, available natural resource have fallen to less than half during the last 50 years and the consumption levels are today more than twice what local ecosystems can produce. This has put the Arab region on the brink of ecological bankruptcy. These are key findings of a report released today by the Arab Forum for Environment and Development (AFED) at the opening of its annual conference in Phoenicia Intercontinental Hotel in Beirut.

The report entitled *Survival Options: Ecological Footprint of Arab Countries* includes the first Atlas of Arab footprint and biocapacity, prepared for AFED by the Global Footprint Network. It shows that Qatar has the highest ecological footprint in the world, followed by Kuwait and UAE. Facts, figures and data maps are allocated to the Arab region and sub-regions and to each Arab country.

AFED's conference was opened under the patronage of the President of Lebanon General Michel Sleiman. More than 500 delegates attended from 48 countries, including ministers, parliamentarians, diplomats, government agencies, private sector, civil society, universities and research centers, international and regional organizations and Funds, in addition to 86 media representatives.

President Sleiman said in his opening speech, presented by minister of environment Nazem Khouri: "Facts and figures in AFED's report are alarming. The report should be nationally disseminated and used by all arab countries. Its results and recommendations should be discussed by all sectors to integrate them in strategies". He emphasized supporting environment and development research and incorporating green accounting in the national budget.

AFED's 2012 report was presented by Najib Saab, AFED's secretary general, and Mathis Wackernagel, president of Global Footprint Network, in a panel moderated by Ashok Khosla, president of the Club of Rome.

Chairman of AFED's board of trustees Adnan Badran said that AFED's report showed that the Arab region is facing an imbalance in resource supply and demand, leading to an economic crash and a disruption of its stability and security.

The opening session included a statement by Razan Al-Mubarak, Secretary General of Abu Dhabi Environment Agency, about UAE footprint initiative, and a keynote speech by Julia Marton-Lefevre, director general of IUCN, about nature-based solutions for sustainable development in the Arab region.

A ministerial debate about sustainability options and policies for survival and growth was held in the presence of environmental ministers from different Arab countries.

Sessions discussed sustainable energy, patterns of production and consumption, green economy, role of business in reducing ecological footprint, and the UN climate change summit in Doha.

The conference hosts IUCN regional partners meeting and the Future Leaders' Forum, and presents AFED's energy efficiency handbook and environmental education handbook.

Conclusions and recommendations will be released in a closing plenary.

Full AFED report can be downloaded from www.afedonline.org

Notes to the editor

Key findings of AFED's report on Arab footprint and survival options:

- The average Ecological Footprint per person in the Arab region is 2.1 global hectares (gha) per capita, a 78 percent increase from 1961.
- Biocapacity availability per person in the Arab region is 0.9 gha per capita, a 60 percent decrease from 1961.
- If all humans lived like the average resident of member countries of the Arab League, 1.2 planets would be required to satisfy humans' resource needs.
- If all humans lived like the average resident of Qatar, 6.6 planets would be required to satisfy this level of consumption and emissions of carbon dioxide. In contrast, if everyone lived like an average Yemeni, humans would demand half of planet Earth.
- Residents in the country with the highest per capita footprint, Qatar (11.7 gha per capita), consume on average more than 13 times that of residents of Yemen.
- Globally, the largest component of the Ecological Footprint is the carbon footprint at 55 percent. In Arab countries, the carbon footprint portion is 45 percent of the total footprint. The carbon footprint component has been the only one to increase, on a per capita basis, since 1961.
- Globally, the largest component of the biocapacity is forest land at 43 percent. In Arab countries, cropland is the largest at 32 percent of the total biocapacity, and has been the

only land use type in which there has not been a significant decrease in availability per capita since 1961. This might have been achieved by employing intensive agricultural practices and extensive ground water extraction.

- 1.9 billion people live in countries with a higher Ecological Footprint per capita than that in Arab countries.
- 2.7 billion people live in countries with a higher biocapacity per capita than that in Arab countries.

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Executive Summary

Survival Options: Ecological Footprint of Arab Countries

2012 Report of the Arab Forum for Environment and Development (AFED)

Measured by the increase in Gross Domestic Product (GDP) over the last 50 years, Arab countries have performed well, with average GDP per capita quadrupling in this time. But while this has often resulted in higher standards of living, it has not always translated into a better quality of life nor has it enhanced the chances of sustainable living. Over the same period, available natural resources in the region have fallen to less than half, and this, coupled with deterioration in environmental conditions, has put the region on the brink of ecosystem bankruptcy. Not only does this situation impose limits on future growth and wellbeing, but it also threatens survival prospects in the region, according to the 2012 Annual Report of the Arab Forum for Environment and Development (AFED).

The Arab region entered into a state of steady ecosystem deficit in 1979 and the consumption levels of life-supporting goods and services are today more than twice what local ecosystems can provide. This has been accompanied with a doubling in the regional Ecological Footprint and a decrease in freshwater availability by nearly four times.

These are some of the key findings of the Arab Footprint and Biocapacity Atlas, prepared by researchers at the Global Footprint Network, as part of AFED's Annual Report on survival options in Arab countries. The Atlas analyzes the demand for resources (footprint) and available supply (biocapacity), expressed in global hectares (gha), to shed light on the resource constraints in Arab countries from the perspective of the regenerative capacity of nature.

Ecological Footprint and Environmental Degradation

Today most Arab countries suffer an ecological debt. Compared to 1961, the average Ecological Footprint of the region has increased by 78 percent, from 1.2 to 2.1 global hectares per capita. There are two main drivers which have led to this sharp jump: The first is a 3.5-fold increase in population size, leading to higher overall consumption; the second is a sharp rise in the amount of resources and services consumed per person as a result of higher incomes and changing lifestyle patterns.

The available average biocapacity per capita in Arab countries decreased by 60 percent over these 50 years, from 2.2 to 0.9 global hectares. This sharp decline is mainly attributed to the vast increase in population size and the decline in the productive capacity of the region's ecological systems due to pollution, habitat destruction, and overall inadequate resource management.

The vast deficit in the region's ecological resources is largely bridged by imports and an over-exploitation of finite local resources. This is an unsustainable strategy, the AFED report warns, as in the long term, overuse will lead to an even greater depletion of natural resources and degradation of the environment.

On the one hand, the dependence on global trade imports introduces concerns of economic insecurity, often driven by soaring food prices, disruptions in global supply chains, and trade restrictions. For oil-importing countries, carrying debt to finance imports imposes burdens on their economies and places a limit on future wellbeing.

And on the other hand, inadequate resource management has dire consequences on the environment. The AFED annual reports on the state of Arab environment have repeatedly warned that overexploitation of resources, the impact of climate change, high population growth rates, uncontrolled economic growth and urbanization amplify the region's environmental challenges and constrain its ability to manage them. Significant among those challenges are water scarcity, land degradation, inadequate waste management, coastal and marine environment degradation, and air and water pollution. AFED reports have estimated the cost of environmental degradation in the Arab region as a whole at 5 percent of total GDP, while budgetary allocations for environmental purposes do not even come close to 1 percent of GDP in any Arab country.

According to data in the Footprint Atlas, Arab countries' individual Ecological Footprints exhibit vast variations. The average resident of Qatar has the highest Ecological Footprint in the world (11.7 global hectares per capita), exceeding by nine times the Ecological Footprint of the average Moroccan. Kuwait and the United Arab Emirates have the second and third highest footprint per capita in the world, respectively.

To put this into perspective, if all humans lived like the average Arab resident, 1.2 planets would be required. If they lived like an average resident of Qatar, 6.6 planets would be required to satisfy their level of consumption and emissions of carbon dioxide. By contrast, if everyone lived like an average person in Morocco, humans would demand only three-quarters of the planet Earth.

Disparity is also reflected in many other forms, such as freshwater availability per capita - which varies between 8 cubic meters in Kuwait and 3,460 cubic meters in Mauritania - and GDP which currently varies between about US \$1,000 in Sudan and Yemen to above US \$92,000 in Qatar.

For some Arab countries, such as Yemen, the average inhabitant's footprint is small compared to the world average, and even too small to meet basic food, shelter, health, and sanitation needs. Therefore, the deficit cannot be bridged by simply reducing the demand for resources. To improve the quality of life, the actual per capita share of renewable natural resources must become more balanced and equitable across countries. Innovative resource management is needed to achieve this.

The Atlas also indicates that the carbon footprint component has been the only one to increase significantly since 1961, with energy consumption growing faster in the Arab region than in any other part of the world. This reflects the proliferation of energy-intensive industries and the increasing demand for electricity and transport from a growing population, often characterized by waste and inefficiency. That is why energy efficiency and renewable energy are main elements in reducing ecological footprints.

Changing Course

In light of the resource constraints in Arab countries, this AFED report is concerned with achieving economic prosperity while simultaneously ensuring ecological health. It seeks to investigate what level of resource consumption is most appropriate for Arab economies, given the available natural capital.

Addressing these questions demands a shift in economic policy formulation by accounting for national ecological endowments. Decision makers in Arab countries will need to look beyond GDP as the sole measure of performance, and must seek to complement traditional economic analysis with data on resources consumption and availability.

Setting development targets is naturally considered a sovereign national right, but economic growth must take into account ecological limits and the capacity of nature to sustainably support life. Given the low efficiency with which resources are turned into final products, Arab countries must improve the resource productivity of their economies by prioritizing energy and water efficiency.

While the AFED report warns of increasing food deficits, it also reveals that if the major Arab cereal producers raise their productivity and enhance irrigation efficiency only to match the world average, they will be able to meet demand. However, achieving food security requires regional cooperation, as often it cannot be realized at isolated country levels without causing grave environmental effects. An additional concern for Arab countries in this regard is the depletion of strategic reserves of scarce groundwater.

Regional programs in scientific research are key to achieving sustainable and equitable growth for all. One crucial step is to make good use of the present income from the region's finite oil resources to build a strong science and technology base, as a step to securing survival and the best possible quality of life in the post-oil era.

Concluding Remarks

Arab countries are facing an urgent challenge: how to provide sustainable wellbeing for all inhabitants and not simply seeking growth for the sake of growth at any cost.

The AFED 2012 report has found that no Arab country can survive as an isolated entity. However, the diversity of natural and human resources in the Arab region offers a foundation for survival and renewal. But this demands regional economic cooperation and Arab trade free of barriers, where the open flow of goods, capital, and people would work to the benefit of all countries in the region. Arab countries need to function as interdependent entities. This is particularly true in an era when the world is steadily moving towards regional trading blocs, based on practical common interests.

As gloomy as its findings might sound, this report does not seek to plant fear or despair about resource deficits. Rather, it seeks to stress the need to change course based on a hopeful vision for the Arab region. In this regard, the AFED report tracks glimpses of hope, with some Arab countries starting to genuinely respond to the warnings. The UAE, for example, which boasts the third largest footprint in the world, has launched a pioneering national footprint initiative intended to manage the country's ecosystem deficit and facilitate the adoption of science-based policies to advance sustainable development. The Masdar Institute of Science and Technology in Abu Dhabi and the King Abdullah University of Science and Technology in Jeddah and Qatar Foundation are recent examples of regional initiatives to advance sustainable development by promoting research in clean and renewable energy, along with food and water security. Morocco initiative for 40 percent renewable energy by 2020 is the most ambitious target worldwide.

The AFED report on survival options is a call to Arab countries to embrace collective action to advance a new sustainable economic and ecological vision. Regional cooperation, resource efficiency, and balanced consumption are the options for survival. Action is needed now. Arabs cannot afford wasting another 50 years on rhetoric on "one Arab nation....."