



Water Challenge In The Arab World (Incomplete Paper)

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Introduction

Aside from the security, political, educational, social and health challenges, the Arab world faces some serious economic challenges among which are: unemployment, lower labor productivity, economic diversification, change in the energy market out of hydrocarbon, environmental, deteriorating terms of trade, lower growth, poverty and so on.

There is even more serious challenges that is hardly being discussed. The World Bank calls, it in a recent study: - "The invisible water crisis".

Other titles reflect its seriousness: -

"The land of waters has its own merits" The Guardian

"Rivers of Dust: Water and the Middle East" Counter Punch

This is not surprising since the Arab region has 5% of the world's population having access only to 1% of the world's total water resources.

In this brief intervention I will try to highlight this major challenge and offer few recommendations.

The Problem

The world bank estimates that the region will face high to extremely high water stress by 2040. By 2050 water scarcity will cost the region 6% to 14% of its GDP.

I will highlight the problem with two examples:

1. Saudi Arabia has only three sources of water: - Rain water which is very scarce, Deep fossil aquifers which are being fastly depleted. It has been estimated that it will only last for 13 more years, and desalinated water which has its own technical and economic problems. In the meantime, the country's per capita consumes double the world average-263 liters each day- and rising, population is growing and the country is implementing very ambitious development program. The rest of GCC members and Yemen face the same problem.
2. The "Tigris – Euphrates basin is losing water faster than any other area in the world". The flow of water to Syria is being reduced by 40%and to Iraq by 80%

due to Turkish dam building. The flow of the Nile, on the other hand, is being reduced over the past several decades due to dam building and continuous draughts. With the new Ethiopian dam, the flow reduction will accelerate. So far, there is no solution to this problem on sight.

Recommendations

There are a number of options available to tackle these challenges. Among them: -

1. Better water management through licensing water wells, regulating water use and designing irrigation system as well as using dripping system in agriculture when possible.
2. Conservation. Saudi Arabia is to cut per capita water consumption by more than one half by 2030 using a number of conservation measures including the pricing mechanism.
3. Treatment of sewage water. Some GCC members have already achieved good results. Oman, e.g., now uses around 78% of its waste water.
4. Desalination, where GCC has 70% of world capacity, is expensive and pollutant. Encouraging the use of renewable energy in desalination, instead of hydrocarbon will cut the cost and reduce pollution.
5. Encouraging breakthrough technology research to use sea water for irrigation of agriculture.
6. Recharging old aquifers by filling returning oil tankers with water from water rich oil consumers.