

Comments and Elaborations by Dr Hazim El-Naser, Chairman of the Middle east water Forum

On

“The Impact and Outlook of the COVID-19 Crisis on water and food security in the Arab region

Joint Webinar MEWF and DHI, June 16th, 2020

Thank you, Professor Jamal Saghir, Chair of the Panel. On behalf of the Middle East Water Form and DHI, I would like to welcome all panelists and participants to this webinar. Today we have **225 participants** from **44 countries**, and for that, I would like to Thank you all for your participation.

1.1 MEWF in Brief . The MEWF is a unique and pioneer platform. The idea of the forum is to connect various interested parties from, industries, private sector, International and regional organizations and academia together in order to exchange or gain knowledge, distribute sector business news, and state of the art technologies in all water and sanitation fields.

1.2 The main objectives are:

- 1.2.1 Raising public awareness and enhancing management of water challenges in the Middle East, through articles, blogs, etc
- 1.2.2 Dissemination of information and promotion of innovation trends in water and sanitation technologies.
- 1.2.3 Discussion of regional water issues through communication and dialogue.
- 1.2.4 The MEWF serves as a regional information hub for Middle Eastern countries.
- 1.2.5 Act as a center for e-learning by integrating the multidimensional aspects of water, in order to qualify experts and leaders for water sectors by using the best expertise and techniques provided by the MEWF

Q-1: How can water scarcity exuberate food security in the Arab region under COVID-19 crisis.

- **By default**, Less water means less food.
The MENA region cannot, currently and in the future, meet its food production requirements due to increased water scarcity. All countries of the MENA region other than Turkey are either water stress (below 1,700 cm/year/capita) or under (absolute) water scarcity line. This situation will be more complicated under COVID-19 due to increase in water uses for hygienic issues (estimated at 15-40 l/capita/day), increase in household irrigation requirements (home gardening, estimated at 30-40 l/capita/day). All means more demand without additional supply to cater for this increase. **Now**

- According to the most recent report issued by the World Bank (Global economic Risk), global economy, is expected to slide into its deepest recession since the second world war. Economic disruptions are likely to be more severe in emerging markets and developing economies. **What does it mean for our countries, it means no more financial resources to develop new projects “the Catch up” projects to keep the status quo? In case we cannot implement it completely or partially, governments will reallocate more water from irrigated agriculture to domestic water use, with an end result of less food production.**

Q-2: How could a crisis like COVID-19 impact people dietary needs within the Arab region, especially needy people and refugees?

- Arab countries imports a very high percentage of its food consumption, ranging between 40 to 90%, depending on which country we are talking about. 75% of Arab needs from Cereals are being imported. With such high percentage of food import and dependency on international trade, any disruption on food supply chains, Definity means high prices as we started witnessing in rice prices in Asia and wheat prices in the US. Price escalations hits the poor and refugees with limited income. On top of that, donor countries will not be able to fulfil their aid commitments due to their internal problems. A good example what we see now in Yemen, where UNICEF appeals for financial resources otherwise 10 million Yemenis (poor and needy) will suffer water shortages and waterborne diseases.

Q-3: Is transboundary issues adding to the complications of water and food security in the Arab region under COVID-19 crisis?

Yes, it does but on the mid-long term. Will give some examples;

- Iraq lost 40% of its water resources over the last 10-15 year from 50 to 30 BCM, a reduction of about 40%. Iraqis lost hundreds of thousands of hectares of their arable land mainly summer crops in the south. This is mainly due to less water flowing south and salinity issues as a result of Turkish and Iranian unilateral development plans of upstream water resources. This impacted local food production and increases import of food at much higher prices, with more people fall into poverty.

-Egypt will lose 7-10 BCM every year because of the Ethiopian renaissance Dam. Its impact on water and food is very significant in terms of water scarcity and food production. Egypt Will lose, 1.8 billion USD of its GDP and 1,000,000 job and up to 0.5 million hectares.

- Jordan using about 20% of its water resources as a result of Syrian violations on the Yarmouk, and yet has to cater for 1 million Syrian refugees.

- Palestinians losing good part of their sovereign water rights in the Jordan valley because of Israeli occupation.

Q-4: What are the political impacts of a dual water and food crisis in the Arab region??

This would be the worse thing to happen. In such a case, as we witnessed this partially over the last few years in Iraq Basra, Lebanon, Yemen, Sudan, Egypt, Syria; a water and food crisis will trigger:

- Social unrest mainly because of food price escalation and drinking water shortages
- More poverty, ESCWA most recent report in April this year estimated, additional 8.3 million people will fall into poverty in the Arab region
- Activation of Transboundary conflicts; because governments will start to export their domestic problems and blame neighboring countries.
- Less production of food locally, means more import, and then high food prices
- All of the above will reduce foreign direct investments e.g. PPP for water and sanitation projects; risk becomes higher, and more water problems most likely to strike, due to lack of implementation of new projects.

Q-5: What can be done to avoid food supply crisis within the Arab region?

This would be a plan of short and long-term measures:

- Countries should draft policies and plans for their food security, under crisis management scenarios.
- Ease of movements of goods and trades through simple and less complicated regulations, at least during crisis time.
- Encourage Investments in Water and Sanitation infrastructure with special emphasis on reuse of treated wastewater for production of Animals footer.
- Utilize the comparative advantage of the regional countries and their respective agricultural calendar.
- Invest in technology that save water and enhance agricultural produce, in particular basic food needs e.g. wheat, etc.

Q-6: How can technology and innovation help in alleviate water and food shortages?

Actually, this is maybe one of the most important elements towards partial alleviation of food shortages in the Arab region. We have to facilitate and promote the following:

- Increase efficiency and utilize technological edge in irrigation and production, one good example is hydroponic plantation. Just to give you an example, production of tomato under best greenhouse technology gives like 10-15 tons/ 1000 m². Under hydroponic it gives almost three times with half of the amount of water.
- During this year, we witnessed serious technological breakthrough in the cost of solar energy from projects in Qatar (The Kharsah Project), where the cost of production of one kw reached 0.0157 \$/kw. Desalination costs also hit a historical low record of only 0.44 \$/m³ for the Yanbu 4 plant at KSA. If we combine both technological breakthroughs, our world would be much better off. This simply means, if we reach with the combination of both technologies (solar and desal) any figure below 0.4 \$/m³, we can cultivate with proper technology (Hydroponic) using desal water.