

Egypt Can Attain Food Sufficiency Once WTO Globalization Is Shut Down

by Marcia Merry Baker and Ramtanu Maitra

On July 8, a speech was presented at the Developing Nations (D8) Summit in Malaysia, by President Hosni Mubarak of Egypt (read by his Minister of International Cooperation, Fayza Abul Naga), stressing that, “There is a dire need to start an international dialogue between the food and fuel exporting and importing countries in an attempt to hammer out solutions that could meet the food and fuel needs of the world population.”

As of the time of this conference, and that of the Group of Eight (G8) in Japan—at which Russia called for a world grains summit—the world market for food has completely broken down. Following the crack-up of the financial system which began last Summer, food prices and supplies have gone out of control from hyper-speculation, years of agriculture underproduction, and mass diversion of food to bio-energy. The premises of the “one world—one market” of the GATT/World Trade Organization years are shattered, leaving the challenge of how to rapidly increase food supplies. The grain cartel interests—Cargill, ADM, Louis Dreyfus, Bunge, Soros/ConAgra—are having a field day, making killer profits, and deciding who gets food, and who doesn’t. On July 10, the Italian offices of Cargill and Bunge were raided by EU and government authorities, for illegal food trade practices.

Provision of adequate food to the 80 million people in Egypt, is in itself an urgent national and international task. This nation, self-sufficient in rice (producing 4.4 million metric tons), has come to rely on annual imports of over 7 mmt of wheat, to meet its yearly consumption needs of 14 mmt. Additional tons of other grains are imported.

Over just the last year, world wheat prices have doubled, while this year, the amount available on the market is declining. World wheat “carryover stocks,” from one year to the next, are down to the level of likely only 110 million tons this year, which is barely 17% of annual consumption, the lowest level in decades.

As a group, the world’s biggest wheat importers are the five nations of North Africa—Algeria, Morocco, Tunisia, and Libya, as well as Egypt, together importing in the range of 16-18 million tons yearly in recent times, out of the total of some 110-116 million tons exported on world markets. The next biggest wheat-importing group is the “Middle East” (so called by the U.S. Department of Agriculture), importing in the range of 10-12 million tons of wheat annually. (Lebanon, Israel, Jordan, Iraq, Iran, Yemen, Saudi Arabia, Kuwait,

U.A.E., and Oman). The two groups combined have imported over 25% of annual world wheat on the market. Now where is it going to come from?

In recent times, Egypt has obtained wheat from Kazakhstan, Russia, Australia, and Argentina, as well as from the United States, at one time, its principal supplier, beginning in the 1970s, when Henry Kissinger began enforcing the dependency on U.S. agriculture capacity as a “food weapon,” on behalf of London-based interests. However, there is now no guarantee of wheat supplies to Egypt, at any affordable price. This year, Egypt is seeking 7.8 mmt of imports, and has put a stay on exporting rice under the circumstances.

In addition to the welfare of the Egyptian population, the role of that nation is critical to the well-being of countries beyond its borders, and not only in the Nile Valley. It is well-established that Egypt’s strong presence is necessary to resolve the ongoing conflicts in Southwest Asia and northern Africa. Thus, because of its current food dependence on the outside world, Egypt, as a nation, is endangering its people *and* compromising its role in this volatile part of our world. Making a break with the decades of insecurity will have beneficial effects worldwide.

Correct What Happened Over Last 30 Years

At the D8 Summit, President Mubarak said, “The root causes of the current food crisis go back to the past three decades at least. This is why we should adopt a well-studied methodology, with a view to reaching sustainable solutions, that could pool the efforts of the international community in a bid to put them into effect.

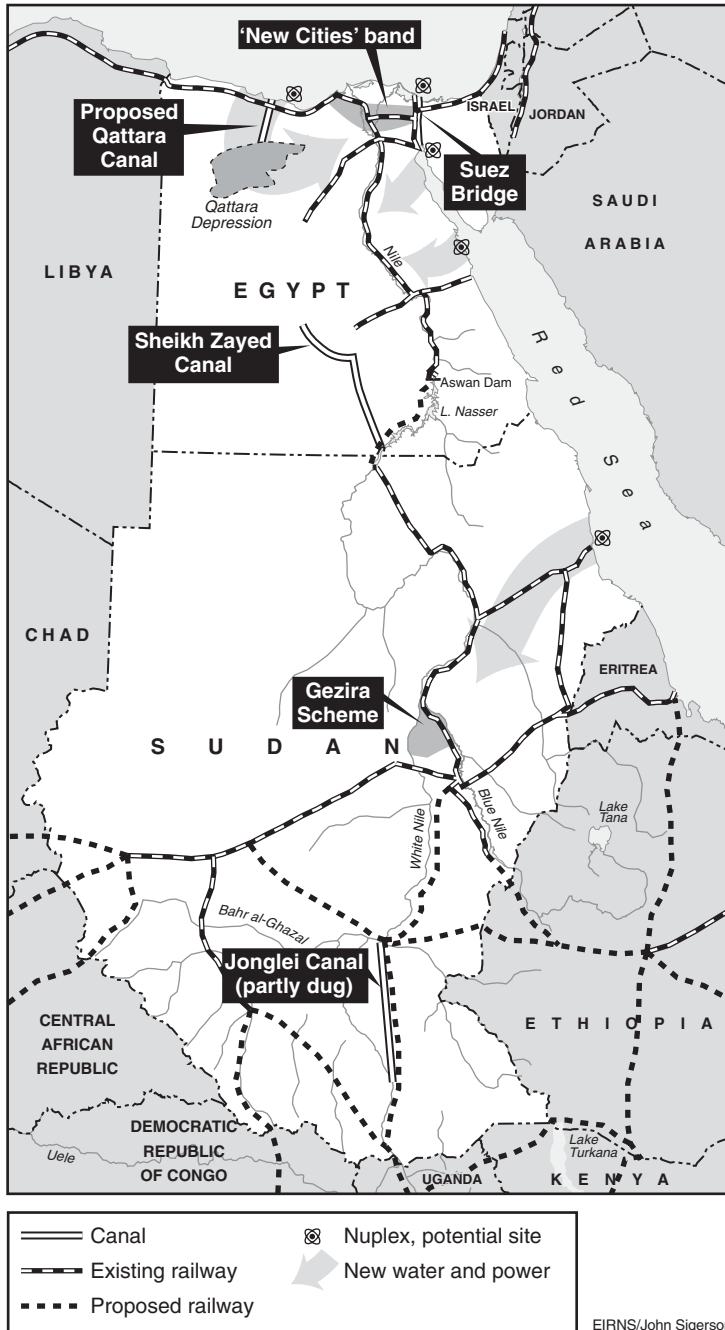
“These solutions should be based on finding a way to deal with the expanding gap between the supply and demand of food. There is a dire need to start an international dialogue between the food and fuel exporting and importing countries in an attempt to hammer out solutions that could meet the food and fuel needs of the world population.

“Within this framework, we think there is a need to move at the national, regional, and international levels. Egypt is due to outline a national strategy for pooling together all agriculture resources and works to discuss vistas of cooperation with neighboring countries that are sharing with it the Nile water...”

In fact, the physical possibilities and constraints for agriculture in the lower Nile Basin for Egypt and Sudan, and in

FIGURE 1

Egypt and Sudan: Selected Infrastructure Projects, Present and Proposed



the upper Nile also, underscore the challenges of meeting food needs for other nations and continents, with less dramatic physiography. In short, for Egypt, there is no way ahead except to resume the commitment of 40 years ago for nuclear power, to achieve the volumes of plentiful water and energy required for expanding food production; and to collaborate

with Sudan and assist the trans-Jordan in the process. In the meantime, full attention must go to potential gains from further stop-gap measures, ranging from reclaiming whatever more agricultural land is possible with groundwater, water re-use and diversion, and other means; reconsidering export cash cropping, so it might produce domestic staples instead; and more “partnering” with other nations, as long as the investment aids staples for domestic consumption, and does not simply “export water” in the form of foodstuffs.

Finally—and most importantly—is the prospect of collaboration with Sudan, through which almost limitless food could be supplied. This is the recommendation of Egyptian scientist, Dr. Rushdi Said, who headed up the Egypt Geological Survey during the Nasser years, and literally “wrote the book” on the Nile. (*The River Nile—Geology, Hydrology and Utilization*; Pergamon Press, 1993). In 2007, Dr. Said reiterated that Sudan is “a beautiful area to develop.” Egypt should use its fossil water for industrial development, until nuclear-desalted supplies come on-line. He said that, “The best union you can have, is with the Sudan, of course. And that’s why, the history of Egypt was tied with the Sudan all the time. The separation of the two countries is bad for the Sudan, and bad for Egypt.”

It is no exaggeration to say that the biggest strategic impediment to Egypt’s food security in recent years, has been the London-centered destabilization of Sudan and all north Africa, through the British intervention to create and perpetuate the “Darfur crisis.”

A counter-example of what achievements are possible in physical economy, is shown in northern Sudan, with the recent completion of the new Merowe Dam on the Nile River, 370 km south of the Egyptian border (see accompanying article). The first wheat crop related to this project was harvested this past April. This is the result of collaboration of China and Sudan, along with participation by European engineering firms.

The following is a review of some of the particulars of the challenge of providing full food security for Egypt, as part of the world policy dialogue now underway for agriculture sufficiency in the post-WTO era.

Confined in the Nile Valley

The 80 million people of the desert nation of Egypt are confined to only 6% of the land area, principally along the Nile River—in its Delta, and within about an 8-km-wide strip along its 900-km course, plus in oases and certain sites of the “New Villages” program. This puts Egypt foremost worldwide, in density of persons per square kilometer of inhabited land. As of today, fully 25%, or 18 million people, live in the greater Cairo area. At the same time, 55% of the population lives in rural areas, conducting intensive farming.

The total area of agriculture cultivation is only 8.6 million feddans (3.6 million hectares, or ha), which is about the same size as in farm land as the U.S. state of Alabama.

Given the constraints of being a desert nation (in size, a bit over three times the area of the U.S. state of New Mexico), the agricultural achievements of Egypt are striking, though not sufficient for the population. Two and three harvests a year are possible for many crops. The yields-per-hectare rank among the highest in the world. The Egyptian rice yield of 4.2 tons per feddan is the world's best. Egypt ranks first in sugarcane, with an average production of 51.4 tons per feddan. And second for corn; fourth for wheat, and so on.

According to the Egyptian State Information Service, ratios of food self-sufficiency in Egypt today include: 85% for wheat, 75% for sugar, and 75% for meat.

The challenge all along has been simply to *expand the habitable and arable area*. This requires sufficient and timely water. In most locations, the problem is not the desert sand itself, which is not hopeless beach-type sand. Rather, the sands of large parts of the country are potentially convertible to productive soils, with the addition of humus, fertilizers—even silt from the Nile, and successive cropping.

After World War II, expanding power, water, land use, and food in the Nile Valley was a priority in the U.S. Atoms for Peace perspective. At the core was nuclear power. In the 1950s, the chief of Detroit Edison, Walker Cisler, brought a table-top scale model of a nuclear reactor to Egypt (and to Iran), to discuss details of providing nuclear power plants in Egypt and the Southwest Asia, with then U.A.R. President Gamal Abdul Nasser. A special goal was the training of Egyptian engineering cadre to construct and run the intended nuclear power network. Besides power for desalinating seawater, plentiful electricity was intended for meeting the needs of large-scale hydroponics—"controlled agriculture"—to produce food in climate-controlled, soilless conditions, especially appropriate in the desert.

None of this was to be. As of the 1970s, the entire perspective was thwarted, with the imposition of the IMF financial regime of anti-nuclear, pseudo-environmentalist policies of forced backwardness. In particular, Egypt was one of the 13 nations specified in the 1974 secret policy document by then U.S. Secretary of State Henry Kissinger (National Security Memorandum 200), on behalf of London interests, to be economically suppressed, in the name of saving scarce resources for Anglo-Dutch-American use.

Lyndon LaRouche campaigned internationally against this subversion. In 1975, in Baghdad, he issued a regional development plan, with the specific proposal of an International Development Bank (IDB). He promoted an "Oasis Plan" throughout Southwest Asia and North Africa, for both nuclear power, and big water infrastructure projects—such as the Mediterranean-Dead Sea Canal, the Qatarra Depression power/water project, and high-tech desert agriculture.

FIGURE 2
The Nile River System



The 'Math' of the Bread Crisis

The "math" of the present-day wheat crisis in Egypt makes the point that nothing other than this kind of collaborative, high-tech farming approach is realistic. With a population of 80 million-plus to support, Egypt has now become wheat-short nation. The country consumes over 14 million tons of wheat every year and grows less than 9 million tons. This

means Egypt has had to import at least 5-7 million tons per year. This shortfall, however, is not a recent development, although the amount of shortfall is on the rise. What is ominous about the shortfall, is that surplus wheat of any amount is no longer easily available worldwide, and there is no indication that the prospect will change any time soon.

Even before the food-grain prices began to soar in 2007, the world market price made wheat a burden for Egypt to import. Cairo has always been judicious in subsidizing food for the poor. It was a necessary action, but it also is a drain to the economy. In December 2007, Egyptian Prime Minister Ahmed Nazif caused a stir when he suggested that the decades-old government-subsidized food staple system be replaced by a monetary handout to those who need it. The suggestion was aimed in part to reduce a budget deficit estimated at 5.3% of GDP in 2006-07, but it was—to the relief of the population—rejected by President Mubarak.

Now that world prices have risen even more sharply, Cairo has to spend a much larger amount to buy food and subsidize it even more, and withal, hope that food becomes available at any price in the world market, with no strings attached.

Why not increase domestic wheat production? Given an average wheat yield per hectare of around 3 tons, Egypt, in order to produce 6 million tons of wheat a year, would have to open up about 2 million hectares of land within a very short time. This would constitute a dramatic increase in currently cropped land total of 3.6 million hectares!

In addition, to irrigate that amount of land for wheat production would require about 18 billion cubic meters of water annually. The current estimates of available groundwater are in the range of 7.5 billion cubic meters, apart from the potential of new “finds” and technology. As for utilizing more of the Nile River flow, Egypt is already using its share—55,500 million cubic meters, which is its annual entitlement under the 1959 water-sharing agreement with Sudan.

Thus, to home-grow more wheat, involves *large numbers*, impossible to meet without a break-out into new kinds of collaboration with Sudan, and new potentials from implementing nuclear power for agriculture infrastructure—desalinating seawater, and other agro-requirements.

‘Out from the Nile’

Figure 1 shows selected infrastructure projects, and depicts the nuclear power effects (arrows) which are indicative of the way out of the apparent impasse of the restricted natural resource base. This was prepared nine years ago for an *EIR Special Report* on a 1997 conference in Walluf, Germany, by the Schiller Institute, titled, “Peace Through Development in Africa’s Great Lakes Region.” (EIR-97-003)

At that time, the world was locked into globalization practices imposed by the IMF/World Bank/WTO and private cartels, enforcing free-trade looting and destabilizations. But now, the whole system has crashed. Therefore, it is urgently “practical” to plan and build for advanced, large-scale power,

water, transportation, and other infrastructure.

In the meantime, any further land reclamation gains from various projects, inclusively referred to as, “Out from the Nile,” are urgent. These involve using groundwater, diverting Nile flow, re-using wastewater, etc. In 1997, a long-term plan was begun (through 2017), to add about 3.4 million feddans of reclaimed lands to the national total. The increase in area of cultivated land in Egypt has risen from 7.3 million feddans (3.1 million ha) in 1997, to over 8.6 million feddans in 2007; every increment of increase is critical.

The “Nubian Aquifer” is the catch-all phrase for the fossil water present in various deposits underlying the territory of most of Egypt and Libya, Sudan, and parts of Chad. Libya is tapping this for use by its coastal population, through its pipeline system called, the “Great Man-Made River,” going from inland well-fields to the coast. Dr. Farouk El-Baz, the Egyptian-American geologist who has worked for years to map this groundwater through satellite overflight and test wells, advises that groundwater be used cautiously, but be used. There are wells making use of it in the West Egypt Desert.

In 2007, El-Baz proposed its use in Darfur. “It is fossil water—meaning that it’s not being rejuvenated—and it is deeper water. Much of the Nubian Aquifer is several hundred to 1,000 meters below the surface. And that water is rather expensive to pump up, and you need to work with it very sparingly, because you know it is going to run out, not being rejuvenated. . . .”

Here are some of the projects underway.

East Egypt Desert. A program began here in the early 1980s, making use of groundwater, and also diverting Nile flow. The El-Saliha farm operations have reclaimed 20,000 hectares of land from the desert and the area is irrigated by Nile water brought in from a distance of about 60 miles. Thirty percent of the project is a fully mechanized dairy farm, which produces milk, an important source of protein. The pasture is irrigated, and the remainder is given over to fruit orchards and greenhouses growing salad vegetables (cucumbers, tomatoes, peppers, etc.). This produce is not consumed in Egypt, but the fruits and vegetables are currently exported to Europe, especially in Winter, when they command high prices.

Toshka Project. This project, in the West Egypt Desert, is associated with using Nile waters from Lake Nasser. In the 1970s, a Toshka overflow canal was built; and in October 1996, it was filled when the Lake reached a record height. Today, a giant pumping station lifts water up and into the new Zayed Canal, intended to reclaim some 1 million feddans of new land for farming. Groundwater pumping is also part of the scheme.

As Salam Canal. This conveyance, opened in 1997, goes through a tunnel under the Suez Canal, to carry Nile water to the arid Sinai Peninsula. The overall program is transforming some 620,000 feddans of desert into farmland, and opening up conditions for resettlement of 1.5 million residents of the Nile Valley.