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STATUS OF AGRICULTURE, FOOD PRODUCTION IN ARAB WORLD EXAMINED

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[Article: "Report Issued by the Arab League: This Is the Current Situation and the Future of Agriculture and Food Production in the Arab World"]

[Text] During the latter part of September of this year, the Technical Committee which deals with the programs of the Council of the Arab Organization for Agricultural Development [AOAS] held a meeting in Khartoum which was attended by representatives of the ministries of agriculture in the Arab nations. This meeting was held in preparation for the session to be held by the AOAD Council in Khartoum on 24 December of this year.

During the meeting the Technical Committee studied the programs of action submitted by the Arab member states of the AOAD Council which dealt with their plan of action for next year, and later on this plan of action will be submitted to the AOAD Council.

The AOAD plan of action includes the building of a permanent headquarters for the organization in Khartoum, the appointment of a secretary general for the AOAD, the holding of training courses and scientific symposiums, and increasing programs of agricultural cooperation between the Arab nations.

AL-MAJALLAH is publishing below the agricultural report prepared by the Economic Secretariat General of the Arab League. Its text is as follows:

The total area under crop cultivation in the Arab world remained unchanged as of last year. That is, it is still 35.35 million hectares. The area under wheat cultivation decreased 3 percent, that is, it decreased by 230,000 hectares. Most of the area under crop cultivation relies on rainfed agriculture (73 percent), and consequently agricultural production continues to be subject to ups and downs as a result of the fact that rainfall is different in different seasons in terms of amount and distribution. For this reason, grain crop production was 6 percent less last year than it was in 1981, and was 11 percent less than it was in 1980.

Grain crop production in Morocco in 1981 experienced a very large decrease (2.3 million tons). But Morocco then reached its average level of production once again. Nevertheless, production greatly decreased in some important

Arab agricultural nations such as Algeria, Iraq, Syria, and Sudan. The tremendous effect of these seasonal ups and downs becomes clear if we realize that the average grain crop in the Arab world, not counting Egypt, was between 600 and 900 kilograms per hectare during the last 8 years. This means that there was a variation of 50 percent between one season and another. Egypt was not included in these statistics because its agriculture relies totally on irrigation and its crops are stable ones. With the exception of grain crops, all types of agricultural crop and animal production increased in 1982.

Development of the Agricultural and Food Production Situation

During the period 1975-82 agricultural production experienced an average real increase of 2.5 percent per year, and during the period 1970-79 this annual increase was 2 percent. On the other hand, the increase in demand for agricultural products during this same period of time went up from 4.6 percent in the seventies to 6 percent per year. As a result of the difference between the increase in production and demand, net imports (imports minus exports) increased an average of 20 percent per year.

The value of agricultural imports went up from \$6.6 billion in 1974 to \$21.2 billion in 1981. If one adds the value of fish imports, imports of lumber products, and imports related to agricultural production (because it is necessary to have them in order to engage in agricultural production), the situation becomes that which is shown below (See Table 1).

It should be remarked that there was an average annual increase of 27 percent in the agricultural imports of the following Arab oil-producing nations--Saudi Arabia, the UAE, Kuwait, Qatar, and Libya. Saudi Arabia had the higher figure for an individual country among these nations (37 percent). This is a phenomenon which was expected in these nations in view of the fact that their agricultural resources are limited and in view of the large increase both in their incomes and in their populations. But one phenomenon which was not expected was the great increase in agriculture imports on the part of the principal agricultural nations in the Arab world. The average increase in these imports was 14 percent for the following nations--Algeria, Egypt, Iraq, Morocco, Sudan, and Syria.

The ratio of agricultural imports to commodity exports of the Arab world as a whole was 8 percent in 1974 and 9.5 percent in 1981. This ratio is generally low because of the volume of oil exports of a number of the Arab nations. However, these imports have come to represent a steadily-increasing burden on the balance of payments of a number of the non-oil-producing Arab nations. In this regard, the statistics in 1981 were 99 percent for Egypt, more than 100 percent for the YAR and Djibouti, and between 54 and 90 percent for Jordan, Morocco, Somalia, Sudan, and Lebanon.

In 1981 Arab agricultural imports increased an average of 9.2 percent in relation to the total value of agricultural exports. As far as some individual items are concerned, the increases in imports were 19 percent for wheat, 16 percent for rice, 28 percent for barley, 16 percent for sugar, 11 percent

for meat, 14 percent for live cattle, and 24 percent for eggs. The increase was greatest in the case of imports of live sheep--86 percent. Total Arab agricultural exports, on the other hand, achieved only modest increases--no more than 1.4 percent per year.

Table 1. Cost of Imports of Agricultural, Fish, Lumber Products, and Agricultural Production Related Items (in millions of dollars)

	<u>1974</u>	<u>1981</u>	<u>Annual Increase</u>
Agricultural products	6,575	21,245	18.24%
Fish and Lumber products	7,170	23,280	19.16%
Related Items [agricultural] production*	7,565	24,460	18.25%
Total	21,310	68,985	18.27%

*Chemical fertilizers, agricultural machines and equipment, and pesticides.

Because of the great difference between the increase in imports and the increase in exports, the ratio of exports to imports went down from 43 percent in 1974 to 15 percent in 1981. At the beginning of the seventies this ratio was 81 percent.

According to 1981 statistics, two-thirds of the agricultural exports were accounted for by five of the Arab nations--Egypt, Morocco, Sudan, Syria, and Tunisia. Agricultural exports from these nations decreased at a rate of 1.1 percent per year, and these exports constitute a high percentage of their total commodity exports. Furthermore, agricultural imports [by these countries] greatly increased. This latter phenomenon is a cause for concern because the Arab world is primarily hoping that these nations will enable it to achieve self-sufficiency in food and to produce the large surpluses of food required if the Arab world is to achieve a secure food supply.

It should be pointed out that Arab agricultural exports noticeably decreased, especially in the case of cotton, fruits, vegetables, oil-bearing seeds, and vegetable oils--and these are among the most important Arab exports. The only increases were the exports of millet (from Sudan) and live animals (from Somalia and Sudan).

There was an increase of only 200,000 hectares in the total area under cultivation (from an average of 35.5 million hectares during the period 1975-79 to an average of 35.7 million hectares during the period 1980-82). That is, there was an average increase of 0.1 percent per year. The reasons

for this situation were the fact that there was no change in the total area cultivated with grain crops and oil-bearing crops (80 percent of the total), there was a decrease of 1.8 percent per year in the total area cultivated with leguminous crops, and there was an increase of between 2 and 4 percent per year in the total area cultivated with sugar crops, tuberous crops, vegetables, and fruits. About 26 percent of the total area under cultivation used irrigation. Grain crop production increased an average of 2 percent per year, and this was due to an improvement in the crop because the total area under cultivation with grain crops remained unchanged.

The following are some of the basic facts as far as production of the principal grain crops is concerned:

Rice

Egypt continued to occupy first place in rice production, although its share of the total rice production of the Arab world decreased from 95 percent in 1975 to 88 percent in 1982 because of the increase in rice production by Iraq. During this period of time Iraq's share of the total rice production increased from 2 percent to 10 percent. The rice crop in the Arab world is highly productive because irrigation is used. Its production is one of the highest in the world (especially in Egypt), and it is nearly as high as that of the U.S. and Japan (5,100 kilograms per hectare for rice production in the Arab world as opposed to 5,500 kilograms per hectare for rice production in the U.S.). Because of the relative decrease in production as compared with the increase in demand (3.2 percent), imports of rice increased about 13 percent per year and the degree of self-sufficiency in rice decreased from 81 to 65 percent.

Corn

There was an improvement in corn production in the Arab world because of an improvement in the productivity of this crop, and this was due to increasing interest in it during recent years, especially in Egypt (where 82 percent of the 1982 crop was produced) and Iraq. Corn productivity in the Arab world is considered to be good in comparison with the world average (which is only 77 percent of that of the Arab world). Corn productivity in Egypt, which is 4,290 kilograms per hectare, is 27 percent higher than the world average, which is only 3,370 kilograms per hectare. However, this rate of productivity is low in comparison with that of some other countries, especially that of the U.S. where it is about 7 tons per hectare.

Demand for corn in the Arab world has been greatly increased--at a rate of 9 percent per year. This has led to a great increase in corn imports, with the average annual increase in these imports being more than 29 percent. Because of this, self-sufficiency in terms of corn has gone down from 85 percent to only 51 percent. The reason for this rapid increase in demand for corn was the poultry enterprises which utilize corn as their main type of fodder.

Barley

In spite of the relative improvement in barley production (3.5 percent per year), productivity of this crop is still low. Furthermore, the barley crop is not a secure one in the Arab world because most of the barley cultivated in the Arab world depends on rainfall and is planted in marginal areas where rain cannot be counted on.

This is what explains the great oscillation which we have seen in barley production during the last 8 years. During this period of time, barley production varied between 530 kilograms per hectare to nearly 1,000 kilograms per hectare. Barley crop productivity in the Arab world is considered to be quite low in comparison with the world average, which is 1,990 kilograms per hectare. In other words, barley productivity in the Arab world is only 40 percent of the world average. Furthermore, it is only 17 percent of the highest barley productivity rate in the world (which is that of Holland--4,700 kilograms per hectare). Demand for barley increased 8.7 percent per year because it is being used more and more to feed cattle from which meat and dairy products are produced. This led to a very high increase in barley imports--41 percent per year.

Millet and Pearl Millet [Dukhn]

There was some improvement in the production of millet (2.6 percent per year), whereas the production of pearl millet decreased by about the same percentage. In spite of the large total area cultivated with these two crops (about 6 million hectares, or 27 percent of the total area under cultivation with grain crops), productivity of these two crops is still very low, especially the crops which depend on rainfall. Except in the case of Egypt, where pearl millet is cultivated with the utilization of irrigation, pearl millet productivity in the nations of the Arab world is only 350 kilograms per hectare (60 percent of the world average). Also, crop productivity of millet is only 500 kilograms per hectare, or 35 percent of the world average.

Because of the low demand for these two crops, millet is one of the grain crops whose production always exceeds local consumption. In 1981 the degree of self-sufficiency in this crop was 108 percent.

Oil-Bearing Crops

Oil-bearing crops, after grain crops, occupy second place in terms of total area under cultivation. In 1982 oil-bearing crops were planted on 17 percent of the total area utilized for agriculture. A great many crops are included in this category, and the most important of them in the Arab world (in terms of total area cultivated) are olives, peanuts, sesame, and cottonseeds. Although soybeans are still grown on a limited scale, cultivation of this crop began to increase at rapid rates during recent years. There are many types of oil-bearing crops and they are cultivated in many different environments in the Arab world, but most of them are crops which depend on rainfall and are cultivated according to traditional agricultural practices (such as the cultivation of peanuts and sesame in Sudan). For this reason, these

crops as a group did not achieve any increase worth mentioning during the last 8 years (0.6 percent per year). Some of them achieved very modest increases, whereas production in the case of others decreased.

Since the principal product of these crops is edible oils, a comparison was drawn up of production and imports on the basis of what the crops provided in terms of oils. It turned out that the degree of self-sufficiency of edible oils, during the past 8 years, decreased from 60 percent to 38 percent. This was due to a decrease in production of 1.3 percent per year and an increase in demand of 5.3 percent per year. This was something which led to a great increase in imports--12 percent per year.

Fruits and Vegetables

Production of fruits and vegetables in the Arab world has enabled it to be nearly self-sufficient in these crops, although this percentage of self-sufficiency, during the period of time taken into consideration, decreased from 104 percent to 95 percent. The increase in demand for fruits and vegetables was slightly higher (4.1 percent per year) than the average overall increase [in production of fruits and vegetables], which was 2.7 percent per year.

Legumes

This category includes a great many crops, the most important of which are beans [ful], broad beans [baqila'], chickpeas, lentils, Indian peas, and oats [hurtuman]. Since the cultivation of these crops is done in areas where farming depends on rainfall and since there was a decline in the productivity of these crops and a decrease in the total area where they are planted, the result was a decrease of 3.5 percent in these crops.

Sugar Crops

There was an increase in the total area cultivated with sugar cane and sugar beets. However, the productivity of these crops decreased somewhat [because of problems relating to the soil and the level of the ground water in Egypt]. Nevertheless, there was an average production increase of 4 percent per year. But, at the same time, there was an increase of 8 percent per year in the demand for sugar. This led to an annual increase of 9.5 percent in imports and resulted in a decrease in the degree of self-sufficiency in sugar from 33 percent to 26 percent.

Vegetable fiber crops, the most important of which is cotton, is the only commodity group about which one can say that production is greater than the requirement of local consumption. In spite of the relative decrease in net exports, the ratio of cotton fiber production to the local consumption requirement continues to be 140 percent.

Tea, Coffee Beans, and Tobacco

The Arab world produces a very small percentage of what is needed to meet the demand for these crops (12 percent), and this demand is continually

increasing. Imports of these commodities now represent a high percentage of the total value of agricultural imports (the figure was 9 percent in 1981), and this total value has gone over \$2 billion.

Animal Products

Production of red meat increased 4 percent, and production of poultry meat went up 9 percent. However, total demand for meat increased at very high rates--nearly 10 percent per year. This resulted in a more than nine-fold increase in imports of meat. Meat imports increased at a rate higher than any other category of agricultural imports (36 percent per year), and the degree of self-sufficiency in meat in the Arab world went down [to] 72 percent [of what it was previously] (from 93 percent to 67 percent).

Egg production increased at a higher rate than any of the other plant or animal production items (with the exception of poultry meat), and its rate of increase was 7 percent per year. However, demand for eggs increased 10 percent per year. This fact resulted in a big increase in egg imports (28 percent per year), and self-sufficiency in eggs decreased from 91 percent to 76 percent. Production of dairy products increased only 2.3 percent per year, whereas the demand for dairy products increased 6.7 percent per year. This led to an increase of 14 percent per year in imports of dairy products, and the level of self-sufficiency in dairy products decreased from 71 percent to 53 percent.

Development of Investment in Agriculture

In comparison with the first half of the seventies, the second half of that decade saw a tremendous increase in the total financial resources allotted for development as a whole in the Arab world. These resources also increased during the first years of the eighties. The share of resources allotted for agricultural development plans increased at rates comparable to those of the increase of the total in resources, as one can see in Table 2.

Table 2. Agricultural Investments in the Arab World

Investments	1970-75	1976-80	1981-85	Ratio of:	
	Phase I	Phase II	Phase III	I to II	II to III
Total investments	56	284	685	510%	1,220%
Agricultural investments	8	26	86	325%	1,100%
Agricultural investments as percentage of total investments	14	9	13		

This table shows us that the investments allotted for agricultural development during Phase II totalled more than three times as much as the resources [allotted for agriculture] in Phase I. In Phase III the resources allotted for agriculture were already ten times as much as they were in Phase I, and they came to total 13 percent of all of the investments allotted for development. These figures might at first constitute a cause for optimism, but we soon find out that these investments are distributed only in a small number of nations, most of which have only limited agricultural potential.

In order to become acquainted with the nature of this distribution, we must divide the Arab nations, which are Saudi Arabia, the UAE, Kuwait, Qatar, Libya, Iraq, and Algeria (seven nations).

2. The developing nations, which are Bahrain, Tunisia, Syria, Oman, Egypt, Lebanon, Jordan, and Morocco (eight nations).

3. The lesser-developed nations, which are Djibouti, Somalia, Sudan, Mauritania, the YAR, and the PDRY (six nations).

If we use the number of inhabitants engaged in agriculture as a criterion for the relative importance of the agricultural sector among these nations, then we end up with the distribution which is seen in Table 3.

Table 3. Agricultural Investments in the Three Groups of Arab Nations

	<u>Agricultural Investments (1981-85) (in millions of dollars)</u>	<u>Persons Working in Agriculture As of 1985 (millions)</u>	<u>Investments Per Person Working in Agriculture (in dollars)</u>
Oil-producing nations*	60,500	20	3,275
Developing nations	17,250	40	430
Lesser-developed nations	3,250	24	135
Total	86,000	84	-

*As quoted by the countries' development plans, with the exception of one nation (among the oil-producing nations) whose resources allotted for agricultural development, as a percentage of its total resources, were estimated as being on a level similar to those of the previous phases.

Table 3 shows us that agricultural investments in the oil-producing nations during Phase III (1981-85) constitute more than three-fourths of the total in such investments in the Arab world, whereas the number of inhabitants in these nations who engage in agriculture comprise less than one-fourth of the total in the Arab world. Agricultural investments in the lesser-developed nations, which have 30 percent of the Arab world's inhabitants who engage in agriculture, comprise only about 4 percent of the total for the Arab world. The most important thing which Table 3 shows is that the share per capita of the agricultural investments in the oil-producing nations is 24 times as much as the share per capita in the lesser-developed nations and 8 times as much as the share per capita in the developing nations. In one of the oil-producing nations the share per capita of these investments is as high as \$1,700, whereas in one of the lesser-developed nations the share per capita of these investments is only \$70--and this latter nation in particular has the greatest unexploited agricultural potential in the Arab world.

These comparisons indicate that the wealthy Arab nations have begun to be seriously concerned about developing their agricultural potential and their rural societies. This is an inalienable part of economic and social development as well as the efforts to provide the Arab world with a secure food supply. But the achievement of such a secure food supply, or any acceptable level thereof, will remain something that cannot be attained unless there is a far greater level of inter-Arab cooperation than there has been so far.

This opinion is based on a material fact, which is that of the extremely unequal distribution among the various Arab nations of the resources necessary for agricultural development. This fact simply means that (with the exception of a small number of Arab nations) it will not be possible for most of the Arab nations--either the rich nations or the poor ones--to achieve acceptable levels of self-sufficiency by only relying on their own resources.

Effectively dealing with the great challenge represented by the issue of agriculture and food production in the Arab world means that it will be necessary to rely on a strategy which has the objective of achieving integration of financial resources and agriculture in accordance with newly-created and flexible formulas which would guarantee joint and equal benefit to the parties cooperating in this field. This is a difficult task which, if it is to bring results, will require a long period of time--made necessary by the nature and peculiarities of agricultural development in the technical and social realms which it involves as well as its infrastructure, material, and organizational requirements.

In concluding this article one should say that the agricultural and food production crisis in the Arab world will become worse in the foreseeable future unless there is an immediate and great improvement in the levels of cooperation among the Arabs over the levels of cooperation which currently exist among them.