

AGRO-INDUSTRIAL PRIORITIES

AND

PROJECTS IN THE ARAB WORLD

by

Dr. H. F. Jumah

Director-General, AGAD, Sharjah

INTRODUCTION

Paper delivered at the Symposium

The Arab World is composed of independent states in addition to Occupied Palestine. The area involved comprises Business Trends in the Arab World from the Mediterranean in the North to the Equator in the South, and from the Arab Gulf in the West to the Western edge of Africa, on the Atlantic Ocean. This geographic expansion provides the area with a rich diversity of climates that allows the production of various agricultural commodities.

organised by

The Swiss-Arab Chamber of Commerce

25-26 October, 1984.

The Arab world is endowed with vast resources which are inequitably distributed. Some countries that warrant the integration of the individual economies to their mutual advantage. While the agricultural resources are concentrated in a few countries like Sudan and Morocco, the financial resources are in the hands of the oil rich countries. Agriculturally, while some countries are suited for the production of temperate crops, others are suitable for tropical crops, while still others have all the financial facilities to furnish them all with agricultural inputs. This diversity provides each individual country with the theoretical advantage of producing a relatively large market, thus making use of the economies of scale.

According to the United Nations categorization, all Arab states belong to the group of developing countries. In this respect, like all members of the group, their development was hampered, first by the colonial rule, and later,

In addition to this, the Arab countries as a group, are known to have amassed great financial resources which can support extensive economic development. Taken together, all these resources are in a position to make the Arab world, not only self-sufficient in food and agricultural raw materials, but also a formidable economic unit.

However, before this potential can be realized, a number of issues have to be resolved:

1. Most of the rain-fed areas suffer from the onset of erosion, dessertification and from shortages in mineral ingredients. The greater part of the arable land, being rain-fed, is susceptible to the hazards related to uncertainty in volume, timing and distribution of the annual precipitation. Therefore, the rain-fed areas should be thoroughly studied and carefully utilized. This places a greater importance on expanding the irrigated sector.
2. In some countries like Iraq and Syria the irrigated areas are characterized with high salinity that reduces the yields and places a limit on the type of crops that may be grown. In the circumstances, any additional agricultural development in such areas should focus on reducing the salinity through drainage and proper irrigation methods.
3. Agriculture in the Arab Region is characterized with low productivity attributed to low quality of seed and breeding stock, susceptibility to pests and diseases and marginal utilization of machinery and other modern inputs. This necessitates that huge funds be devoted to research, propagation and extension. There is also the need to create conditions whereby the modern inputs are utilized optimally by way of enlightening the farmers and providing them with the necessary incentives.

4. The lower investment rates in agriculture, compared to other sectors, have forced a significant part of the working force to migrate from the rural areas thus raising the wages of the remaining labour force and therefore, the cost of production. In the Arab Republic of Yemen wages have risen 25 times in 7 years, while agricultural prices have only tripled and this has made agriculture unremunerative. Obviously, there is a need to give agriculture top priority and a greater share of the investments.
5. The price policies in almost all Arab countries are biased against agriculture. In the oil-rich countries agriculture is subsidized, but the rate of investment in other sectors is so great that the subsidized agriculture does not seem attractive enough and indeed a disparity in incomes between the urban and the rural areas is created. In these countries where agriculture is the leading sector, the prices of most agricultural products are fixed in the interest of the urban consumer and this again discourages agricultural production. All these policies have to be reversed or adjusted in favour of the farmers.
6. Lack of infrastructure, social facilities and services in the rural areas discourage production and call for enormous funds to be allocated to develop them.

All these limitations and obstacles cannot be resolved unless the Arab economies are integrated and their resources jointly exploited to develop agriculture and to secure their food requirements.

AGRICULTURE AS A BASE FOR  
INDUSTRIAL DEVELOPMENT IN THE ARAB WORLD

Most of the industries in the Arab world depend on agriculture; either as a source of raw materials, such as food processing, weaving and spinning, furniture and paper industries, etc.; or as a user for such inputs as fertilizers, concentrated feed, agricultural machinery and implements.

Food industries

As has been mentioned earlier, agriculture in the Arab world has a solid base of natural resources, as reflected in the extensive arable lands, the rich animal wealth and the abundant water resources. Agronomically, there is no limit to the number of crops (of tropical or mediterranean nature) that can be grown in the area. In spite of this, the Arab countries are importing an ever-increasing list of agricultural commodities.

According to available statistics, the Arab countries had imported food items, in 1982, for more than 14 billion dollars (see table 1). These are mostly cereals, oil crops, meat, sugar, vegetables and fruit and, incidently, they can all be grown in the area. To get these items you need to develop the relevant food industries such as grain and oil seed mills, vegetable, fruit and milk processing, fish canning, abattoirs, sugar factories, etc.

At present food industries constitute an important component of the industrial sector and they are almost universally distributed in the Arab countries. However, they are most prominent in those countries which have a large agricultural sector; such as Egypt, Morocco, Tunisia, Syria, Algeria, Iraq and Sudan. In one of the reports<sup>(1)</sup>

---

(1) Unified Arab Economic Report, 1983, p. 59. This report is published jointly by the Arab League, Arab Monetary Fund, Arab Fund for Economic and Social Development and OAPEC.

Table [1]: The Food Gap in 1982  
for the Arab World

ITEM	Requirements 000 tons	Production 000 tons	FOOD G A P	
			Quantity 000 tons	Value mill.US.\$
<b>Cereals (total)</b>	52714.95	27236.46	25478.49	6145.97
Wheat	20946.33	9504.44	11459.89	2546.15
Maize	7705.34	3921.21	3784.13	809.98
Rice	4236.51	2646.81	1589.70	785.13
Barley	9532.19	5025.53	4506.66	1101.88
Potatoes	3316.30	2946.81	369.49	80.68
Pulses	1362.04	1012.27	349.77	211.67
Vegetables	22418.14	21895.73	522.41	231.24
Fruits	11271.56	10917.26	354.30	449.00
Sugar	4592,83	1461.80	3131.03	1368.31
Edible Oils & fats	2850.45	1161.45	1689.00	1108.38
Meat (total)	3760.57	2846.47	914,10	2714.42
Red Meat	2375.31	1976.22	399.09	2035.98
White Meat	1385.26	870.25	515.01	678.44
Fish	1119.77	1082.59	37.18	25.06
Eggs	754.14	557.11	197.03	256.74
Milk	16871.50	8805.99	8065.51	1769.33
<b>TOTAL</b>				<b>14360.80</b>

Source: AOAD, Yearbook of Agricultural  
Statistics, Vol. 4, 1984.

it has been estimated that food industry in twelve Arab countries<sup>(1)</sup> contributes 24% to GDP. Notwithstanding this relatively high ratio, the Arab world is satisfying only 50% of its food requirements. However, if the present trend of country planning continues, the situation shall not change significantly in the future, as there are numerous obstacles that are in force at the country level:

1. In some countries there is an acute shortage of arable land to provide the necessary raw materials, e.g. the Gulf states.
2. In other countries scarcity of financial resources deprives agriculture of the necessary inputs and the resultant low productivity (of crops and livestock) does not offer relatively low-priced raw materials to enhance the economic growth of agro-industry, e.g. Sudan, Somalia.
3. Immigration of trained personnel and agricultural labour from the rural sector has been a major factor that has negatively affected agriculture all over the Region.

If these real obstacles are contrasted with the abundant resources mentioned earlier, it becomes quite clear that the food problem in the Region cannot be solved if the countries work in isolation and the problem should therefore be tackled regionally. In fact, this was the approach adopted by the Arab Organization for Agricultural Development in formulating the Strategy and Programmes of the Arab Food Security, which has had universal support and approval from the highest authorities in the Region.

---

(1) These include, in addition to those mentioned above: United Arab Emirates, Jordan, Kuwait, Lybia and North and South Yemen.

The 'Strategy' gives carefully worked-out projections for the production levels and requirements of the major food items by the year 2000 (see table 2). If these figures are compared with those for 1982<sup>(1)</sup> (the latest published by AOAD) one gets an idea of the volume of agro-industries that need to be developed in the Region to produce the required food items.

If the calculated increases in production between the years 1982 and 2000 are any indication, then agro-industries have to be developed to cope with that level of production. This means that they have first to match the current levels of food requirements, which by themselves, constitute a challenging objective. To provide a better grasp of the situation, the following pages give a brief review of some of the important agro-industries in the Arab world.

#### Sugar industries

At present, there are approximately 41 sugar factories located in 9 Arab countries with an annual capacity of 2539 thousand tons of sugar. Those amounts are extracted mainly from such crops as beet roots and sugar cane with an extraction rate that approximates 12.4% and 9% respectively.

Despite those annual supplies, the Arab world remains a net importer of sugar, producing only 32% of its annual consumption, in 1982.

On looking at the industry from a regional perspective, it has been identified that the sugar industry suffers from a number of constraints which, mainly, include limited supplies of raw material coupled with deteriorating quality which makes it difficult for plants to function at the optimum levels.

---

(1) AOAD, Yearbook of Agricultural Statistics, Vol. 4

**Table [2]: Food Production and Food  
Requirements in the Years  
1982 and 2000 (in 000 tons)**

ITEM	1 9 8 2		2 0 0 0	
	Production	Require- ments	Production	Require- ments
Cereals	27236.46	52714.95	32453.53	128670.26
Wheat	9504.44	20946.33	12128.96	45831.83
Maize	3921.21	7705.34	5418.10	28224.83
Rice	2646.81	4236.51	2848.89	7224.28
Barley	5025.53	9532.19	9748.50	34034.85
Pulses	1012.27	1362.04	1689.95	1572.47
Vegetables	21895.73	22418.14	57112.06	60962.31
Fruits	10917.26	11271.56	20988.68	26789.34
Sugar	1461.80	4592.83	3323.21	17325.46
Edible Oils & Fats	1161.45	2850.45	2105.74	4840.68
Meat (total)	2846.47	3760.57	4909.25	12339.66
Red Meat	1976.22	2375.31	2182.23	4715.65
White Meat	870.25	1385.26	2727.02	7624.01
Fish	1082.59	1119.77	1703.19	2224.08
Eggs	557.11	754.14	2165.81	3302.74
Milk	8805.99	16871.50	17892.86	65341.77

Source: (1) AOAD, Yearbook of Agricultural  
Statistics, Vol. 4, 1984.  
(2) Projections were calculated  
by AOAD staff.



To alleviate those problems and to narrow the gap between future production and consumption, the strategy of Arab food security programmes as outlined by AOAD, suggests allocating \$5.4 billion which represents 16.4% of total programme's cost, to be spent on intensifying sugar production both vertically and horizontally.

#### Vegetable-Oil Industries

Vegetable-oil industries play a crucial role in the lives and economies of the Arab world where oil is extracted mainly from sesame and groundnuts that contribute 36.3% of the total production, olives (35%), cotton seeds (21.8%) and sunflower (2.2%).

Consumption of vegetable-oil runs high in the Region, and Arab countries remain to be net importers with production satisfying only 41% of annual consumption in 1982.

It has been estimated that there are approximately 114 oil factories and 2962 oil mills with a capacity of 16.5 million tons, though only 33% of it is utilized at present.

On its part, AOAD within the framework of Arab food security programmes, has suggested a comprehensive programme to improve vegetable-oil production levels which entails allocating \$2,9 billion or 8.6% of the total investment costs of the entire programmes.

#### Dairy industries

The number of dairy factories and projects approximates 154 distributed in 18 Arab countries, with an annual productive capacity of 2.4 million tons of raw milk. It should be noted however, that the dairy industries in the Arab region is operating below capacity that reaches 41%, due mainly to insufficient amounts of raw milk and lack of trained personnel.

### Food canning industries

These industries are mainly concentrated in canning tomato paste, fruits and vegetables, olive, pickles, jams, fruit juices, date products, frozen and dried fruits and to a lesser extent fish and meat. It is estimated that the annual capacity of food canning industries reaches 877 thousand tons distributed as follows:

89 250	tons of canned vegetables;
30 000	tons of canned fruits;
208 250	tons of tomato paste;
88 050	tons of olives and pickles;
385 200	tons of fruit juices;
12 300	tons of date products;
59 150	tons of jam products.

At present, however, the industry is operating below capacity which reaches 58% in case of canned food and 30% and 47% for frozen and dried food respectively. This inadequate performance is due mainly to some impediments facing the industry which include limited supplies of raw material coupled with high cost of production, which makes it difficult to compete with imported canned food products.

### Fish industries

These include canning of fish products, in addition to freezing of products and producing fish powder and oil. It is estimated that there are 186 fish factories in the Arab region out of which there are 135 canning factories, 30 factories for producing fish powder and oil and 21 factories for cleaning, cutting and freezing fish. These projects make use of 186 thousand tons annually which approximates only 6% of the potential catch and 18% of the annual Arab production of fish. Similar to other food industries, the fish industry is operating below

capacity that reaches 50%, and facing difficulties in obtaining specialized and trained manpower in areas of fish canning and technology.

#### Other Agro-industries

Apart from the food items, the Arab world produces a number of industrial crops such as cotton and tobacco which are processed mainly for the local market. As there is a very strong competition from other countries, especially the countries of South-east Asia - in the case of spinning and weaving, and Western Europe - in the case of tobacco processing, the expansion in these industries is better be tailored to suit the modest increases in consumption.

#### Agriculture-related Industries

##### A. Agricultural machinery and implements:

The production of agricultural machinery and implements in the Region is only at its infant stage, confined to assembly lines in a number of countries and the partial production of certain spareparts in Egypt and Algeria. However, judging by the current volume of imports (14000 tractors in 1981<sup>(1)</sup>) and the projected annual imports by the year 2000 for the proposed Arab Food projects only (about 34000 tractors), one cannot fail to detect the great potential for developing this industry. What is true about the tractors is also true about the agricultural implements; such as: seeders, ploughs, harvesters, etc. as they are closely related and their production in the Region has to be coordinated to maximize the proper utilization of the available resources.

---

(1) AOAD, Yearbook of Agricultural Statistics, Vol. 3, p. 381, 1983.

### C. Concentrated Feed Industry

Concentrated feed industry is a new comer to the Region initiated by the fast expansion in the poultry and fattening industries and projects have already reached 500 with an annual capacity of 14.8 million tons of concentrates. However, actual production does not exceed 7 million tons annually, distributed between poultry feed (4 millions), and cattle feed (3 million tons). Countries like the Kingdom of Saudi Arabia and the Gulf states produced 1300 thousand tons of concentrate in 1983, and by contrast, the Sudan where there is a vast potential for utilizing agricultural by-products, has a production level that does not exceed 175 thousand tons. However, with the expansion of meat consumption in the Region, it is expected that the coming years shall witness a great development of this industry. The figures quoted in the study on the Strategy and Programmes of the Arab Food Security project the requirements of feed by the year 2000 as 5.1 million tons, of which 3.7 millions are for the poultry industry and the balance for the fattening plots.

### AGRO-INDUSTRIAL PRIORITIES AND PROJECTS

The seriousness of the Arab Food Security problem leaves little room as to the choice of priorities which, by necessity, centers around the food industry. That seriousness is better reflected in the efforts of the Kingdom of Saudi Arabia, which in the span of 5 years, has been transformed from a country depending absolutely on grain imports, especially wheat, to grain exporter, hopefully by 1986. The ambitious plans to expand grain production are being coordinated with equally ambitious plans to install the necessary mills.

On the regional level, the agro-industrial priorities have already been defined by the ministerial council of AOAD, which comprises all the ministers responsible for agriculture in the Region. The criteria adopted for getting the priorities for the projects to be executed during the first 5-year term included the strategic importance of the food item, the relative contribution of the item in filling the food gap, the priority assigned to the project in the host country, the comparative advantage of its production, the volume of total investment costs, the role of the project in achieving integrated rural development, etc.

The strict adoption of these criteria made it possible to select 53 projects as a first priority (see Appendix). Sectorally, these projects are divided into 16 for wheat and other grains, 10 for sugar production, 21 for animal and poultry productions, 5 for fish production, in addition to a project intended to enhance agricultural production in Occupied Palestine.

Country-wise, the projects have been distributed among 13 Arab countries: Sudan coming on top with 13 projects, followed by Morocco 9, Somalia 6, <sup>Syria</sup> Iraq and Tunisia 4 for each, Mauritania and the Kingdom of Saudi Arabia 2 for each, and finally one project for each of Algeria, South Yemen, the Sultanate of Oman, North Yemen, United Arab Emirates, the Lebanon and Occupied Palestine. The remaining project is for the production of grand-parents for poultry development to be established in four countries; namely: Jordan, Saudi Arabia, Iraq and Morocco.

The total investment costs of these projects have been estimated at 9.5 billion dollars (1975 prices) and they are expected to increase food production by 8.2 million tons of grain, 324 thousand tons of vegetable oils, 671 thousand tons of sugar, 735 thousand tons of meat, 95

thousand tons of eggs, and 1.2 million tons of fish.

Since the approval of these projects, a number of steps have been taken to realize them. It should be noted that most of these projects are at the identification stage with the exception of six projects for which there are semi-detailed feasibility studies and they need to be completed and/or updated. All the other projects require detailed feasibility studies and the funds needed to finance the cost of the studies were estimated at about forty (40) million dollars (1980 prices). The volume and extent of this task raises two issues: one concerns the provision of the funds and the other concerns the institutions that can effectively prepare the detailed studies.

As the Arab food security plan is of an immediate concern, a working group comprising all regional institutions and the Arab private sector, has been established last year under the auspices of the Arab League, to promote and accelerate the execution of the identified projects. One of the first issues of the working group has been to create a revolving fund to finance the cost of the studies, to be reimbursed from the investment funds of the projects concerned. In the process of selecting the consultancies that shall undertake the different studies, the working group is devising a plan assigning the potentially highly profitable projects to the private sector and creating a development fund for the others.

Apart from its active participation in the working group, AOAD has already established a unit for undertaking detailed feasibility studies and is currently preparing two detailed studies - the "Integrated Rural Development" project in Hagga Province (N. Yemen) and "Dairy Production" project (Mauritania).

THE ROLE OF EUROPE IN THE DEVELOPMENT  
OF AGRO-INDUSTRIES IN THE ARAB WORLD

Western Europe has a leading role in the foreign trade of the Arab world, followed alternately by USA, Japan and Canada. In 1981, Western Europe absorbed more than one-third of the Arab exports (98% of which comprised crude oil, iron phosphate and other minerals), while providing 42% of all Arab imports. Significantly, among these come the food commodities, the value of which in 1981 totalled some 6.3 billion dollars; i.e. 50% of the value of all food imports and 30% of all agricultural imports to the Region<sup>(1)</sup>. This reflects to what extent the two regions are inter-dependent. As things stand under the current economic system, this interdependence assigns the role of raw material producer to the Arab world and other developing countries while favouring Western Europe and other industrialized countries with the processed and industrial goods, with all the added value entailed. This formula has crippled the economy of the Arab world among other developing countries and might have helped to precipitate the current stagnation in the economies of the industrialized world especially with the soaring levels of international debt burden among developing countries. In fact, the persistent slackening in the international economic growth of the past years has clearly indicated that the industrialized countries cannot revive fully their economies without first and foremost taking serious steps to develop the economies of the developing countries, including the Arab world; i.e. by adopting the package of the New Economic Order.

Therefore, in order to expand the economies of both the Arab world and Western Europe, the channels of inter-

---

(1) Unified Arab Economic Report (1983), p. 122.

dependence have to be restructured on a more equitable basis, and new areas of cooperation have to be explored. The Arab world needs European technologies and expertise to enhance production and promote its agro-industries. The potential for cooperation exists, especially with the availability of resources, natural or otherwise, which if realized, could set a fruitful and exemplary pattern to the rest of the world.

1. Development of New Sugar Beet Plantations (Syria)
2. Development of Arabian Cattle (Syria)
3. Kadexor Meat Production \*\*\*\* Project (Sudan)
4. Rehabilitation of Three Sugar Projects: Gezira, Halfa and Bahari (Sudan)
5. Development of Assala Sugar Project (Sudan)
6. Development of Helio Sugar Project (Sudan)
7. Development of Jaisal-Paulo-Salerta Project for Crop Production - First Phase (Somalia)
8. Grain Production Project (Kingdom of Saudi Arabia)
9. Expansion of Hajar Sugar Plantation (Iraq)
10. Completion of Al-Hawiyah Sugar Plantation (Iraq)
11. Integrated Rural Development in Nagha Province (N. Yemen)
12. Development of Rainfed Agriculture (Yemen)
13. Qadafia Meat Production Project (Sudan)
14. Goshar Cattle and Sheep Rearing Project (Somalia)
15. Hogaaba Cattle Rearing Project (Somalia)
16. Concentrated Feed Project - 16 Factories (Sudan)

B. PROJECTS AT THE IDENTIFICATION STAGE:

1. Jaisal-Paulo-Salerta Project for Crop Production - 1st Phase (Somalia)
2. Development of Broadbean Production in the Gezira Project (Sudan)
3. Seed Control in Cereal Crops (Tunisia)
4. Fertilizer Application in Wheat and Oil Seeds (Syria)
5. Sigaba Sugar Beet Factory (Yemen)
6. Re-establishment of 15 Tannin sheep Production Farms (Iraq)