

SYRIA'S AGRICULTURE AND ITS ECONOMIC POTENTIALITIES

by

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## INTRODUCTION

The wealth of a nation is measured by the available quantity as well as the quality of its factors of production. The abundance of land, labor, and capital in any country does not necessarily indicate its fortune. To be rich, a country must have a productive land, creative labor, and a well invested capital. Once these factors are made available and properly allocated, the prosperity of a country can be ascertained.

The present utilization of Syrian agriculture is inadequate. The national income is low and, consequently, the individual farmer's income is poor. This situation is due mostly to the inferior social status of the farmer and the inefficient methods of production and distribution of his agricultural products.

The purpose of this study is to find a solution for this situation and to determine how the agricultural economy of the country can be expanded through adequate development of its resources.

The social standing of the Syrian farmer needs to be advanced. Much advancement can be made by educating the farmer and releasing him from the exploitation of the present system of feudal ownership and land tenure.

Increased production can be achieved by improving the ways and means of production together with drafting more land

into cultivation.

The marketing and distribution of agricultural products can be improved greatly. The small quantities of products that each farmer usually handles make individual progress difficult. A more satisfactory result could be attained through private cooperative agencies or through centralized governmental bureaus. Cooperative agencies are more democratic and are highly recommended for the future; but due to the fact that their development requires a large capital and that a long period of time is involved in their establishment, a centralized governmental agency of a voluntary type is justifiable to meet the immediate needs.

As the rural population becomes educated and employs modern methods of production and distribution, the national economy of the country will be greatly improved and Syrian people will enjoy a better social and financial standing.

## PRESENT AGRICULTURAL SITUATION

### Geographical Location

Syria is situated in the midwestern part of Asia. On the north, it is separated from Turkey by the Taurus mountains. On the east, it is bounded by the desert (Badiat Al-Cham) which sets the limit of Iraq. Palestine is located on the southwestern frontier, and Transjordanic is located on the southeastern border. Only the northwestern part of Syria is on the Mediterranean sea while the Anti-Lebanon strip of mountains sets its major western boundaries east of the Republic of Lebanon.

### Syria's History

Ancient Syria was conquered by Egypt in 1500 B.C. Subsequent conquerors included the Hebrews, Phoenicians, Assyrians, Chaldeans, Persians and Greeks. From 64 B.C. until the Arab conquest in 636 A.D., Syria was a part of the Roman Empire. The Arabs made Syria a trade center for their whole dominion, but commerce suffered severely from the Mongol invasions in 1260. Syria remained a Turkish Province from 1500 until the end of World War I.

A secret Anglo-French pact in 1916 put Syria under the French zone of influence. On April 25, 1920, the Supreme Council of the Allies in San Remo entrusted France with the mandate over Syria and Lebanon. Two years later, on July 24,



1922, the mandate was ratified by the Council of the League of Nations.<sup>1/</sup>

During the domination of the Ottoman Empire, France occupied a leading position in the economic life of Syria. Before World War I, France controlled 55 percent of the railways in Syria and Lebanon. The Societe Ottomane du Chemin-de-fer Damas-Hama et Prolongements, which was backed by the Regie Generale Des Chemins-de-fer in Paris, linked Aleppo, Homs, Hama, and Damascus with the Mediterranean harbors of Beirut and Tripoli. The constructions of tramway lines, municipal and public works, electricity supply, and telephone installations were in French hands. On the whole, French penetration in Syria and Lebanon was also very thorough in the religious, cultural, economic and political fields.

When France was entrusted with the mandate, the mandate had to be enforced by troops to put down several nationalistic uprisings. Under French rule Syria was broken into five independent entities. The partitioning of Syria, the cutting off of her state from any outlet to the sea, the deterioration of her economic position after separation from the Ottoman Empire, were to be blamed on France. With the approach of World War II, the French government urgently wanted the friendship of Turkey. As a result, the Sanjak of Alexandretta, with an area of 1,850 square miles and a population of 239,000 was given to Turkey in June, 1939.

<sup>1/</sup>Ben-Horin, E. "The Middle East", 1943, p. 75.

After nationalistic demonstrations in 1939, the French High Commissioner suspended the Syrian constitution. In June, 1941, British and Free French forces invaded Syria and wrested it from the Vichy regime. During the rest of World War II, Syria was an Allied base. Again in 1945, nationalistic demonstrations broke into actual fighting and British troops were rushed in to reinforce the French garrisons. In 1946, after restoration of order, preparations were made to withdraw both British and French troops from Syria.<sup>1/</sup>

Present-day Syria has a one-house legislature whose members are elected for four years by the male citizens over 20. The Prime Minister and cabinet exercise the executive power. The President is elected by the legislature and serves a five-year term.

#### Population

In 1945, Syria had a population of 2,948,15 people. From 60 to 70 percent of its population were directly engaged and dependent upon agriculture for a living and most of the remainder of the population were engaged in the processing and trading of agricultural products. In 1943, 2,630,044 persons were directly engaged in agriculture, and there were only 629,567 persons who had no connection with agriculture. Syrian population and its rates of increase vary from year to year. In general, it can be concluded that the rate of increase is declining.<sup>2/</sup> The recent ten year trend has been

<sup>1/</sup>Kieran, J. "Information Please Almanac 1947", p. 569.

<sup>2/</sup>See Table I.



accentuated greatly by the lack of food, clothing and medical facilities due to World War II.

Many races and religious sects are represented in the Syrian population. So far as religion is concerned, the Syria population is composed of the following: Moslems (Sunni) 69.8 percent; Moslems (Alawite) 11 percent; Greek Orthodox, 4.6 percent; Armenian Orthodox, 3.5 percent; Moslems (Drize) 3.1 percent; others which include Syrian Orthodox and Catholic, Greek and Armenian Catholic, and Israelite, 7.9 percent.<sup>1/</sup> These religious differences have been a factor which contributed greatly to the heterogeneity of the population as well as to the political and social problems. Such diversification of sects has been (especially in the past) the principal basis for class and group consciousness. In 1890, a religious war was waged between Mohamedans and Christians in which there were many innocent victims. Now, the freedom of religion is protected by the constitutional rights of every citizen. However, the recent political disturbances in Palestine created hatred between the Arabs and Jews, not only in Syria but all over the Middle East.

Among the other social elements is the Bedouin population which constitutes a large portion of the Syrian population. Exact figures of the total Bedouins and desert population are not accurate because there is no means of determining, even approximately, the population of the itinerant tribes. But

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<sup>1/</sup>Syrian Republic, Ministry of National Economy, Statistics Department "Statistical report", November 1946, pp. 33-34.

Table 1. Syrian population.<sup>1/</sup>

Year	Total	Increase over the preceding year	Percentage of increase
1936	2,096,486	109,698	5
1937	2,367,734	271,248	12
1938	2,467,027	119,293	6
1939	2,545,209	58,172	2
1940	2,649,056	103,849	4
1941	2,697,620	47,562	2
1942	2,792,388	96,768	3.5
1943	2,860,411	67,023	2.5
1944	2,901,316	40,905	1.5
1945 <sup>b</sup>	2,949,815	48,499	1.6

<sup>1/</sup>Syrian Republic Ministry of National Economy, Statistics Department, Statistical report, Nov. 1946, p. 4.

<sup>b</sup>For 1954 figures: "Statistical report" issue of June, 1947, p. 13.

recent statistics presented by the United States-Syria Agricultural Mission estimate the Bedouin and Semi-Bedouin population to be about 500,000. Emphasis should be given to this group of people because they have contributed greatly to the general culture of the country as well as to its social heritage.

Except among the inhabitants of the northwestern section of Syria where the language is Turkish, the common language spoken by the majority of the population is Arabic. This is the most unifying element for a heterogeneous population with as many as 20 religious sects, most of which are the offshoots of Islam, Christianity, or Judaism.

The distribution of this population varies with certain regions which are thickly settled, to large tracts of land that are totally uninhabited. As previously stated, the Syrian population is largely rural. Migration from rural to urban districts has been behind that of most western countries, but the industrial movement and the rapid improvement in transportation are operating to increase urbanization at the expense of the rural population. The proportion of foreign residents in Syria has made alterations evident in the political and economic factors of the moment. In 1933 there were as many as 25,422 foreigners in Syria. Of this total, 5,807 were French, who were for the most part personnel of the French High Commission, the experts and advisors attached to their government, and the military forces.<sup>1/</sup> Due to the change in the

<sup>1/</sup>Himadeh, S. B. "Economic organization of Syria", 1936, pp. 20-26.

political status of Syria which occurred in 1946, the majority of the French have left the country.

#### Present Agricultural Situation

Syria is predominately an agricultural country, and has been since the beginning of its history. Although Syria covers an area of 60,000 square miles, only 8,000 square miles are under cultivation at the present time. Only a small portion of this area is under irrigation for the growing of fruit trees and vegetables. Most of the cultivated land is utilized for the production of grains. Under dry-farming conditions the system of fallowing half of the land is used. Actually, not more than 6 or 7 percent of the total area is under cultivation during a single year. The uncultivated area consists of much waste land and moderate forest areas, which are restricted largely in the Alouite and Anti-Lebanon ranges, and extensive desert lands where the Bedouins graze their flocks and herds.<sup>1/</sup>

The physical features of Syria vary. Rainfall ranges from less than 5 inches a year (over the desert lands bordering Iraq) to more than 25 inches along the Mediterranean sea area. Rainfall is seasonal; most of it falling between December and February. The temperature is moderate throughout the year along the sea shores. In the interior plains wide differences in temperature occur between summer and winter.

<sup>1/</sup>United States Department of Agriculture "Report of the United States - Syria Agricultural Mission", Sept. 1947, pp. 4-9.



In topography, the country varies widely from the coastal ranges of the Alaouite and Anti-Lebanon in the west to the expansive plains and river valleys in the interior. This variation provides for potential diversification of crops.

Present agricultural activities in Syria are obsolete. Animal life is still connected with the old fashioned methods followed by the nomadic tribes centuries ago. The hand sickle and wooden plow dating back to the Pharaonic ages are still in practice. Agricultural power machines are rarely employed. With the exception of the cultivated areas in Jezireh and some places around Damascus, cattle and horses are used for draft power. Pumping water for irrigation is accomplished largely by using horses, camels, and sometimes donkeys for providing the power (Naoura). In some places, like the Salamiya, the farmers still resort to the old Artesian wells that were used by the Romans thousands of years ago. The United States - Syria Agricultural Mission estimated that not more than 1,000 square miles of land are actually under irrigation, even by crude methods. Most of the waters of the rivers Orontes, Euphrates, Balikh, Khabour, Tigris, and other smaller sources, as well as practically all the water that flows down the mountains and hills during the rainy season are lost in the sea. Intensive agriculture is rarely applied; thus, low yields and low production are common, due to the lack of modern methods and techniques.



The farmer usually is poor and uneducated. His way of living is far from modern. Having almost no private ownership of the land he cultivates, the farmer is always at the mercy of the landlord. The peasant proprietor has neither the means nor the knowledge to improve his holdings, and the tenant has no inducement to do so. Many of the tenants live on or below the border-line of adequate nutrition and begin and end their lives in debt. Education and propaganda are liable to be ignored or misinterpreted by an illiterate adult population. All this poverty of the farmer is due mostly to the feudal system of land tenure.

#### Cultivated Crops in Syria

The varied climate of Syria has made possible a wide variety of crops. Wheat and barley are the leading cereals with grain sorghum and corn ranking next. Cereals, which are the most important crops grown in the country, occupy about 78 percent of the total area under cultivation, especially in the plains of Homs and Hama, the Euphrate, the plains of Hauran, and the coastal regions. Wheat is Syria's most important crop. About half of the cultivated area of the country is used annually for the production of wheat. Huvelin in his report, "Que vaut la Syrie?" in 1920 estimated the potential area for wheat cultivation at 2,000,000 hectares, with a minimum yield of 1.4 tons per hectare making a total potential yield of about

3,000,000 tons for all the Syrian states.<sup>1/</sup> Of this estimated area only 810,485 hectares were cultivated in 1946 with a yield of 568,774.9 tons. Barley is next in importance and occupies about one-fourth of the cultivated land being planted. In certain poor regions, especially during World War II, barley was utilized for human consumption by mixing it with a small proportion of wheat to make bread. Of the total of 1,440,000 hectares of land that potentially could be planted with barley, as Mr. Huvelin estimated in 1930, only 370,799 hectares were planted with barley in 1946. In spite of the previous illustrations, the annual production is normally greater than the local demand. Much of the excess is exported to neighboring countries for fodder and to whiskey manufacturing countries where Syrian barley is in demand because of its white color.

Rice culture was encouraged during World War II. Of foreign origin, it was grown to a limited extent in only very moist soil. Formerly, Syria had depended on the importation of rice for its population, but the difficulties confronted during the war in securing rice from outside sources induced farmers and the government to promote its cultivation. In 1932 the cultivated area planted to rice was 405 hectares. The present area amounts to 7,609 hectares with the total production of 12,000 tons.

The cultivation of cotton has been subject to great

<sup>1/</sup>Himadeh, S. B. "Economic organization of Syria", p. 76.

Table 2. Acreage and yield of crops in Syria for the year 1946.<sup>1/</sup>

Name	Hectares	Yield (tons)	Average per hectare (tons)
Wheat	810485	567874.9	.700
Barley	370799	292394	.661
Lentil	42693	19453.2	.456
Oat	7305	9010	1.154
Chickpeas	34183	17004	.497
Peas	322	142.5	.440
Peanut	421	503.8	1.197
Corn (white)	94973	59937	.619
Corn (yellow)	23665	27516	1.162
Tobacco	8348	12358	1.196
Castor-oil plant	115	81	.704
Water melon	52225	500735.2	9.586
Cantaloupe	17041	96173.4	5.643
Sorghum	69001	96874	.751
Horse-beans	16032	15099	.950
Sesame	9311	2968	.476
Vegetable marrow	3586	11453	1.199
Potato	3304.0	15059.7	4.556
Alfalfa	899	15200	17.078
Onion	5268	53661.4	10.116
Hemp	4740	2689	.567
Sugar Cane	92	2065	22.445
Cotton	19937	4784.6	.241
Rice	7609	12009	1.577

<sup>1/</sup> Syrian Republic Ministry of National Economy, Statistics Department, "Statistical report", 1947, op. cit., pp. 92-95.

changes. During the Middle Ages, Syria was the chief center of the World's cotton cultivation. However, the importance of cotton had declined and its production was practically nil, until the time of the French occupation, when an attempt was

made to revive production. The Syrian government has been striving to increase the quantity and to improve the quality of Syrian cotton. The government is making an effort to secure modern ginning and pressing factories, to distribute high quality seeds without cost and to establish experimental stations. Also, land newly given to the production of cotton was exempted from the tithe for several years. In certain cases bounties were granted. ✓ Mr. Achard, one time agricultural adviser to the State of Syria, estimates that 2,500,000 hectares could be given over to cotton growing, of which 800,000 hectares are irrigable and the remaining 1,700,000 are arid. Of the previous area estimated as cultivable for cotton, only 19,837 hectares were under cultivation in 1946 with a total production of 4,784 tons of fibers. Growing conditions in the plains of Jezireh and Euphrate are highly suitable for cotton production, and with the hope of future development of irrigation and intensive cultivation in these areas there is a great possibility that cotton cultivation in Syria could be greatly increased. Adversely agricultural reports show a decline. The largest crop was in 1926 when the total area allocated to cotton was 79,280 hectares with a total production of 98,890 tons of fibers.

Tobacco may be considered next in agricultural importance. It is grown mostly in the region of Latakia. In spite of the excellent quality of Syrian tobacco, careful tobacco breeding

✓ Rimdech, S. B. "Economic organization of Syria", p. 80.



and selection have never been practiced in the tobacco-growing region of Latakia. Tobacco manufacturing was conducted under a governmental monopoly during the Turkish regime; at present it is controlled by the Regie des Tabacs. England and the United States are the chief importers of Syrian tobacco.

Silk production was a prosperous industry in Syria, where whiteberry trees are grown for the feeding of silk worms, but this resource is limited now for many reasons. The most important is the economic factor which offers the possibility of importing silk at a cheaper price and utilizing the areas devoted to whiteberry trees to grow more valuable fruit trees, such as apples. Notwithstanding the increasing competition that the Syrian silk has been facing in the world market, the production of artificial silk has developed rapidly with a consequent lower cost of production, thus causing the silk industry in Syria to decline.

Horticulture is mostly limited to the Oasis of Damascus, Douma, Aleppo and Idlib. Fruits are varied and abundant, the most important of which are apricots, olive trees and nuts. Syria, considered among the leading countries in the production of apricots, grows this fruit mainly in the Oasis of Damascus (Ghouta). Olive trees are found in the northern part of Syria and in the oasis of Damascus near Douma. Olive oil is used in the manufacture of soap, and it is also domestically used in the preparation of foods.

Citrus fruits are grown along the Mediterranean shore where



Table 3. Area, yield, and number of fruit trees in Syria. <sup>1/</sup>

Name	Area	Yield	Number of trees
Olive	78108	41899	8845039
Apricot	6671	21356.6	2275378
Grape	58886.8	170835.9	49212780
Apple	2229	5669.3	770191
Pear	1892	1488.5	503767
Peach	590.5	1214.9	199405
Mulberry	5267.5	24480.3	1893195
Fig	11319.6	9032.6	2886104
Cherry	1075	1995	249765
Walnut	3103.6	2122.3	1810362
Pistachio	2485	1178.8	546588
Orange	344	1803	198225
Lemon	296	2635	263325
Others	111063	14391.9	3971282

<sup>1/</sup>Syrian Republic Ministry of National Economy, Statistics Department, "Statistical report", 1947, pp. 86-97.

yields are abundant and fruits are of excellent quality. Previous to World War II, surplus fruits were exported to Europe, principally to France, England, and Germany.

### Animal Life in Syrian Agriculture

Although obsolete methods are used for producing animals in Syria, flocks and herds are the most important source of income for a large portion of the population, especially the Bedouins. Technical methods applied to producing livestock in Syria are nil. The Bedouins go from one grazing place to the other according to seasons. They harvest the scanty grass with their flocks of sheep and goats and their herds of camels. The Bedouins are the main source of meat for the Syrian population. They raise the bulk of the country's livestock and produce most of its meat, wool, and dairy products. These nomadic sheep raisers who are poorly educated are curtailing the triple-purpose (wool, meat, and milk) sheep production in the country. At present the average sheep produces three pounds of wool and 50 pounds of milk per year. Scientific investigations should prove that an animal can be developed that is superior in all three qualities, or that it would be better to develop specialized breeds in Syria.

Horses, mules, camels, donkeys, buffaloes, and pigs are also important sources of wealth to the country, but to a more limited extent.

The inferiority of livestock in Syria is due to many factors. The unscientific breeding and care accounts for most of the defects in this industry. Grazing regions are available only after harvest which is during the spring. During the re-

remainder of the year, feed is so scarce that dry or green fodder is fed to the livestock. This shortage of pasture lands and the ignorance of the Bedouins in caring for their animals render the herds vulnerable to disease.

The Damascene cow is a superior animal for dairy purposes. Its yield in milk and the quality and percentage of fat in the milk are high. More care is given to the Damascene cow but still there is much room for improvement.

The "Jolany" cattle are the major source of meat and power used on the Syrian farms. The animal is strong and short. The care of the livestock is very primitive and needs to be amended.

Dairy manufacturing and modern creameries are located in cities and towns, but most of the Syrian dairy products are produced on the vast pasture land of eastern Syria. There, milk and its products are simply incidental and very secondary. Sanitation in the processing and handling of milk products is limited, and there is little protection for the consumer against bacteria in the milk. Government control is only concerned with the adulteration of milk, and similar regulations apply to cheese production. However, these regulations are seldom complied with. Native butter (samm) is chiefly produced by the Bedouins and used to a great extent by all the population as a substitute for fats. Large quantities of this butter are exported yearly to the neighboring countries and to the United States. Other dairy products are cheese, sour milk and drain-

Table 4. Animals in Syria for the year 1946.

Name	Number	Name	Number
Cattle	371262	Goat	1237343
Dairy cattle	73174	Camel	47761
Horses	110691	Buffalo	5355
Mules	49140	Pigs	441
Donkeys	232155	Beehives	39935
Sheep	3259607	Poultry	3583899

Table 5. Animal products for 1946.

Name	Quantity (tons)	Name	Quantity (tons)
Wool	9479.6	Honey	130.55
Milk	199304.15	Butter milk	73650
Cheese	7045.83	Eggs	100,000,000 (in number)
Butter	547.2	Eggs (other than chicken's)	6137000
(Samm)	5673.25		

Note: These data were collected from the Statistical Report of the Syrian Department of Statistics for the year 1946.

ed sour milk. Such products are usually produced at home under very primitive conditions. Most of the Syrian dairy farms still operate along antiquated lines. The result is that the country annually imports large quantities of dairy products which could be produced at home if modern methods were employed.



## Agricultural Industries

Agricultural industries are so limited in number and scope that they hardly need to be mentioned. However, potentially these industries can be improved if an adequate supply of capital can be acquired.

At present, the most important agricultural industries are the olive-oil, soap, tobacco, silk, canning, and sugar industries.

Olive oil extraction, which goes hand in hand with soap making, is a prosperous resource for the country. The people of Syria have a fondness for olive oil in the preparation of their food. Olive trees are grown in areas that meet their biological and climatic requirements such as the regions of Douma and Latakia. Olive oil extraction factories lack the technique of modern mechanization, and they are operated under a craft system of private enterprise. The quantity of oil produced depends on the olive crop, which in general, is good every other year. Of the oil produced, a substantial amount is exported, depending upon the olive crop and the price prevailing in the importing countries. According to Mr. S. B. Himadeh, about 20 percent of the quantity produced is usually exported; the other 80 percent goes for local consumption and for soap manufacturing. The soap industry is very primitive in its methods, along with having many other obstacles. The most important of these includes the poor methods of production and foreign competition. In spite of these obstacles the



industry provides for local needs and in competition with the soap coming from Palestine. Toilet soap is very seldom manufactured and is imported usually from France, England, and the United States.

Cigarette factories are operated as a governmental monopoly and must provide for the Syrian demand. The import of cigarettes is restricted. Tobacco production is concentrated in the Latakia area while cigarette manufacturing is centralized in the cities of Damascus, Aleppo, and Latakia.

The silk industry formerly was prosperous. However, the widespread use of artificial silk and the general depression of the 1930's greatly affected silk prices. The possibilities of importing silk at a cheaper price from China and the potentiality of growing more valuable fruit trees in the areas devoted to whiteberry trees has decreased the output and revenue from this industry.

The canning industry has proved to be successful, although it could be expanded to include a greater variety of food-stuffs. The two main canning plants are located in Damascus and are equipped with new machines. This modern canning of fruits and vegetables meets the local demands in Syria, and greatly aids the seasonal conservation of fruits and vegetables, especially where no refrigeration and storing facilities are available.

A new sugar factory has been completed in Homs, where biological and climatic conditions are ideal for the raising

of the sugar beet. The directors of this factory are trying to encourage farmers in the plains of Bekka, Lebanon, to expand the cultivation of sugar beets and has assured them of satisfactory prices for their product. The cooperation of these farmers will accelerate sugar production in Syria and will ascertain the success of this industry. Some political circles in Lebanon are not in favor of this project on the grounds that if many fields are to be cultivated with sugar beets, there would be a reduction in wheat production in Lebanon, and thus, according to their interpretation, will further increase the dependency of Lebanon on Syrian wheat. ✓

Among other agricultural industries, the following enterprises may be mentioned: the milling of flour, the production of macaroni, the manufacturing of alcoholic products, and the hemp enterprise. Hemp fiber is used almost exclusively for making rope. The licorice root is processed locally and some of the finished product is exported.

The future of these industries depends upon one factor, modern mechanization. Raw materials are abundant and hand labor is comparatively cheap; but if up-to-date methods of production are not applied and modern machines are not obtained, the future of these industries will have to fear foreign competition. With abundant "matieres premieres", enough labor, and modern techniques in production, the future of agricultural industries is very promising.

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✓ The Syrian sugar company Al-Isalah Arabic newspaper, New York, December 20, 1948, p. 2.

Table 6. Agricultural industrial resources in Syria for  
1945. 1/

Name	Quantity (in tons)
Olive oil	12791.2
Dried apricots	539
Pressed apricots	1561
Apricot meal	5284
Wine	598.7
Arak (Syrian drink)	58534.5
Raisins	7880.8
Dried figs	8700.3
Dried pistachio	505.3

1/ Syrian Republic Ministry of National Economy, Statistics Department, "Statistical report", 1946, p. 44.

### Exports and Imports of Agricultural Products

Formerly, all Syrian exports were agricultural in nature. However, since the beginning of World War II, the textile industry and cement manufacturers have exceeded local demand and are now finding markets abroad, especially in the surrounding Arabic nations of Egypt, Lebanon, Transjordan, Iraq, and Saudi Arabia. In past years, Syria has enjoyed a considerable trade with Palestine, the exports far outweighing the imports from this country. The readjustments of the political relationship between the two territories will naturally restore the trade position.

The agricultural exports consist mostly of cereals, olive oil, tobacco, apricot paste, licorice root, pistachio nuts, silk, and wool.<sup>1/</sup>

In 1937 Syria's imports amounted to 53.6 million Syrian pounds while exports were valued at 25.7 million pounds.<sup>2/</sup> The export-import market has changed since 1937. In 1945 the total exports from Syria were valued at 43,842,000 Syrian pounds and imports were 130,624,000 Syrian pounds. Cloth, oil, and foodstuffs were major imports.<sup>3/</sup>

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<sup>1/</sup>U. S. D. A. "Report of the United States-Syria agricultural mission" op. cit., p. 9.

<sup>2/</sup>Economic revival in Syria Great Britain and East, Vol. 67, Aug. 21, p. 122.

<sup>3/</sup>Kieran, John, "Information Please Almanac, 1947", p. 570.



In 1938, Great Britain ranked first in the supply of Syrian imports, after being third during 1937 and 1936. France dropped to second, and Japan to third. The United States ranked fourth in imports to Syria after occupying sixth place for two previous years. Roumania was fifth and Germany came up to sixth place after ranking ninth in 1937. Palestine took 27.5 percent of all Syrian exports in 1938 as against 31 percent in 1937. France was third in 1937 and second in 1938; Italy came third and Great Britain ranked fourth, against fifth place in 1936 and 1937.<sup>1/</sup>

Table 7. Classification of countries importing Syrian products. 1936-1946.<sup>2/</sup>

Country	1	36	37	38	39	40	41	42	43	44	45	46
Egypt	5	7	6	8	6	8	7	6	6	2	5	
U.S.A.	3	2	5	3	2	2	4	8	8	6	3	
France	2	3	2	2	1				2	5	1	
England	4	5	4	4	7	3	3	2	1	3	7	
Iraq	8	8	9	9	4	4	6	3	4	4	4	
Palestine	1	1	1	1	3	1	2	1	3	1	2	
Transjordan	6	9	8	6	5	7	5	4	7	7	6	
Turkey	10	6	10		8	6	8	10			9	
Russia							1	5	10			
Iran						9	9					
Saudi Arabia							10	2	9	9	10	
Chiprus								7	8	8		
Switzerland						5						8
Japan					9							
Italy	7	4	3	5						10		
Germany		10	7	7								
Belgium	9			10								
Roumania					10	10						

<sup>1/</sup>"Expanding trade of Syria and Lebanon" Great Britain and East Vol. 50, April 28, 1938, p. 473.

<sup>2/</sup>Sharif, Mounir "Al kadaya Al iktisadia Al koubra" (Great economic problems in Syria and Lebanon), 1947, p. 119.



Table 8. Classification of countries exporting to Syria, 1936-1946.<sup>1/</sup>

Country	1	36	37	38	39	40	41	42	43	44	45	46
Chiprus											9	
Egypt				10	10	5	6	6	8	8	9	
U.S.A.	6	6	4	4	4	4	6	3	7	5	1	1
France	1	1	2	1	1	10						3
England	3	3	1	2	3	8	5	5	2	3	2	
India	9	10					2	1	1	6	8	6
Iraq	10		10		9	1	2	2	1	2	4	
Japan	2	2	3	3	2	3	8	10				
Palestine	8	4	7	9	7	4	4	3	4	4	7	
Transjordan							9				9	10
Iran								9	8	7	6	
Switzerland								10	9			
Italy			7	8	5	8						8
Roumania	7	5	5	6	5							
Germany	4	9	6	7								
Belgium	5	8	9	8	6							
Russia											10	10

<sup>1/</sup>Ibid., p. 117.

Table 9. Syrian trade with the Middle East.<sup>1/</sup>

Country	1939	1945
Egypt	SL 5426900	SL 15610300
Iran	SL 460060	SL 13532500
Iraq	SL 2916000	SL 15503600
Palestine	SL 16746200	SL 29319400
Turkey	SL 1547500	SL 2799400

<sup>1/</sup>United Nations "Economic Report, Salient Features of the World Economic Situation, 1945-47", Jan. 1948, p. 103.

Note: The figures presented in the United Nation's report represented the total of imports and exports in thousand units of local currency (in Egyptian pounds, Iranian Rials, Iraqiian Dinars, Palestinian Pounds, and Turkey's Lira). The transformation to Syrian Pounds is done here according to:

"International Monetary Fund per values of Member Currencies as end of July, 1948", Information Please Almanac, 1949, p. 351.

## THE SOCIAL STATUS OF THE SYRIAN FARMER

Now that a brief review of the agricultural situation in Syria has been presented, it is desirable to develop ways and means by which Syria's agriculture may enjoy prosperity, and advance the national economy of the country.

Parallel with the recommendations of the United States - Syria Agricultural Mission, the development of agriculture in this country should achieve the maximum possible contribution toward raising the standard of living through increasing per capita and total production.<sup>1/</sup>

Several factors need to be considered in discussing the improvement of agriculture in Syria. "On the social side, there are a number of related problems arising from the system of land tenure and the social organization".<sup>2/</sup> On the economic side, the amelioration of the present means of exploitation and the addition of new land to cultivation will ascertain what progress can be made in the agricultural economy of the country.

The following discussion will be subdivided into three main sections. These sections are:

- I. Social status of the farmer
- II. Potentialities in production
- III. Potentialities in marketing and distribution  
or agricultural products.

<sup>1/</sup>United States Department of Agriculture "Report of the United States - Syria Agricultural Mission", p. 2.

<sup>2/</sup>Allen, B.A. "The agricultural development of the Middle East", 1946, p. 13.

"The inhabitants of a country represent its greater potential resource. If these people are literate, healthy, and productive, they are an economic asset, not only to themselves but to the whole nation. If they are illiterate, diseased, and unproductive, they become a national liability" <sup>1/</sup>

Due to the fact that the Syrian population is mostly agricultural, the social welfare of the rural population immediately assumes vital significance in a study of Syria's economic potentialities.

The prevailing social conditions of the Syrian rural population are far from satisfactory. "The standard of living of the rural population as a whole is at the barest subsistence level, with inevitable consequences of disease, short life expectancy, and illiteracy" <sup>2/</sup> In raising this standard of living, which is an important factor in ameliorating the living conditions, it is most likely that there will be an increase in agricultural output, as human effort is the most important single factor of production.

The unequal distribution of wealth and the concentration of the national income (especially that part which pertains to agriculture) in relatively few hands, leave the masses with a depressed standard of living. To improve this condition, many factors should be considered. The most important are rural education, labor relations and land tenure.

<sup>1/</sup>Allen, H. B. "Rural education and welfare in the Middle East", 1946, p. 2.

<sup>2/</sup>United Nations "Economic report, Salient features of the world economic situation, 1946-47", 1948, p. 90.



## Rural Education

Education is a slow but a sure process. In direct relation to its spread, a people may be progressive or decadent. Advancement is to be expected from educated people. Ignorant masses tend to be dangerously retrogressive.

This phase of study depends wholly upon governmental sense of duty and collaboration, where the individual can interfere only through his right to elect his proper representatives. A country which derives a high proportion of its national income from the production of its rural workers cannot afford to neglect the development of such valuable assets.

In the usual conception of this term education would be applied differently to the youth than to the adult population. Accordingly, two procedures are to be followed in the educational process. One plan, to be applied to youth, would provide them with elementary and secondary schools, as well as colleges. The second would be concerned with adult education, and would include mostly experimental work and extension services.

Here also, the process covers two phases: the urban and the rural education. In cities the available educational facilities are satisfactory. A large number of elementary and higher institutions adequately provide necessary facilities. In 1946, there were 821 state schools, 303 private schools and 41 foreign schools teaching about 165,000 pupils.<sup>1/</sup> This number

<sup>1/</sup>The Statesman's Year-Book, 1948, p. 1277.

has increased to 1191 elementary and secondary schools with a total enrollment of 172703 students in 1948.

Facilities for rural education in Syria are limited. There are few schools in the rural areas and farmers fail to send their children because of poverty, the effect of the feudal system, and the need of children to help at home with the farm work.<sup>1/</sup> The lack of education is due largely to the financial status of the individual farmer and the lack of educational facilities provided by the government. As to the effects of the feudal system, it is said that the antagonistic opposition of feudal lords to education is based on the assumption that it will be easier for them to exploit the illiterates. Accordingly, there must be a complete change in the feudal system if educational progress, as well as agricultural improvement and a higher level of living are to be expected.

The facilities for education in Syria need to be expanded and the methods used need to be improved.

The elementary schools for boys and girls should be similar to those in Palestine. There, agricultural courses are given to students beginning with the third elementary standing. This is not true of urban schools. Each school is provided with a small garden where the boys are taught to apply the best practices and improved methods of cultivation. These small

<sup>1/</sup>Allen, H. B. "Rural education and welfare in the Middle East", pp. 4-8.

gardens arouse interest among parents of the children who often provide extra land for extending the gardens.<sup>1/</sup> The student not only is taught to take care, but applies his knowledge to his father's garden. These school gardens are models for the adult population of the area. The application of such a program in Syria has been strongly favored and encouraged by the United States - Syria Agricultural Mission of 1947.

There are two intermediate schools in Syria, one at Selemya in the Homs-Hama region and one at Bouqa near Latakia. The present conditions of these two schools are poor and need much improvement. They offer a two year course in agriculture but should be equipped immediately to function as three year intermediate schools of agriculture. The United States - Syria Agricultural Mission recommended the establishment of three additional intermediate schools of agriculture, one to serve the Aleppo region, one for the two Mehazates of Jebel Druze and Houran, and one for the Euphrates and Djesirah. With these five schools all the productive rural areas of Syria will have satisfactory intermediate facilities to teach their children to become better farmers with a good understanding of the modern techniques used in agriculture. The graduates of these schools will either return to their farms and increase the efficiency of production in their areas, continue their education, or work at the government's experiment stations.

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<sup>1/</sup>Keen, B. A. "The agricultural development of the Middle East", 1946, p. 41

Institutions of college standing in agriculture do not exist in Syria although the American University of Beirut, Lebanon, offers a two year course of Junior College equivalence. A plan for a college of agriculture is under study. Once the plan is accomplished, this school will either be affiliated with the Syrian University in Damascus or will be located, under separate administration, in Aleppo.

Due to the lack of well trained personnel in agriculture, the Ministry of Education through the advice of the Food and Agricultural Organization of the United Nations has to rely upon foreign experts to teach in Syria. Graduates of the intermediate schools can teach in the elementary rural schools.

In conclusion, the Ministry of Education, in collaboration with the Department of Agriculture of the Ministry of National Economy, should provide immediate facilities for elementary rural education along with the improvement of the two existing intermediate schools. In the near future, the three other intermediate schools should be opened together with the college of agriculture, which preferably should be located in Damascus.

To carry on such a program the Syrian government should appropriate an adequate share of the national budget to education. The erection of new schools, along with improvements of the present ones, requires a large amount of capital; and the provision of only 9 percent of the Syrian budget to education, as was the case in 1946, should be increased



enormously.<sup>1/</sup> In 1946, the total budget in bill was 1,2000,000 Syrian pounds while the United States - Syria Agricultural Mission suggested 1,500,000 Syrian pounds for a total of four schools. Also 325,000 Syrian pounds were suggested as an annual appropriation required for the four schools to meet up-keep and other recurrent items.<sup>2/</sup>

In addition to these institutions, the Ministry of Education should appropriate certain funds to take care of scholarships for students to study agriculture abroad. It is advisable that at least 50 such scholarships be constantly maintained for competent students.<sup>3/</sup> The cost of such scholarships, computed on a similar basis with the Iraqi and Egyptian appropriations for scholarships abroad will be about 2,500 American dollars for each student every year.

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<sup>1/</sup> Information Please Almanac, 1948, p. 589.

<sup>2/</sup> United States Department of Agriculture "Report of the United States-Syria Agricultural Mission", pp. 55-75.

<sup>3/</sup> Ibid., p. 75.

### Agricultural Experiment Stations and Extension Service

The amazing discoveries of research and experiment stations in various parts of the world lead to the conclusion of their inevitable need in Syria.

Syria, like any other nation, has many of its problems unsolved. The finding of solutions to these problems and facilitating their practical application will necessarily assure the agricultural progress of the country. Of course, many of the problems confronting Syria's agricultural prosperity have similar causes and consequences in other parts of the world. Also many of the solutions concluded by other countries can be applied to certain problems with satisfactory results. But still, most of the Syrian problems have to be studied locally, not only within the boundaries of the country itself but in special regions of the country with respect to topography, climate, soil, and other peculiar factors and conditions.

Although it has been mentioned previously that the erection of experiment stations is needed for the adult population, experimental work and laboratories are the shrine of all people irrespective of age and profession.

The establishment of such agencies have been urgently recommended by most study groups, missions and conferences in the Middle East in general and in Syria in particular. The sole purpose of these institutions is the advancement of the farming industry and the welfare of the people engaged in it.

When the discoveries of research, the results of successful experiments, better seeds, and improved animals are placed in the hands of the practicing farmers, Syrian agriculture can be assured of its appropriate position in world agriculture.<sup>1/</sup>

The existing experimental farms, seed-improvement centers, and animal breeding stations are functioning principally as nurseries and demonstrational plots. There are some limited tests of cereal varieties.<sup>2/</sup> Recently, the government's experiment station in Damascus and Aleppo have started intensive research work on wheat and sheep. The wheat study, conducted in Damascus, has as its purpose to find which varieties can meet the local climatic and soil conditions and at the same time have a strong resistance to rust. The Aleppo center is working on cross breeding to develop a stock of sheep having both high meat value and long, soft wool.

With respect to the number and location of the needed experiment stations for Syria, one important thing should be considered; this pertains to the fact that many of the problems in the country are regional and not national. Thus, in surveying the location of such stations, at least one station should be appropriated to each of the nine Mohafazats; however, the United States - Syria Agricultural Mission of 1947 suggested that due to the similarity of conditions in Djebel Druze and

<sup>1/</sup>Allen, H. B. "Rural education and welfare in the Middle East", p. 15.

<sup>2/</sup>Keen, E. A. "The agricultural development of the Middle East", p. 84.

Hauran, one station should be enough for these two Mohafazats. The same recommendation was made for the Mohafazats of Homs and Hama. But together with the Mohafazats and their special regional problems in determining the location of the experiment stations, the location of the intermediate schools of agriculture should also be considered. The school gardens recommended for the practical experience of the students of elementary schools are far from meeting the minimum requirements of intermediate schools at which more advanced work should be given. Each secondary or intermediate school should be very close to an experiment station; this will facilitate "economy in operation, utilization of facilities, concentration of library facilities and utilization for demonstration".<sup>1/</sup> Consequently, it is recommended that each intermediate school should have one experiment station and a central or National experiment station should be located near Damascus.

As to the setup and internal organization of the needed experiment stations, each Mohafazat has its characteristically important problems. The erection of the various stations should thus meet the local conditions and requirements of the region where it is placed. For example, a department of Animal Husbandry is needed less in Latakia than in the Jolan region where beef cattle are important. The Central or National Ex-

<sup>1/</sup>United States Department of Agriculture "Report of the United States - Syria Agricultural Mission", p. 25.



periment Station of Damascus should include the following departmental<sup>1/</sup>:

- Department of Farm Crops and Soils
- Department of Horticulture and Vegetable Crops
- Department of Animal Husbandry
- Department of Botany & Plant Diseases (Plant Pathology)
- Department of Zoology, Entomology and Apiculture
- Department of Animal Diseases and Parasites
- Department of Rural Social Science
- Department of Agricultural & Industrial Engineering
- Department of Statistics

Such experiment stations need, among other things, well trained personnel and experts. Due to the lack of technicians in the various fields of agriculture in Syria, it has been recommended in several instances, that it is essential to seek the assistance of technical experts from outside the country. The various experts may be made available through the Food and Agricultural Organization of the United Nations, or through other international agencies, or governments having the facilities for training the kind of experts needed (e.g., Egypt).<sup>2/</sup> The employment of these foreign experts is of temporary necessity and as soon as Syrian specialists are available, the services of the foreign experts will not be needed.

<sup>1/</sup> Ibid., pp. 80-84.

<sup>2/</sup> Food and Agricultural Organization of the United Nations "Report & Resolutions from Commission I" Sub-Committee B (Near East Region), End Draft, p. 5.

There must be at least one foreign expert to act as director for each of the various departments in each experiment station. Also the Central Experiment Station of Damascus with its various departments and subordinate directors, should be supervised by a foreign expert. The other stations do not necessarily need a foreign expert as supervisor since they will be under the general direction of the Central Experiment Station of Damascus.

It should be born in mind that beside having these stations and the needed technical personnel, adequate laboratories and research facilities should be provided.

Now that the need for these stations, their location and their internal organization has been presented, the next step is to appropriate the necessary funds for them. In spite of the urgent need for these stations, there are other matters of equal importance beside experiment stations that should be considered. Due to the limited Syrian budget all the proposed matters cannot be met at once. As soon as the plans for further development of Syrian agriculture have been studied from the financial and other viewpoints by special committees appointed for such purposes, it becomes the duty of the parliament to evaluate these recommendations presented, and to approve their application in the light of their relative importance and the availability of funds for financing them. Also with respect to the experiment stations themselves, it is almost impossible to create all the stations with their full laboratories and research facilities at any one time. It is recommended that

one or two stations be built and equipped in each year as funds can be made available. Even within each station not more than one or two laboratories and departments should be established in any one year. If such work is carried on successfully and continually, it is hoped that within a period of not more than ten years, Syria will have her needed experiment stations with full departments and facilities.

It is not enough that special problems have been studied. The results obtained should be made known to all the interested farmers. This cannot be done without the extension service. In the present Department of Agriculture, the Bureau of Agricultural Guidance provides free pamphlets to direct the farmers in following the proper technical methods in agriculture. Such pamphlets are edited by the agricultural experts in the Bureau and are written simply in a form easily understood by the average farmer. Beside the Bureau of Agricultural Guidance, each experiment station should be provided with extension service to make available to the farmers the findings and results of the various studies undertaken. Also, the stations should provide extension teachers and workers to travel in each Mohafazat, to guide the farmers in their work and to study their needs.

### Land Ownership

The fundamental pillar of agricultural activities is centered around the forms of land ownership. It is within the range of such ownership that agricultural prosperity may spring. In spite of the fact that every type of land ownership has its characteristic advantages with respect to the "milieu" where applied, there is also much waste and devastation which has condemned, impoverished and, consequently, lowered much of the agricultural land to submarginal levels.

There are four principal kinds of land ownership in Syria. These are the Miri, the Mulk, the Waqf, and the Masha.

The Miri is a "state domain, rented out to various tenants for different periods of time or leased indefinitely to a farmer and his progeny against the payment of a regular tax".<sup>1/</sup> Together with the tax the landholder in this case pays fees for transfer and succession and the cost of the "tabu" grant. This type of tenure originated during the Ottoman Empire, when the State transferred large estates to feudal lords for their political support. The holder has the right to use the property as he desires; he may sell, mortgage or lease the property but cannot convert it into "waqf" except with the consent of the State. Also, among other conditions, continuous cultivation is necessary, or else the land, if not cultivated for five

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<sup>1/</sup>Brunner, E., Sander, I. T., and Ensminger, D. "Farmers of the world", 1945, p. 70.



consecutive years without valid reasons, will revert to the State.

It is fortunate that one of the worst evils of the Miri has been corrected by amendment to article 25 in the Ottoman Land Code of 1324, A.H. which restricts holders from changing the character of the land over which they hold the privilege of occupation. They cannot, without the consent of the "tabu" office change arable land into vineyards or woodlands, or build upon it.<sup>1/</sup>

The Mulk is land that is owned on a fee simple basis, entailing practically absolute rights with respect to disposal and manner of cultivation. It can be compared to the usual ownership in the United States, although it is not protected by homestead rights with respect to transfer and inheritance as is the case with real estate laws in the United States.

The Waqf is a property dedicated in perpetuity for religious or charitable purposes. Other types of waqf are used as a means of securing land to the founder and his heirs along an explicitly stipulated line of inheritance; it becomes charitable only if the line of inheritance has come to an end. This institution is peculiar to Moslem laws which bear some resemblance to the trust in English law.<sup>2/</sup> The Supreme Moslem Council for the Inspection of Waqf is the authorized body for the control and supervision of Moslem waqf.

<sup>1/</sup>Himadeh, S. B. "Economic organization of Syria", pp. 53-54.

<sup>2/</sup>Ibid., p. 62.

The evils of the waqf have retarded the economic and social development of the country. Due to the fact that waqf property is extensively scattered over the country, its administration and supervision have become difficult and inadequate. In cases where the waqf is dedicated to the benefit of the individual and his family, successive inheritances have divided the property into minute shares. These are often of little value to the individual owners who are restricted from selling their shares. In such cases, interest in the property is lost, improvements are discouraged, and a discontented class of property owners is thus created.

The Masha is a form of communal ownership with many socialistic inclinations. Usually a village or group of individuals within the village own certain shares in the territory, but no specific plots are allotted to individuals. If it is grass land, the livestock of every member of the village has the right of pasture. In other cases allotment for cultivation by each family takes place at regular intervals. Under this type of ownership, no individual owner has the incentive for improvement. Each person tries to take as much as possible in return for the least possible effort. Land held under this type of tenure is always subject to devastating exploitation.

Actually, all these forms of ownership, except the Mulk, should be terminated and large holdings should be discouraged. A land owner should have neither absolute rights of land ownership nor be deprived of such liberties as sale and transfer.

The Miri, Masha, and Waqf discourage private initiative and result in harmful utilization of the land.

Because of the religious lines attached to it, the waqf land will be hard to convert to simple mulk or common ownership; but future waqf land should be discouraged and curtailed. Consequently, the miri and the masha lands, involving nothing but customs and mores, as attachment, can and should be converted by governmental acts to simple mulk.

It becomes the duty of the government to stop future waqf and pass laws pertaining to the transformation of the past miri and masha ownership to ordinary land holdings. The ownership should be of such a type that improper use of the land and exploitation would be considered "unconstitutional" under the law.

The Feudal System of Ownership. The complicated and ancient system of feudalism continues to exist in Syria. The land is characteristically held in large domains whose owners come mostly under the classification of absentee owners; they enjoy the luxury of the big towns; they are not concerned with, or give little attention to the details of cultivation.

With respect to the distribution of ownership, two extreme situations exist. In one extreme, a few landlords own sizable amounts of land, while on the other hand, endless numbers of farmers own minute individual plots. The big land owners, as previously mentioned, give little attention to their land, re-

sulting in the misuse of the potential resources of the country and the impoverishment of the land. On the other hand, the small proprietors either lack the means of improving their land, or their holdings are so small that they cannot operate economically. In this respect the government should provide a scheme for encouraging efficient size units and discourage extremely small plots. This would hold true to intensive cultivation and could be helped by cooperative agencies in the marketing of their products. Accordingly, these small proprietors are under the same drawback as the small tenants of the large landlords.

Land Tenure. Due to the existence of absentee owners, most of the lands in Syria are normally worked by tenants under the metayer type of contract. According to the Ottoman Civil Code (article 1451) "the metayer is a kind of association in which one party provides the land and the other brings his labour, the produce being shared between the Associates".<sup>1/</sup> In Syria, the landlord puts at the disposal of the farmer land, cattle, seed and the capital necessary to carry on until harvest time. The share of the metayer varies according to localities, type of cultivation, fertility of the soil, and the available means of irrigation. In the orchards of Tripoli, Saida, and Tyr, the metayer receives one-sixth of the fruits; in the olive gardens of Douma and elsewhere the metayer receives a one-third

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<sup>1/</sup>Andre Latron "La vie rural en Syrie et au Liban", p. 48.



share. Where rainfall is abundant, the half - and - half sharing is common. As rainfall becomes more scarce, and where land becomes less fertile, the share of the metayer goes as high as 70 and 80 percent.<sup>1/</sup> At harvest time, the tithe (12.5 percent) is first subtracted and then the rest will be divided between the metayer and the landlord with respect to the previous considerations. Furthermore, the share of the metayer may be reduced by any advance payments made during the year and by the usurious interest rates that are charged. Very often, after a peasant pays back the money advanced by his landlord, scarcely anything is left over. He is often forced to make a new loan in order that his family may have enough to live on until the next harvest. Usually the metayer provides for all operating expenses. The partition between the proprietor and the metayer is thus on the net product.

The average area given to each metayer also varies from locality to locality. In certain irrigated areas like the Ghouta (The oasis of Damascus) the metayer is provided with a piece of land from 7 to 10 hectares. This portion increases to 50 and 60 hectares in some districts according to the scarcity of rainfall and the extensiveness of cultivation.

Normally, this type of tenancy is on a yearly basis terminable by the landlord at will. The tenant has no definite lease on the property but is a sharer of the produce. If the metayer is dissatisfied with his situation, his movement from one place

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<sup>1/</sup>Ibid., p. 50.

to another is usually confronted with two obstacles:

**Social:** It pertains to the fact that the metayer is attached to a place because his father used to work on the same place.

**Financial:** Usually the proprietor loans funds to the metayer. The metayer cannot leave the place until he pays his debts and thus is obliged to remain where he is.

Disadvantages and Consequences of the Metayage. "Undoubtedly this system of tenancy by metayage is one of the most serious hindrances to the development of agriculture in Syria"<sup>1/</sup> Among other evils, this system creates the following consequences:

Since the contract is usually oral, for one year and at the mercy of the landlord, the investment of capital and labor is discouraged. The tenant does not carry on any long-run improvements because he may be leaving the next year and thus will not benefit much from the improvement. Also, short run improvements are hesitable since the landlord shares the produce and will reap part of the benefit that results therefrom, when the cost of such improvements and extra care are paid by the tenant alone.

The one year duration of the contract causes the metayer to try to get the most out of the land during this short

<sup>1/</sup>Himadeh, S. B. "Economic organization of Syria", op. cit., p. 59.

period. As a result the fertility of the soil is exhausted and its productivity destroyed rapidly.

The above mentioned evils curtail production in the long run. This will eventually impoverish the economy of the country. Since taxes on production are considered a source of income by the government, this curtailment narrows the financial channels of the government. The poorer the government the less efficient it becomes, and thus the less effort and contribution can be expected from it for the improvement of agriculture in general.

Due to the near exploitation of the tenant by the landlord, the metayer has a low income. Insecurity, low standard of living, poor education, and malnutrition become familiar under these conditions. These factors amount to what has been previously stated: "a population that becomes a national liability".

Remedy of Metayage. The major emphasis should be placed upon finding a means through which security is assured. Security does not have to pertain only to the metayer but should favor the landlord equally. The landlord should be assured of a fair return from his land and also the metayer should receive a just compensation for his efforts. If a formal contract can be required to be signed by both contracting parties, then the limits of each contractor will be cleared and he will work accordingly. In this formal contract, the tenant will lease property for a definite length of time and

for a fixed sum of money. It should be taken into consideration that a short length of time (one year) will consequently result in what was stated to be: the effort of the tenant to exhaust the land. Also it will discourage, as previously mentioned, the investment of capital and labor. But if the duration of the contract is for more than one year, then the above stated evils may be eliminated. Of course, there is an argument that when the duration is comparatively long, the tenant, thinking that he is protected by such length, may abuse it in exploitation and that the landlord cannot do anything. This possibility will be eliminated if the rights and obligations of each contracting party are clearly defined in the contract. Such a contract should become void whenever these rights and obligations have been violated. In such case, the liquidation of the terms of the contract will lie under the jurisdiction of the court and will be determined according to its decision. It should be understood that the contracting parties will resort to the court, if they do not arrive at a mutual agreement with respect to the terms of the liquidation.

With respect to the fixed sum of money as should be stated in the contract, both contracting parties will know the financial terms in advance and will meet their obligations if they agree that the terms are fair.

The government should require such a contract and penalize any person operating without it.



Another remedy to the evils of metayage will be through diminishing the monopoly of land owners. These land owners, being few in number, feel that the metayers, who are comparatively large in number, have to abide by whatever is asked. In other words, the supply of land is regimented by the few land owners, while its availability is less elastic due to the large number of metayers seeking land to work on. This supply and demand situation leaves the landlords at an advantage, and they abuse it. Such being the case, the government might increase the supply of available lands for cultivation by renting or selling some of the public domain. The goal behind this is to create a larger group of land owners and thereby weaken the grip of the metayage system. Easy terms and reasonable figures of payment for such properties should be born in mind when and if the government believe that course to be desirable. A parallel step was taken in May, 1926, when the French High Commissioner issued "arrete" No. 274 facilitating the sale of 1,700,000 hectares of cultivable land to tenants, the price of which was to be paid in annual installments over a period of 15 years.

Another means of avoiding the evils of metayage, one of great importance, is by making available a kind of loan to which the farmers may refer when in need. The existing "Agricultural Bank" carries such loans but its process is slow, and it has not yet proved to be really fulfilling the duty for

which it was created. By making loans available, the metayer will no longer be at the mercy of the landlord or other commercial loan agencies who charge him usurious rates of interest.\*

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\* This matter of loans and interest rates was discussed previously to be one of the two obstacles confronting the movement of the tenant from one place to the other in case of dissatisfaction.

## POTENTIALITIES IN PRODUCTION

The establishment of a productive structure favoring the increase of income depends upon certain prerequisites without which economic progress is impossible. Among others, human and natural resources are very important. The human factor is important as far as labor is concerned. From a United Nation's report it can be concluded that the population has a tendency toward rapid growth.<sup>1/</sup> This will increase the available labor supply for further cultivation. Also, the introduction of modern mechanization in agriculture will diminish the need for rural hand labor.

The natural resources are abundant. The cultivated area in Syria does not amount to more than 13 percent of the total area.<sup>2/</sup> There are large regions of fertile land yet to be put under cultivation.

Increased production and productivity per earner can be attained through the intensification of agriculture and the extension of the land under cultivation. Such possibilities depend upon the expansion of irrigation and the introduction of more advanced methods of production.<sup>3/</sup>

<sup>1/</sup>United Nations. "Economic report, Salient Features of the world economic situation 1945-47", pp. 90-108.

<sup>2/</sup>United States Department of Agriculture. "Report of the United States - Syria Agricultural Mission". p. 13.

<sup>3/</sup>Bonne, A. "Prosperity for the Middle East, unused irrigation capacity. Room for additional 30,000,000" Palestine & Middle East. Vol. XV, pp. 228-231.

Before trying to increase production in Syria, there are two matters of relative importance that should be considered. These are the transportation problem and the market problem. Increased production requires either an increase in the home market demand with a proper distribution, or an expansion of export possibilities. If neither of these markets is able to absorb the produce, the country may be endangered by a surplus problem. In many of the most mechanized agricultural countries, like the United States of America, the government on different occasions has had to impose restrictions on production and cultivation to avoid the wastes of surplus and its consequences. Syria should learn this lesson from other nations and study the best solution before any plan for further production is carried out.

So far as home markets and consumption are concerned, it has been estimated that in 1962 the Syrian population will total about 8,500,000 people, or almost double the 1946 population.<sup>1/</sup> Assuming that the per capita consumption will remain the same as of to-day, this increase in population indicates that the home market after ten to fifteen years can absorb twice the present consumption even if no export is considered. Another possibility in the home market is noticeable in the actual and optimum consumption of the Syrian population. The per capita consumption of basic foodstuffs in 1939 was 390

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<sup>1/</sup>Bonne, A. The economic development of the Middle East. p. 62.



kilos while the optimum was 620 kilos. This difference of 230 kilos is largely due to the poor financial situation and low social standing of the farmer. If the individual income is increased and principles of proper nutrition applied, the 5,500,000 persons in 1962 should consume 1,265,000 tons more of feedstuffs. This possible increase in the home market consumption, together with the hope of an efficient export market in the future, leads to the conclusion that Syrian production can be more than doubled without fear of surplus or waste.

As to the problem of transportation, the Alexander Gibbs Co., in a report on the agricultural economic potentialities in Syria, has reported that if the transportation facilities remain as they are at present, an increase in production will be harmful to the farmers. Their deduction is based on the fact that an increase in production while transportation facilities are still limited will result in a decrease in prices of agricultural products in excess of the transportation costs.<sup>1/</sup> With their conclusion it is recommended that the methods of increased production should not be applied until the government is able to improve the transportation facilities.

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<sup>1/</sup>"Report of Alexander Gibbs Co., on the agricultural economic potentialities of Syria" Al-Ayam (Arabic newspaper), Damascus, Syria, Feb. 23, p. 2.

Table 10. Actual and optimum consumption of the rural population in Syria and Lebanon<sup>1/</sup> (Population figures for 1939 - (2500000) quantities are given in 1,000 tons.)

Meat and fish	Optimum	55
	Actual	28
Vegetables	Optimum	319
	Actual	202
Fruits	Optimum	183
	Actual	131
Bread (wheat)	Optimum	335
	Actual	340
Milk products	Optimum	546
	Actual	228
Sugar	Optimum	75
	Actual	46
Total	Optimum	1561
	Actual	975
Per capita	Optimum	.62
	Actual	.39

<sup>1/</sup>Donne, A. "The economic development of the Middle East", p. 58.

## Irrigation

Water is sometimes an indispensable factor in the agricultural activity of the country, but it is always an important one. Irrigation expands the range of crops, permits the cultivation of several crops per year, and thus extends the agricultural season over practically the whole year. It also permits the use of additional cultivable land together with an increase in the average yield per hectare.

Since rainfall provides only a fraction of agriculture's needs for water, the agricultural capacity of Syria is mainly dependent upon irrigation. The agricultural potentialities of Syria are dominated by the fact that there are substantial territories which require the use of artificial irrigation for the achievement of their maximum yields.

The present irrigation facilities result in the following:

1. Application of dry farming methods of cultivation.
2. Decrease in the yields of agricultural lands.
3. Discouragement of the addition of thousands of fertile acres of cultivable land.

The application of dry farming methods of cultivation forces the farmer to fallow almost half of his land every year. Were it not for the limited irrigation facilities, the Syrian farmer would be able to cultivate all his land instead of fallowing half. In this respect alone, Syrian production may be doubled every year if enough water is made available for irrigation.

As to the yields per hectare, the return from nonirrigated land is less than half the return obtainable from irrigated land.

"In Palestine, under irrigation, wheat crops in Jewish settlements average 2,000 - 3,000 kilogrammes per hectare, as compared with a yield from nonirrigated Jewish lands of 600 kilos in dry years and 1,200 in normal years."<sup>1/</sup>

Here, under the same care, same weather conditions, and similar soil fertility, the difference between irrigated and nonirrigated yields is 1,340 to 2,340 kilos in dry years and 800 to 1,800 kilos in normal years. So under the assumed conditions of a normal year, the cultivation of nonirrigated land results in a 50 percent loss to the country. Applying the same deduction to Syria, if irrigation can be made available, the annual production may be greatly increased if not doubled.

Concerning the limitation of additional acres under cultivation as a result of the confined irrigation facilities at present, the losses are enormous. In the Jezireh region alone, which lies to the northeast of the Euphrates and is crossed by two of its tributaries, the development of irrigation projects may possibly put two million acres under intensive cultivation.<sup>2/</sup> The Ghab is another underdeveloped area in Syria. It is a complex swampy region through which flows the Orontes

<sup>1/</sup>Bonne, A. "Prosperity for the Middle East, unused irrigation capacity. Room for additional 30,000,000." Palestine and Middle East, p. 23.

<sup>2/</sup>United States Department of Agriculture. Report of the United States - Syria Agricultural Mission, p. 15.



river. In winter it is a lake 12 to 18 miles long, but in April or May the waters recede and the reeds reappear to remain until November. Changes in water levels from 24 to 38 inches cover or expose hundreds of acres.<sup>1/</sup> In this region, the United States - Syria Agricultural Mission concluded that proper drainage and irrigation would greatly increase the productive capacity of an area of perhaps 800 square kilometers. As to other projects that could increase the land under cultivation, the following are important:<sup>2/</sup>

1. A project on the river "Al Ibeter" could irrigate 45 thousand hectares.
2. A project on the waters of the "Big River" in Latakia could irrigate 3,000 hectares.
3. A project on the waters of the "Abrash" in Safita could irrigate 10,000 hectares.
4. The falls of "Tel Chehab" could irrigate 4,000 hectares.

In conclusion, the land under cultivation may be increased by 825,576 hectares in Jezireh, 80,000 hectares in the Ghab, and 62,000 hectares in the other regions if the previously mentioned projects are carried out successfully. Irrigation would not only add 967,576 hectares to cultivation, but would double the yield that would have been obtained in nonirrigated sections and reduce to nil the areas devoted to fallow in the

<sup>1/</sup> Tower, J. A. "Studies in Syrian Geography" The Geographical Review, 1937.

<sup>2/</sup> Sherif, Mounir, Al Kadaya Al Iktisadieh Al Koubra fe Souria and Loubnan (The great economic projects in Syria and Lebanon), pp. 41-46.

irrigable region. Thus the least that can be procured from the development of these irrigation plans will double the agricultural production obtainable otherwise.

The approximate cost of such projects depends upon many factors. The FAO Regional Conference for the Middle East has estimated that a project for irrigating 250,000 acres in the valley of the Euphrates will require the installation of approximately 250 pumping plants of from 50 to 100 horsepower each and will cost about ten million Syrian pounds.<sup>1/</sup> On such basis the average cost per acre would be 40 Syrian pounds, or 98.84 Syrian pounds per hectare.

#### The Introduction of More Advanced Methods of Production

The Use of Mechanized Agriculture. The primary purpose of any machine is production with the least expenditure of land, labor, and other capital. The use of machinery either enables a larger number of persons to make a living, or it enables a given number to make a better living.

A study made on the saving of labor in production as re-

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<sup>1/</sup>Food & Agriculture Organization of the United Nations. Report to the Council of FAO by the Director-General. FAO Regional Conference for the Near East, p. 6.

sulting from the use of machinery, indicates that

"the quantity of labor now requisite for the production of a given quantity of nine crops (barley, corn, cotton, hay, oats, potato, rice, rye, wheat) is, on the average, only 21 percent, or a little over one fifth, of the quantity which would be requisite under the former hand methods of production."<sup>1/</sup>

This rate of saving will be of major importance to Syria, especially when the irrigation projects previously mentioned add 967,576 hectares to cultivation. If the present methods of production (with respect to power) are to remain, these 967,576 hectares may require labor far in excess of what may be available in the country. Unless modern mechanized agriculture is applied, the lack of labor may restrict all possible addition of land to crop cultivation.

There is also a saving in time to be considered. In harvesting wheat for example, an average man can harvest approximately half an acre a day with the hand sickle which is common in Syria, while the use of a combine with a steam tractor as motive power will enable him to harvest 7.4 acres a day. Thus a day's work in harvesting with the use of a combine accomplishes what would have required 14.8 days by hand sickle.<sup>2/</sup> Another striking example of time saving may be illustrated in the case of plowing wheat land. The rate of plowing that a man averages with a wooden implement, whether

<sup>1/</sup>Quaintance, H. W. The influence of farm machinery on production and labor, p. 50.

<sup>2/</sup>Rogin, Leo. The introduction of farm machinery in its relation to the productivity of labor in the agriculture of the United States during the nineteenth century. Vol. IX, 1931, p. 23.



drawn by oxen or horses is about one to two acres a day, while the use of gang plow and harrow combined with a steam tractor enables the same man to plow 13.4 acres a day. The total increased effectiveness of man power when aided by the use of machinery, varies from 150 percent in the case of rye to 2,244 percent in the case of barley.<sup>1/</sup>

With the consideration of the previously mentioned advantages of mechanized agriculture, one is led to the inevitable and conclusive recommendation for the use of modern farm machinery in Syria. However, there are two factors working against the extensive use of farm machinery. First, there are few trained mechanics and, secondly, the agricultural credit for the purchase of machinery is inadequate. The first factor may be eliminated when proper courses in the use of farm machinery will be presented at the various intermediate schools and the College of Agriculture. The graduates of these institutions will provide the elimination of the first obstacle. To overcome the second obstacle, the Syrian government has exempted all agricultural machineries from the payment of customs duties; it also has imported some machinery, mainly tractors, and has distributed them to the farmers on an installment basis without charge of interest rates. Finally, the government has provided at least 20 percent of the foreign exchange made possible by the export of agricultural products. Accordingly,

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<sup>1/</sup>Quaintance, H. W. The influence of farm machinery on production and labor, p. 23.



if the government increases the import of machinery at its own expense and distributes them to the farmers, their production may be increased, and more exports may be possible. Thus more foreign exchange will eventually be available for the farmers to purchase their own machinery without the need of the government to lend them the money or to import to machinery for them. In 1946 Syria had 202 tractors, 143 combines, 7 threshers, 30 seeders, and 419 plows and discs.<sup>1/</sup> The additional requirements for agricultural implements and machinery were thoroughly studied by the FAO Regional Conference for the Near East; these requirements will be presented in detail in the following table.

The Use of Improved Plants and Animals. Together with the subjugation of new land and the use of more intensive cultivation methods, the matter of improving local plant varieties, animal breeds and introducing superior types is a very important possibility for increasing the agricultural output in Syria. It is the job of agricultural research to test the various animal breeds and plant varieties to determine their relative usefulness and adaptability, to introduce new varieties and breeds, and to improve the native breeds by careful selection.

In the case of livestock, research must be undertaken to locate, select, and breed superior animals. Sheep breeding

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<sup>1/</sup>Syrian Government, Ministry of National Economy, Statistics Department, Economic Report, op. cit., 1947, p. 113.

Table 11. Requirement of agricultural implements and machinery for 1948.<sup>1/</sup>

Machines	:	Total	:	Value
Tractors		600		2,400,000
Ploughs and cultivators		2650		600,000
Seeders		300		120,000
Harvesting and threshing machine		345		1,000,000
Seed cleaners		125		150,000
Graders and bulldozers		50		300,000
Well drills		5		40,000
Fumigating plants		2		10,000
Total				4,710,000

<sup>1/</sup>United Nations. Report to the Council of FAO Regional Conference for the Near East, pp. 8-10.

should be carried out to improve the size and value of the carcass for meat, to improve the quality of the wool, and to increase the amount of milk. The Damascene cow is a well developed native breed of dairy animal, but studies of foreign breeds can be undertaken with the purpose either of improving the Damascene cow or of introducing new breeds that can economically meet the Syrian situation. Jolani beef are a major source of meat which can be improved to a great extent.

As for plant varieties, extensive research must be undertaken to improve the local plants and to introduce new varieties with a higher productivity and more resistance to disease and plant pests. Once tested, adequate distribution of seed plant material to farmers is imperative. Also, the discovery of effective methods of controlling insect pests and fungus and virus diseases of plants, through research by agricultural experiment stations, would minimize great losses confronting the farmers every year.

Such a program would add greatly to the country's productivity and wealth.

## POTENTIALITIES IN MARKETING AND DISTRIBUTION

Production and distribution of raw products of food is still a problem of all governments because of its close relationship to organized society and civilization.

Food must not only be produced, but it must be transported to the place of consumption. "There must be organized and intelligent distribution of the product from the farm to the place of human need."<sup>1/</sup>

Agriculture is the most important source of wealth in Syria where crop production plays a major role. Such being the case, great care needs to be directed toward their best use. Their conservation, storage, transportation, and distribution are very important. It therefore is necessary that a desirable policy be developed for proper handling of these factors.

### Creation of the Mira

Before June, 1942, farmers had rather complete freedom with respect to the methods by which they marketed their crops. The farmer could store or sell his products without any governmental interference.

The prices of such products were determined on the open market by the prevailing forces of supply and demand. In the early years of World War II, Syria could hardly meet its national demand without imports. The low yields of the first

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<sup>1/</sup>Brinton, J. W. "Wheat and politics", 1931, p. 259.



years of the war, the added consumption of the French armies stationed in Syria, the doubt and fear of scarcity during the war period, and the speculation among wheat merchants caused the prices of farm products to rise to dangerous levels. To meet this situation, the Syrian government attempted to advance funds to the different municipalities with which to buy bread crops for distribution to the middle and low income groups at prices which they could afford.

The municipalities bought on the open market. There was no compulsion placed on the farmer to sell his products. The subsidies for buying bread crops and selling bread and flour brought very heavy losses to the government. Furthermore, problems of buying these crops and distributing them became so difficult that the military authorities, with the French Governor General as the head, started to interfere and established in June, 1942, a special organization (The Mira) which was granted absolute power to collect and distribute bread crops for the purpose of satisfying the nation's need of grains. This organization was to remain in operation until the end of World War II. But at the end of the war the Syrian government, after giving consideration to the existing situation extended its duration for another year. It has been extended ever since, and the possibilities of closing the Mira at present are increasing as a result of more freedom of trade in wheat and barley. Such freedom had been approved by the

Syrian House of Parliament and became effective December 1, 1948.

#### The General Administrative Body of the Mira

This body was composed of the Minister of Finance, the Director General, the Supervisor General, the Chief Controller (Finance) and technical experts. The Minister of Finance served as president of the Mira. The main office of this body was in Damascus and was divided into two general branches: Technical and Financial.

#### Regional Directorates

There were seven regional directorates:

1. Southern Directorate: which included the Mohafazate of Damascus, Horan and Djebel Druse.
2. Directorate of Homs and Hama: which included the Mohafazate of Homs and Hama.
3. Directorate of Aleppo: which included the Mohafazate of Aleppo and its counties.
4. Directorate of Deir el-Zor: which included the Mohafazate of Deir el-Zor and its counties.
5. Directorate of Jezireh: which included the Mohafazate of Jezireh and its counties.
6. Directorate of Latakia: which included the Mohafazate of Latakia and its counties.
7. Directorate of Beirut: covering all Lebanon.

Each directorate was composed of the following departments:

1. Buying department.
2. Transportation department.
3. Finance department.
4. Storage department.
5. Statistic department.
6. Equalisation department.
7. Permit department.

#### Duties and Responsibilities of the Mira

The duties of the Mira were to collect the grains (wheat and barley) from the growing regions where production exceeded local needs and to transport, store, and distribute them to the population of the regions where needed.

#### Estimation of Amounts to be Presented to the Mira

At the beginning of the harvest season (April-May) the Mira made an estimate of the future crops through committees composed of the County head, the County Treasurer, two farmers and one representative from the Mira. This committee toured all the farms in the county and estimated the amount that was to be presented to the Mira by every farmer. The following procedure was used in making the estimates:

The area seeded was multiplied by the average productive

capacity of the region.<sup>1/</sup> This resulted in an estimated total production of the region. From this total were subtracted the seed requirements for the next crops season, the yearly needs of the farm people within the region, and the amount needed for livestock feed for the coming year. The need for farm people was established by the House of Parliament to be 350 kilos of grains (wheat and barley) for a person per year, while the need for feed was established to be 1,000 kilos for every head of livestock per year.<sup>2/</sup> After making the above deductions, the remainder was presented to the Mira. If the farmer thought this duty exceeded his capacity, he could appeal to the Directorate's equalization department. This department reviewed the estimated duty placed upon the farmer and under valid circumstances established another duty.

When the estimation and equalization were fulfilled, the committee presented its report to the Mohafate for approval. The approval committee in the Mohafazate was composed of the Mohafez as president, the Mohafazate's Treasurer, the Director of the National Economy, two members of the Chamber of Agriculture, and the Mira's Directorate head.

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<sup>1/</sup>The average will be known in advance with respect to previous productions taking also into consideration the advantageous or disadvantageous climatic conditions that may have occurred.

<sup>2/</sup>"Economical Bulletin", Damascus Chamber of Commerce, Progress Printing Co., Damascus, July, 1948, p. 109.



### Determination of Prices for Wheat and Barley

The prices of these commodities used to be determined yearly by the main administrative body of the Mira on the basis of international wheat price (in Liverpool) in wartime. This price was almost seven times as high as the pre-war average figure. After the Mira had been in existence for two years, it became the duty of the Syrian House of Parliament to fix wheat and barley prices. The Parliament established the following:<sup>1/</sup>

Wheat:	430 Syrian pounds per ton of not more than 4 percent of foreign elements.
	350 Syrian pounds per ton of not more than 7 percent of foreign elements.
White barley:	210 Syrian pounds per ton of not more than 4 percent of foreign elements.
	205 Syrian pounds per ton of not more than 7 percent of foreign elements.
Black barley:	205 Syrian pounds per ton of not more than 4 percent of foreign elements.
	200 Syrian pounds per ton of not more than 7 percent of foreign elements.

Such prices were paid when wheat or barley was delivered to the buying centers that were located near the Damascus-Aleppo railway lines. If the buying centers were not on such location, the cost of transportation from the buying centers to grain stations located on the Damascus-Aleppo line were subtracted from the prices paid to farmers. The Mira subtracted seven percent of the total amount of money the farmer

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<sup>1/</sup>Ibid., p. 110.

received for his crops. This seven percent was then paid to the government as the income tax of the farmer.

#### Collection

Once the estimates were finally approved, every directorate established buying centers in the producing regions. They were usually located close to a railroad or near a highway. The following personnel were located at the buying centers:

1. Director, 2. Treasurer, 3. Accountant, 4. Expert (to determine the percentage of foreign elements in the grains), 5. Store keeper, 6. Weighting agent and aid, 7. Guardian.

The process of collection began with the farmer who brought his crops to the expert. The duty of the expert was to determine the percentage of foreign elements in the grains. If the foreign elements were less than four percent, the farmer was allowed the full price for his grain. For every one percent of foreign elements above the allowed four percent, a total of 2.5 Syrian pounds was deducted from the price of each ton.<sup>1/</sup> For example, if the price of a ton of wheat was 100 Syrian pounds and the farmer presented a ton of wheat that contained 10 percent of foreign elements, he was paid  $100 - (10-4) \times 2.5$  85 Syrian pounds. After the expert was finished with his duty, the grains were weighed and then transferred to the storekeeper. The weighing agent gave the farmer a statement

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<sup>1/</sup>This was established by the main administrative body of the Mira and was changed later by the Syrian House of Parliament, as previously stated.

of the amount presented on which the expert had placed the percentage of foreign elements. The storekeeper signed the statement to indicate that the grain was received. This statement was given to the accountant to provide a memorandum of grain purchase. After the statement was approved by the director, the treasurer paid the farmer for the grain.

### Storage and Distribution

The buying centers, after receiving the grains, transported them to the main storage places. The amounts stored in each place were in proportion to the yearly needs of the population of the region. The Mira provided the transportation facilities and storage centers which were more economical than those that existed before the Mira was established.

Three different types of distributive processes were prevalent:

1. The storage department, after determining the amount needed for the population of the region, gave the grains to a milling contractor who, in turn, distributed the flour to the different bakeries from which the people bought bread. (This was done in Damascus)

2. The Mira gave the wheat and barley to the contracting miller who distributed flour to the population upon presentation of a ration card issued by the municipality. (This was done in Aleppo)

3. The Mira distributed wheat and barley (not milled) to the population. (This was done in Hama and Homs)

The selling prices of wheat and barley were established by the Mira on the following basis:

Buying prices plus:

1. Fifteen percent of governmental expenditures (which included repair of roads and bridges used by the Mira, and paid by the Mira to the government).

2. Eleven percent which was to cover general expenditures of the Mira, such as wages of employees, storage, and transportation cost, etc...

Thus the selling prices of a ton of wheat sold by the Mira were:

430	Syrian pounds	(buying price)
63.5	"	" (Governmental expenditures)
47.3	"	" (Mira's general expenditures)
<u>540.8</u>	"	" Total

#### Powers of the Mira

After the Mira was established, wheat and barley circulation in Syria was under its control. The farmer could not move any quantity of wheat and barley unless he had a warrant from the Permit Department of the Directorate in his region. Such permits were only issued to the farmer after he had fulfilled his requirements to the Mira. As soon as the estimates were placed on the farmer and approved by the Committee of



Approval in the Mohafazate, it became his duty to meet the required quota. The police power could interfere and force the farmer to meet his quota if he attempted to avoid fulfilling it.

The national distribution was also controlled by the Mira, and so far as international trade was concerned, the Mira was the only agency that could export or import wheat and barley. However, a law issued by the House of Parliament (Law No. 417) in an early session of 1948 permitted free trade in wheat and barley to begin December 1, 1948.<sup>1/</sup>

#### Amounts Handled by the Mira

Due to the fact that a high percentage of the Syrian population is agricultural, the total quantity of wheat and barley that was handled by the Mira in any one year did not exceed 35 to 40 percent of the total production. The maximum quantity of wheat and barley handled by the Mira since its creation was handled in the 1946 crop season. The following tables list the grain purchased and distributed by the Mira during 1946.

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<sup>1/</sup>Economical Bulletin, Damascus Chamber of Commerce, 1948, op. cit., p. 109.

Table 12. Purchase of wheat by Mira for 1946.<sup>1/</sup>

Mohafazato	Tons
Damascus	3601
Homs	12679
Hama	16824
Horan	24563
Euphrate	4367
Jezireh	97130
Aleppo	60394
Latakia	807
Djebel Druze	4666
Total	225021
Total production in 1946	568774.9
Percentage bought by the Mira	39.56 percent

<sup>1/</sup> Syrian Republic Ministry of National Economy. Statistics Department, "Statistical Report", 1947, p. 109.

Table 13. Purchase of barley by Mira for 1946.<sup>1/</sup>

Mohafazate	Tons
Damascus	497
Homs	5467
Hama	6474
Horan	266
Euphrate	745
Djezireh	10396
Aleppo	20463
Latakia	660
Djebel Druze	196
Total	45163
Total produced in 1946	292364
Percentage bought by Mira	15.99 percent

<sup>1/</sup>Ibid., 109.

Table 14. Quantity sold by Mira within the country in 1946.<sup>1/</sup>

Mohafazate	Wheat (tons)	White barley (tons)	Black barley (tons)	Total (tons)
Damascus	19407	2242	200	22029
Hama	3333	1235		4568
Hama	2430	1127		3557
Horan				
Euphrate	847		119	966
Djezireh	701		77	778
Aleppo	8099	2172	94	10365
Latakia	1479	51		1530
Djebel Druze				
Total	36306	6622	579	13639

<sup>1/</sup>Ibid., 110



Table 15. Quantity stored by Mira until December 31, 1946.<sup>1/</sup>

Mohafazate	Wheat (tons)	White barley (tons)	Black barley (tons)	Total (tons)
Damascus	16655	232	232	17219
Hama	16765	3222	4830	24847
Hama	7366	1369		8735
Horan	5	1		6
Euphrate	2530	196	203	2931
Djesiroh	22351		18	22369
Aleppo	23664	1679	15149	40492
Latakia	3690	605		4295
Djebel Druze				
Total	93026	7536	20532	121094

<sup>1/</sup> Ibid., 110

Table 16. Quantity sold to Lebanon until December 31, 1946.<sup>1/</sup>

Mohafasate	Wheat (tons)	Barley (tons)	Total (tons)
Damascus	679	19	698
Homs	1969	1576	3545
Hama	4819	3300	8119
Horan			
Euphrate			
Djezireh	56414	88	56502
Aleppo	21301	5051	26352
Latakia			
Djebel Druze			
Total	85182	9834	95016

<sup>1/</sup>Ibid., 110

### Contribution of the Mira

The Mira successfully accomplished all the duties and requirements for which it was created.

During World War II, it did an excellent job of providing bread for the population. If it had not been for the strict control over exports, the high prices in the countries surrounding Syria would have greatly encouraged speculators and farmers to export their wheat and leave the Syrian population with supplies far below their needs.

Among other things, the Mira helped the Syrian government create a two price system for bread. The first price, which was equal to cost, was imposed on bread sold to the middle and high income groups. The second price was placed on the "bread of the poor" which was less than its costs. This second category of bread was sold to the poor groups at prices they could afford. The losses which were paid by the government through this program averaged about 12 million Syrian pounds yearly for the 1942-43 and 1943-44 seasons.<sup>1/</sup>

The Syrian Department of Rationing tried in 1944 to stop the losses placed upon the government with respect to the "bread of the poor", and suggested the unification of bread prices. This department estimated, after studying the situation, that such losses could be diminished to one third. This pro-

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<sup>1/</sup>Darkazally, Adel. "The Mira to be continued or abolished" Economical Bulletin, p. 62.

posal was refused by the House of Parliament. The political instability of the country was the main reason for such refusal. The political authorities were afraid that such unification in bread prices might lead the poor classes to revolt; thus they found themselves obliged to avoid any disturbance that could weaken the government.

Conclusively, the existence of the Mira was a necessity created by the price situation during the war period.

#### Advantages and Disadvantages of the Mira

##### Advantages:

1. It procured a source of revenue for the government.
2. It created a secure market for the farmer.
3. It protected the farmer from the marketing exploitation of the middle-man and especially the speculator.
4. It decreased the farmer's costs for transportation, storage, and sales.
5. It created work for more than five thousand employees who would have been otherwise unemployed.
6. It granted loans to the farmers at reasonable rates of interest on their future crops.
7. It secured agricultural machineries, such as combines and tractors for some farmers.
8. It increased the availability of scarce currency (U.S. dollars and Swiss Francs) by exporting wheat and barley



to the foreign countries. Twenty percent of the currency thus obtained was allocated to purchase machinery, and the government could not use these funds for any other purpose.

9. It helped the government to plan sound economic policies in the production and distribution of wheat. Also it made available many statistical data that did not exist before with respect to production, consumption, and trade in wheat and barley.

Disadvantages:

1. It reduced the competition among wheat growers and merchants which could lower wheat prices to such an extent that the low income group could afford to purchase it.

2. In defiance of the organization, a black market flourished for wheat and barley, encouraging the farmers to contraband.

3. The fixed price administered by the Mira was based on pre-war index, while a fair price establishing law, when needed, should be based on the anticipated future prices and not on past prices.

4. Among other things there was often a difference between the quantities bought and distributed by the Mira. Where did this difference go? To illustrate, the Mira purchased in 1946 a total of 225,021 tons of wheat but its official records

prove the handling of only 214,584 tons.<sup>1/</sup> The difference of 10,437 tons, or 1/8 of the total, indicates a leaking point in its organization.

#### Should the Mira Remain

The Mira was conceived to operate until the end of World War II. Having been created to meet wartime conditions, it has been built with respect to short-run policies that are not satisfactory in peace time.

The foreign demand for Syrian bread grains in peace time is less dangerous than during the war. During the war, Lebanon could not import any wheat excepting from Syria because of the blocked international channels. This situation created prices high enough to encourage speculative transactions. In peace time the Lebanese demand for Syrian wheat is much less because wheat from Canada, Australia, and other exporting countries can also be economically imported to Lebanon. For example, the Lebanese Ministry of National Economy recently purchased 8400 tons of flour from Australia and 400 tons of flour from Canada.<sup>2/</sup> These imports of flour into Lebanon have reduced the

<sup>1/</sup>These figures are computed as follows:

85,182	tons sold to Lebanon
36,396	tons distributed in Syria
93,026	tons stored
<u>214,584</u>	total

<sup>2/</sup>Al Islah (Arabic Newspaper published in New York City)  
December 20, 1948, p. 2.

demand for Syrian wheat. Under these conditions Syria need not be concerned with such a great foreign demand for her wheat that over-exporting will occur. The Syrian population is now assured of the supply for its needs of bread grains. At the present time it appears that no organization to restrict grain exports is needed.

The general cost of living now has decreased by 25 percent as compared with the wartime prices; but the prices imposed by the Mira on wheat and barley in 1942 have scarcely been reduced. This advantage enjoyed by the wheat and barley prices may effect the economy of Syria by causing the general level of prices to increase accordingly. Also, the farmers who do not produce wheat and barley are placed at a disadvantage because their products are sold on the lower general price level. The farmers find themselves protected if they grow wheat and barley which the Mira will purchase at a favorable price. Such a situation could cause a shift in production and result in more lands allocated for wheat and barley, and, consequently, less land allocated to other crops. This condition has existed during the war and is likely to remain as long as the Mira is still in order. This trend can be seen in the following statistic: in 1937 only 30.7 percent of the total cultivated land was sown with wheat and barley; by 1946 it had increased to 49.5 percent.

Also, the Mira, by having complete control over the distri-

bution of wheat and barley has curtailed possible competition among wheat farmers which, in peace time, could lower wheat prices to such an extent that the low income groups could afford to purchase it. This would mean the withdrawal of the 12 million Syrian pounds that the government has been appropriating to cover the subsidy for the "bread of the poor".

The Mira was created in a period when the total Syrian production was low. So its creation was necessary to plan adequately to meet the demand despite low production. In 1942, the total wheat production in Syria was 303,748 tons,<sup>1/</sup> while in 1948 the estimated production was 533,050 tons which was an increase of about 75 percent.<sup>2/</sup> From this angle it is obvious that the Mira's work in equitable distribution of wheat is much less needed now than it was during the war.

The previous considerations point out that the Mira, as it stands since its creation, should not be recommended. It is contrary to sound economic considerations. However, before the Mira is disqualified completely and abolished, an efficient program for future distribution and handling of farm crops must be sought. There is still the necessity of creating a Wheat Board to supervise exports and encourage and improve crop production through efficient surveys, research, and recommendations.

<sup>1/</sup>Economical Bulletin, Damascus Chamber of Commerce, op. cit., p. 108.

<sup>2/</sup>Syrian Government Ministry of National Economy. Statistics Department Statistical report, for 1937-1948, July 1948, op. cit., pp. 6-8, (for the 1943 figures)



Table 17. Acreage allotment to wheat and barley in hectares  
1936-1946.

Year	Total cultivated land	Land cultivated with wheat and barley	Percentages of land allotted to wheat & barley
1937	1,907,179	586,150	30.7
1938	1,928,531	613,093	31.8
1939	1,904,079	670,650	35.2
1940	1,929,412	765,365	39.6
1941	1,961,318	688,863	35.1
1942	1,868,246	733,610	39.2
1943	1,894,696	806,186	42.5
1944	1,905,596	843,375	44.2
1945	2,263,412	1,098,268	48.1
1946	2,390,003	1,181,284	49.5

There should be no lag between prices of farm products and non-farm commodities. There should be one price level under which all commodities will be equally treated, and any factor which denies such an "equal relationship" should be removed.

To act with respect to the economic potentialities of the country Syria depends on the importation of many products, mostly machinery for agricultural and industrial expansion. In order to meet the requirements of such importation, Syria must have foreign currency, which can be obtained through exportation. For this reason, and due to the fact that agriculture is the major source of revenue in Syria, exports of agricultural products should be carefully handled. With an adequate Wheat Board to find outside markets, there will be no fear of surplus production nor over-exportation. On the contrary, the farmer will be encouraged to increase his production. Fortunately, the potentialities of increasing production are apparent for the Syrian farmer. As total production increases, the possible exportable amounts of farm products will increase accordingly. This will bring more foreign currency to the country, which, as previously stated, is mostly needed to buy farm machinery and other industrial goods that will further increase the economic status of the country.

The Wheat Board upon its creation should be the major channel of exportation. This does not mean that the farmer is

not free to export his crops when and where he wishes, but he should carry such transactions through the Wheat Board. With the help of experts this department will suggest where agricultural exports may yield the best results. The Wheat Board will have under its control the foreign currency that is derived from the transactions. The foreign currency is to be placed under the disposal of the Ministry of National Economy which in turn will supervise its allocation.

In addition to being a channel for exports, the Wheat Board can oversee the present storage, transportation, and marketing facilities for the farm crops.

Storage, transportation, and marketing services are conducted by the Mira. If this organization is abolished, these services will fall back into the hands of the individual. His present facilities are far from being adequate. Usually the farmer does not store his cereal crop. He is often in debt to a money-lending trader to whom he is bound to sell after harvest, the time when such debts mature. There are no agencies to finance the farmer so that he may hold his crop for better prices. Consequently, he is compelled to sell his products when it is ready, regardless of the prevailing price. Since there are no grain elevators to store cereals without danger of spoilage, the farmer is afraid to keep his crop lest he loses everything.<sup>1/</sup> So as soon as the harvest is over and

<sup>1/</sup>Himadeh, S. B. "Economic organization of Syria", p. 221.

the produce is ready for sale, the farmer presents his crop to the middleman, who undertakes both the financing and distribution of a large part of the nonperishable agricultural produce. These grain brokers are located in agricultural towns closely connected with the terminal markets and mills where they dispose of a large part of their supply. Some farmers who are not bound to sell to any individual prefer to sell their products on a commission basis through town traders.

The present transportation of the crop from the farm to the consumer is a slow and costly process. The individual farmer is either too poor to have adequate transportation facilities (such as trucks) to carry his produce to the market, or the total quantity that he handles individually is too small for economical transportation. As a further hindrance, the Syrian rural highways are poor and most transportation of farm crops is supplied by animals and carriages rather than by trains or trucks.

Taking such factors into consideration, the FAO Subcommittee B (Near East Region)

"urges the government through a well-planned campaign and by making the necessary machinery and pesticides available to limit the waste of foodstuffs due to ... improper handling, to plan from modern processing, storage and conservation ... and especially stresses the importance of action to be taken in the way of limiting the wastage of cereals on the way from the producer to the consumer."<sup>1/</sup>

<sup>1/</sup>Food & Agriculture Organization of the United Nations "Report & Resolutions from Commission I" Sub. Committee B (Near East Region), p. 4.



So far, it can be concluded that the farmer loses a large part of the price of his produce through the lack of scientific storage and through costly transportation and marketing. Such facilities, if taken care of individually, would cost much more than if done cooperatively or through a centralized agency. Notwithstanding the fact that the best method to arrive, democratically, at sound economic results would be through cooperatives, at the present time a centralized agency is more quickly put into operation as a substitute for the Mira.

Among average farmers, cooperatives are not yet practical from many standpoints, among which must be considered the uneducated status of the farmers and the lack of capital required for the creation of such cooperatives. So for the time being, a Wheat Board could take care of the internal distribution and marketing of farm products. The Mira has very efficiently handled such matters. Its storage and transportation facilities continue to exist. Its employees are well trained, and retaining them would reduce operating costs. If the same procedures followed by the Mira would be continued by the Wheat Board, except for its compulsory collection of grains, the matter of storage, transportation and distribution would be economically met.

While the Wheat Board is fulfilling its duty in providing better handling procedures, the farmers should be educated and encouraged toward cooperative movements. After the farmers

have become aware of the great advantages of co-ops, have organized, and have built cooperative facilities, the Wheat Board can abandon its functions of storage, transportation and local marketing.

## SUMMARY

After describing the interrelation of the various factors and their relative importance in the dynamics of agricultural economic progress in Syria, broad outlines are suggested for the planned development of the Syrian economy. This planning means a carefully conceived and gradually increasing direction of economic activity. To achieve this, an elastic system of governmental guidance and control may be required until the farmer becomes educated enough to follow the most advantageous methods of progress.

What has been defined in this paper as the principal aim of such a systematic and active guidance of the people's economic life? This aim is the establishment of a higher standard of living for the common farmer. The measures proposed are: 1. improved social status through better education and redistribution of the national income through adjustment of land rent, and reform of land tenure for the benefit of the farmer; 2. increased productivity and extension of cultivated area through the inauguration of development projects, with special reference to irrigation and mechanized farming; 3. better distribution of farm products through a centralized marketing agency to be substituted by cooperative movements in the future.

Due to the fact that the Syrian population is mostly agricultural, the social welfare of the rural population immediately

assumes vital significance in a study of Syria's economic potentialities.

The Syrian farmer, commonly illiterate, is subjected to exploitation by the feudal landlords. The remedy for his illiteracy is education, which as suggested, is to include formal instruction by schools and adult training through experiment stations. The facilities for rural education need to be expanded, and the methods used need to be improved. The elementary schools should be provided with facilities for courses in agriculture with small gardens where the boys can learn to apply improved methods of cultivation. The two existing intermediate schools should be equipped to function as three year intermediate schools of agriculture, and three additional ones should be established. The Latakia region now has the "Souka Intermediate School" while the Hama-Hama region is provided with the "Balamiye Intermediate School". The additional three schools should be located as follows: one to serve the Aleppo region, one for the Euphrates and Jesireh, and one for the two Mohafazates of Jebel Druze and Houran. With these five schools all the productive rural areas of Syria will have satisfactory intermediate facilities for educating their children. The College of Agriculture, which is now under study, either will be affiliated with the Syrian University of Damascus, or will be located under separate administration in Aleppo. In addition to these institutions,



the Ministry of Education should appropriate funds to take care of at least 50 scholarships every year for students to study agriculture abroad. The establishment of experiment stations is recommended for the sole purpose of advancing the farm industry and the welfare of the people engaged in it through the solution of Syria's agricultural problems. Each important agricultural region should be provided with at least one experiment station to meet its local conditional problems and requirements. The Central or National Experiment Station should be located in Damascus and should include the following departments: Farm Crops & Soils, Horticulture and Vegetables, Animal Husbandry, Botany & Plant Diseases, Zoology, Entomology and Apiculture, Animal Diseases and Parasites, Rural Social Science, Agricultural & Industrial Engineering, and Statistics. Each experiment station should also be provided with extension service to make available to the farmers the findings and results of the various studies undertaken.

The matter of exploitation of the farmer by the foudal lords is accentuated by the defective types of land ownership in Syria. These are the Miri, the Mulk, the Waqf, and the Masha. The distribution of ownership in Syria has two extreme situations. On one hand a few landlords own sizeable amounts of land while on the other hand, an endless number of farmers own small individual plots. This situation has resulted in absentee ownership where most of the land is worked by tenants

under the metayage type of contract. Usually the metayer provides all operating expenses, while partition between the proprietor and the metayer is made on the basis of net product. The evils of this system are:

1. Since the contract is usually oral, for only one year, and even then at the mercy of the landlord, the investment of capital and improvement of the land is discouraged.

2. The fertility of the soil is exhausted as the metayer tries to get the most from the land during a short period.

3. The curtailment of production due to the above mentioned fact results in low revenue for the government, which in turn contributes less toward the improvement of agriculture.

4. A low income for the metayer is a consequence of the near exploitation of the landlord. This low income amounts to insecurity, a low standard of living, poor education and malnutrition.

The remedy for this situation can be attained if formal contracts will be required to be signed by both contracting parties. The duration of the contract should be for three years and should clearly define the rights and limitations of each party. The government itself can increase the supply of available land by renting or selling some of the public domain on easy terms. This will weaken the grip of the metayer system. The expansion of governmental loans to farmers is also recommended. With low interest loans available the metayer

will no longer be at the mercy of the landlord or other commercial lean agencies who charge him usurious rates of interest.

This section deals with further extension of the cultivated areas as well as the intensification of agriculture. Such potentialities are largely dominated by the fact that some substantial territories require the use of artificial irrigation for the achievement of their maximum yields. Irrigated agriculture means the additional application of considerable capital and labor. In return, however, there is a manifold increase in productivity and a substantial expansion of yields.

The present irrigation facilities in Syria are so obsolete that the farmer is forced to apply dry-farming methods of cultivation in many cases. The farmer fallows almost half his land and receives a decreased yield from what he cultivates. Furthermore, he is discouraged from putting thousands of fertile hectares under cultivation for lack of water supply.

Of course low productivity results from the lack of applying irrigation methods of cultivation. It has been observed that the wheat yield from nonirrigated land averages 660 kilogrammes per hectare in dry years and 1200 kilos in normal years, as compared with the yield of 2,000 to 3,000 kilos of wheat per irrigated hectare. Under such consideration only, it can be concluded that in the case of wheat the use of artificial irrigation would increase the yield by 62.8 percent. In conjunction with the substantial increase in productivity,

the application of artificial irrigation would bring 967,676 additional hectares under cultivation. The capital needed for such an expansion in irrigation is estimated to be about 98.04 Syrian pounds per hectare. As for procuring the labor necessary for the intensification and expansion of irrigated agriculture, the increased rate of population, together with the labor saving devices of mechanized agriculture, indicate that an ample source of power will be available.

Mechanization is another important factor in raising the farmer's income. The purpose of mechanization is the production of commodities at the least expenditure of time, energy, and money. There is a 79 percent saving in labor if mechanization is applied to the cultivation of barley, corn, hay, oats, potatoes, rice, rye, and wheat. With energy saving mechanisms, a day's work in harvesting wheat with the use of a combine accomplishes what would have required 14 days to harvest by hand sickle. The total increased effectiveness of man power when aided by the use of machinery varies from 150 percent in the case of rye to 2,244 percent in the case of barley. However, the extension of mechanized agriculture is confronted with two major obstacles in Syria. First, there are few trained mechanics, and second, the agricultural credit for the purchase of machinery is inadequate. The solution of the first obstacle can be attained when the intermediate schools and the College of Agriculture can graduate individuals with a strong,



basic knowledge of farm machinery. To overcome the second obstacle the government should either import these machineries and sell them on an installment basis to the farmers, or should provide the farmers with sufficient loans to import their own machineries. It has been estimated that the agricultural implements and machineries that were required in 1948 were valued at 4,710,000 U.S. dollars.

Another factor of relative importance in increasing the productive capacity of Syrian agriculture is to encourage the improvement of plants and animals in the country. The present Syrian plant varieties and animal breeds can be invigorated through research in cross breeding. Also, new plant varieties and animal breeds should be imported if they can meet the local soil conditions, climatic variations, and ultimate demands. The control of insect pests, fungus and virus diseases of plants should be undertaken to diminish the losses confronting the farmers.

Before 1942, the Syrian farmers had complete freedom in marketing their crops. The low yields of the first years of war, the added consumption of the armies stationed in Syria, and general speculation urged the French authorities to create the Mira. This institution was granted absolute power to collect and distribute bread crops for the purpose of satisfying the nation's need of grains. A committee composed of the county agent, the county treasurer, two farmers, and one

representative from the Mira, toured all the farms and established a quota for each farmer. The figures of the quota were arrived at after subtracting from the total production the seed requirements for the next crop season, the yearly need of the farm people (350 kilos of grains for each person per year), and the amount needed for feed (1,000 kilos per head per year). The prices were fixed by the House of Parliament and depended upon the percentage of foreign elements in the grains. A ton of wheat containing less than four percent of foreign elements was priced at 430 Syrian pounds, while a ton containing between four and seven percent of foreign elements was priced at 350 Syrian pounds. The Mira had its buying centers where wheat and barley were collected and then transported to the main storage places where distribution occurred. Among its chief advantages, the Mira decreased the farmer's cost of transportation, storage, and sales; its control also limited speculators when the surrounding countries were offering prices high enough to cause over-exportation. As for its disadvantages, it favored the wheat and barley farmers by offering them protection and a sure market. This situation caused a shift in production and resulted in more land being allocated to wheat and barley. In 1957 only 39.7 percent of the total cultivated land was sown with wheat and barley; by 1946 this had increased to 49.5 percent. The Mira, through its control over marketing, reduced the competition among wheat growers and merchants, competition which could lower wheat prices to such an extent that the low

income groups could afford to purchase it. This would mean the withdrawal of the 12,000,000 Syrian pounds that the government has been appropriating to cover the subsidy for the "bread of the poor".

It has been proposed that the Mira should be abolished and that the marketing and distribution of farm crops should be left free. However, before doing so, an efficient program for future distribution and handling of farm crops must be sought. The plan proposed here, is to create a centralized agency, the Wheat Board, to be substituted by cooperative movements in the near future. The storage, transportation, and marketing of farm products will be left to the individual farmer when the Mira is abolished. His present facilities for handling these factors are inadequate. Transportation is costly if not individually because the farmer is either too poor to have adequate facilities, or the quantity that he handles is too small for economic transportation. He lacks scientific storage facilities and consequently is often confronted with great losses in his staple crops. His low income and indebtedness bind him to sell his products soon after harvest regardless of the prevailing prices. Notwithstanding the fact that the best way to arrive, democratically, at sound economic results would be through cooperatives, at the present time a centralized agency is more quickly put into operation as a substitute for the Mira. The present farmer is uneducated and does not have

the capital required for the immediate creation of cooperatives. Thus, if the same procedures followed by the Mira are continued by the wheat board, except for the compulsory collection of grain and price control, a desirable intermediate program could be developed. After the farmers have become aware of the great advantages of cooperatives, and once the necessary funds are provided, the Wheat Board can abandon its functions of storage, transportation, and local marketing. The export market should remain under the guidance of the Wheat Board for the sole purpose of providing scarce currencies (U.S. dollars and Swiss francs) needed for the importation of many products, mostly machinery, for agricultural and industrial expansion upon which the economic potentialities of Syria are dependent.



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