THE ECONOMIC DEVELOPMENT OF IRAN

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PREFACE

In the machine age, with the advance of mass production, a new problem has occupied the minds of economists. This new problem is not the Malthusian doctrine of inadequate supplies but rather that of a rate of production too high to be sold continually at profitable prices. With periodic insufficiency of demand industrial countries have faced depressions of varying duration and intensity, which have continued until the rate of production and demand once more were in equilibrium. Despite increased industrial productivity a large part of the world subsists at a standard of living which provides insufficient food values and which does not yield a minimum amount of housing, medical care and education. In industrial countries from ten to fifty per cent of the working population is unemployed during depression periods although workers are willing and able to work in order to obtain goods. In the non-industrial countries, on the other hand, millions of workers are victims of what has been termed "disguised unemployment." They find themselves at tasks which are much below their potential productivity and consequently yield a standard of living substantially under that which they are capable of achieving.

The solution to this problem in the undeveloped areas lies partly in spreading the gains of science, both pure and practical; in combining adequate doses of capital and management with the supplies of labor; and in using the excess of resources originating from technical advances in industrial countries. A program on this line would at the same time eliminate inadequate demand in the high-standard countries and depressing poverty in the low-standard countries. As far as Iran is concerned, it is necessary to know her economic background before the necessary measures for economic development can be discussed intelligently. In this respect,

in spite of a few works by Iranian and foreign scholars, the materials on the economy of Iran, in English literature, are limited. The result of insufficient and first-hand information or "little knowledge" of some writers has been a distorted picture in which certain points are over-emphasized, while the significance of others are under-estimated. Statistics, censuses and data in many aspects are lacking. The absence of statistics makes the study very difficult. Due to the scarcity of published data on many of the topics discussed in the present study, it has been necessary to secure the desired information and data directly from the Ministries of Iranian Government and/or offices concerned. The present economic situation of Iran is the product of an evolution, and can only be understood by a study of its economic background. Therefore, the application of August Comte's adage that "no conception can be understood except through its history" seemed a logical approach in this study.

My appreciation is due to Dr. C. J. Ratzlaff, who generously devoted his time to the direction of this study. The work could not have been accomplished without the aid of his experienced judgment. I am also grateful to Dr. Dudley Dillard, who made valuable suggestions, and to Dr. Franklin D. Cooley for his help in the preparation of the early drafts of the manuscripts. Needless to say, however, responsibility for the conclusions reached is entirely my own.

Chapter I

PHYSICAL AND CLIMATIC FACTORS

Between the valleys of the Indus on the east and the Tigris on the west rises what is called the Iranian Plateau. Iran fills the western portion of this elevated tract. It is bounded on the north by Russian Caucasus, the Caspian Sea, and Russian Turkestan; on the east by Afghanistan and Pakistan; on the south by the Gulf of Oman and the Persian Gulf; on the west by Iraq and Turkey. Its area is about 628,000 square miles,[1] or two-thirds of the Iranian Plateau.

In altitude the plateau exceeds 5,000 feet at Kerman, 5,000 feet at Shiraz, and 3,000 in the region of the great northern cities of Tehran and Mashad, while Tabriz, in the extreme north-west, exceeds 4,000 feet. Of the central cities, Isfahan exceeds 5,000 feet, and Yazd 4,000 feet. The highest point is Mount Damavand, east and north of Tehran, with an elevation of about 18,500 feet (5,650 meters) above sea level.[2] The plateau is traversed in places by mountain ranges running generally in a northwest to southeast direction, parallel with the Zagros Mountains which form the western and southern boundries of the plateau. The northern boundary is formed by the high Alborz range, north of which are foothills fringing the narrow Caspian Sea coastal plain. In the south of the Zagros Mountains, at the head of the Persian Gulf, lies another plain and the valley of the river Karun.[3] The valleys, situated between these ranges of mountains are usually green and fertile. From the slopes of

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[1] The equivalent of all states east of the Mississippi and north of and including Tennessee and North Carolina.

[2] Sir Percy Molesworth Sykes, A History of Persia, Macmillan and Co., Ltd., London, 1921.

[3] Karun is the largest river; it flows into the head of the Persian Gulf.

the mountains springs of water flow down into the valleys.

In the central areas the plains situated between the ranges of mountains are mostly desert; and because of lack of adequate water and the salty soil, they are incapable of cultivation. The Kavir desert occupies a large part of the country; and it is perhaps the largest absolutely barren desert area on earth. The lowland part of Iran is that situated on the shores of the Caspian Sea and the Persian Gulf. The Caspian Sea[1] area contains the most fertile part of the country, while the Persian Gulf region, though irrigated in part, is not very productive.[2]

Iran is a land of extremes in climate. The atmosphere is one of the most invigorating and delightful imaginable.[3] The climate varies with latitude and altitude; the central plateau being of a semi-arid condition, while the south is tropical.[4] The Caspian littoral is sub-tropical without extremes of temperature. South of the Alborz Range, which parallels the shore of the Caspian, there is snow in winter, and in summer the temperature may reach 110° Fahrenheit (43° Centigrade). The highlands have severe winters. Tehran, at a height of 4,000 feet, has a January maximum of 35° F. while extreme temperatures below 0° F. have been recorded in Isfahan.[5]

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[1]The Caspian Sea is at present about 85 feet (26 meters) below sea level, and apparently receding at an average rate of 4 inches (10 centimeters) annually.

[2]Wilson, Sir Arnold T., The Persian Gulf, an historical sketch from the earliest times to the beginning of the twentieth century, Oxford, 1928.

[3]Sir Percy M. Sykes, Persia, Oxford, 1922.

[4]Wilson, Sir Arnold T., The Persian Gulf, Oxford, 1928. Also: Great Britain Admiralty, Notes on Climate and other Subjects in Eastern Mediterranean and Adjacent Countries -- and Great Britain Foreign Office, Persian Gulf, H. M. Stationery, London, 1920.

[5]Source: Ministry of Agriculture, Tehran.

Precipitation, both as to denisty and distribution, is an unfavorable climatic factor. The snowfall is variable and uncertain. The highlands, over 4,000 feet in altitude, usually are covered by heavy snow, between December and April. In the maritime areas, on the other hand, the fall of snow is a rare occurrence. The rainfall is light everywhere except on the Alborz Mountains, which receive a heavy fall in winter owing to the depressions which originate over the Caspian. At Rasht, the annual average is fifty-six inches,[1] but the amount decreases rapidly eastward to less than twenty inches in the region beyond the eastern end of the range. Over the plateau south of the mountains, the annual total is about nine inches in the north; it decreases southward, being only two inches per year at Sistan. At the head of the Persian Gulf, the rainfall is somewhat greater, slightly over ten inches.[2] The rainfall is almost entirely limited to the months of October to May inclusive and is heaviest from December to March.

The climatic conditions in the Gulf are profoundly affected by the configuration of the surrounding region. The broad mountain chains which extend to the north and northwest interfere with the free inflow of tempering winds from the north. During the late spring and summer the prevailing wind is the Shemal, from the northwest, hot but dry and healthy.

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[1] Source: Ministry of Agriculture, Tehran.

[2] Wilson, Sir Arnold T., The Persian Gulf, Oxford, 1928.

Chapter II

NATURAL RESOURCES

General Conditions

Iran is a wealthy country, having fertile lands, potentially abundant minerals, relatively vast forests, adjacent seas well-stocked with fish, and above all rich oil bearing territories. Lands which are either mountainous or salt deserts and therefore not suited to cultivation form not less than 30 per cent of the whole area of the country. Only about 10 to 15 per cent of the total land area is under cultivation. An additional 20 to 30 per cent could be cultivated if irrigation were available. About 15 per cent is grazing land and 15 per cent is in forest.[1] The fertility of the cultivatible land varies considerably, in many places reaches a very high degree, but nowhere is it comparable to the fertility of the Nile Valley or the Ukranian black earth.

The total area covered by any kind of forest does not exceed 30,000 square miles (about 1/24 of the whole area of the country).[2] Of this, 1/3 is situated on the shores of the Caspian Sea and provides the most important timber which includes: oak, elm, ash, beech, box, cypress and willow. The other two thirds are represented by park-land covering the western and southern hills of Iran. The plains and hills around the plateau of Iran provide good pasture for domestic animals. This has made of Iran an important stock breeding country.

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[1] E. K. Alami, Le Redressement Économique de l'Iran, Université de Paris, 1936, p. 66. Also: B. A. Keen, The Agricultural Development of the Middle East, H. M. Stationery Office, London, 1946.

[2] The Ministry of Agriculture, Tehran.

A host of species of plants, some of them almost unknown in other lands, grow in Iran.[1] During the long centuries Iranians studied their properties and found important uses for them in the fields of medicine and industry. It seems certain that such varieties as pistachios, almond, apricots, peaches and lucerne were introduced to other parts of the world from Iran. The collection and preparation of certain plants which grow wild forms an important part of the exports of the country. Some 4,000 tons of gum tragacanth and 859 tons of gum azafsetida are gathered, yearly, together with 200 tons of material from the henna plant. Coloring matter comes from indigo, saffron and other plants while atrophenis spinosa, and hedy sarim are used in medicinal preparations.

Wild animal life includes tigers, bears, wolves, leopards, hyenas, lynx, wild cats, fox and jackals. The game birds include bustard, pheasants, partridges, francolin, sand-grouse, mallard, teal and snipe. Pigeons are plentiful everywhere in the vicinity of cultivation. Of non-game birds eagle, hawks, vultures, bee hoopoos and bluejays abound, and the crow, raven, chough, magpie, starling, bulbul and warbler are common. In the Caspian provinces many species of water birds are to be found.

Agricultural Products

Possessing every variety of climate, Iran enjoys a great diversity of agricultural products. The most important are the following: cereals, rice, cotton, silk, tobacco, sugar and tea.

Cereal cultivation is determined according to the degree of irrigation which is possible. The Caspian Zone, with a rainfall which sometimes exceeds 55 inches and produces great humidity, is somewhat of an

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[1] H. Pirnia, A Short Survey of Economic Conditions of Iran, Tehran, 1945, p. 8.

exception. The rivers of Iran capable of being worked for irrigation by gravitation are few. The main Iranian plateau is watered by a number of streams, mostly of inconsiderable length. In such conditions agriculture relies for the most part on irrigation, drawn either by gravitation from those rivers holding a supply from spring to autumn, or more commonly by ghanats,[1] artificial subterranean canals starting from the foothills and collecting water for distances of 12 to 30 miles until they are brought to the surface and the stream directed above ground to the lands to be irrigated. Dry cultivation is also used in cultivation of cereals. The most important cereal product of Iran is wheat, with an annual production of about 2,000,000 tons, followed by barley with 750,000 tons.[2]

Rice is largely cultivated in the low-lying strip of the Caspian Sea and to some extent in other parts of the country. The provinces of Gilan and Mazadaran on the Caspian produce nearly nine-tenths of the whole output of rice. The annual production of rice is 500,000 tons.[3] There is an important export of rice to the Soviet Union.

Cotton is grown in nearly all provinces of Iran. The climate conditions of the central plateau are best suited for short staple cotton. The production of cotton is estimated at some 150,000 tons.[4] Formerly only a small quantity of cotton was used in the local mills and the greater quantity was exported, but during the last 10 years many mills and textile factories have been erected in Iran and they absorb a large proportion of the cotton.

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[1] M. Fateh, The Economic Position of Persia, London, 1926.

[2] Source: Ministry of Agriculture, Tehran.

[3] Ibid.

[4] R. N. Gupta, Iran, An Economic Study, Indian Institute of International Affairs, New Delhi, 1947.

Silk production is of long duration. In the 16th and 17th centuries the finding of a market for the silk trade of Iran was a source of preoccupation and profit for the Safavian kings. In the 17th century Chardin estimated the silk crop of Iran to be about 4,000,000 pounds. Up to 1860 the total production annually was valued at 1,000,000 pounds.[1] The mulberry is grown for sericulture chiefly in Gilan and Mazandaran, to a lesser extent in Yazd and Khorasan. It was formerly grown very extensively from Isfahan to some 30 miles up the valley of Zainderud. The breeding of silkworms from 1864-1890 declined to small proportions owing to the disease "pebrine," but, at the end of the 19th century, an import to Gilan of selected silkworm eggs from Brusa in Turkey led to a revival of the industry. The present production of silk is about 2,000 tons, which is processed largely by local factories.

Tobacco grown in the Caspian province supplies the total need of the Government tobacco factory in Tehran, which produces cigars and cigarettes for the whole country. The tobacco is now produced about as follows:

TABLE I

Production of Tobacco Factory

Type	Area Hectares	Crop Kg
Cigarette	8,570	4,500,000
Pipe	5,650	2,500,000
Water-pipe	1,115	2,000,000*

*Source: Office of Tobacco Monopoly, Tehran.

Many attempts have been made to encourage the growing of sugar beets, providing raw materials for eight sugar factories, which need about 40,000 tons of sugar beets a year. The average sugar beet yield is

[1] M. Fateh, The Economic Position of Persia, London, 1926.

7.5 tons per hectare, about one-fourth of what it should yield. Reasons for this low yield are lack of irrigation water during summer months, lack of phosphate fertilizer, and continued growing of beets on the same land without crop rotation.[1] The consumption of sugar in Iran is annually 110,000 and the production of sugar beets is enough to produce only 30,000 tons.

Tea is grown in some of the northern provinces, and its cultivation is growing rather rapidly. The area between the cities of Ramsar and Astara, and between the mountains and the Caspian Sea is particularly well adapted to the cultivation of tea. It is estimated that within this area there are 8,000 hectares, not now cultivated for tea, where it can be grown. The national annual consumption of tea is 10,000 tons; the production is 4,000 tons. Some of the tea factories which serve the present producing area are privately owned, others are operated by the Government.

The fisheries of the Iranian littoral of the Caspian Sea are a valuable resource and also a source of revenue to the State. In 1868 they were leased as a monopoly, to a Russian firm. The upheaval caused by the World War I having resulted in failure of the concessionaire to pay the royalties, the concession was withdrawn by the Iranian Government in 1918, but leased to another Russian firm. The concession was terminated by mutual agreement, and Société Mahi Iran, a new corporation for the exploitation and marketing of all products of the fisheries was established. In the new corporation Iran and Russia have equal rights, but the president of the Societe should always be an Iranian. The Iranian Government has established and operates a fish-canning factory at Bandar Abbas principally for sardines.

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[1] Report on Program for the Development of Iran, Prepared by International Engineering Company, Inc., San Francisco, California, U.S.A., for Morrison-Knudsen International Company, Inc., July 1947.

Indigenous Plants

Iran abounds in indigenous plants including medicinal plants, fragrant plants, resiniferous plants, plants yielding coloring matter, and oil-yielding plants.

The most important medicinal plants are the following: Absinth, Senna, Mastic, Wild Rue, Fleawort, Origanum, Plantain, White Succary, Cat's Paw, Maidenhair, Parsley, Thyme, Manna Tighal, Persian Manna, Purgative Manna, Salep, Colocynth, Rocket, Santonica, Fennel, Mustard, Liquorice, Rhubarb, Aniseed, Hyssop, Cumin, Sumac, Jujube, Hermodactyle, Negella, Hedge Mustard, Tamarix, Manifera, Marjoram, Buglose, Morning Glory, and Myrtle. Fairly large quantities of the above natural products are exported from Iran and the country is well supplied to meet any increased demands in the future.

Fragrant plants provide the basis for the perfume industry of Iran, which dates back to ancient and medieval times as shown by the numerous references to its famous rose and other perfumes in Oriental tales. More recently it has fallen in the background with the result that its products, in the form of rose and orange-blossom perfumes of which fairly large quantities were formerly exported to India, Iraq, and other neighboring countries, now barely suffice for the needs of the country itself. The best rose perfumes are now manufactured in Maiman (Fars) and Kashan. In view of the great variety and special fragrance of its flowers, the perfume industry of Iran can easily be revived and large quantities of rose and other perfumes and essences made available for export to foreign countries. Spearmint and Penny-royal are other important fragrant plants which grow profusely in most parts of Iran, especially in the Caspian Sea areas, for which a large foreign demand exists.

The most important of the resiniferous plants of Iran is Tragacanth. This plant which provides Iran with one of its important export items grows wild in most parts of the country, especially in Fars, Isfahan and Kermanshah. Large quantities of Gum Tragacanth, obtained from this plant, are exported every year to Europe, United States of America, India and other countries where it is mainly used in the textile and pharmaceutical industries. Gum Arabic and Gum Asafoetida are other important products of the resiniferous plants of Iran. In 1941 as much as 251 tons of Gum Asafoetida, valued at Rls. 2,175,372 was exported from the country, mainly to United States of America, Great Britain, India and Iraq.[1]

As to plants yielding coloring matter, the more important of the indigenous ones are: Indigo, Madder, Henna and Saffron. The coloring matter obtained from the root of the Madder is used in Iran in the carpet industry; but some quantity of Madder roots, as well as Indigo leaves, is also exported abroad where they are used in the manufacture of dye-stuffs. The exports of Henna from Iran in 1941 amounted to over 758 tons, valued at Rls. 3,595,414 and the buying countries were Russia, Afghanistan, Germany, United States of America, Turkey, Syria, Iraq and India. During the same year 5,575 kilogrammes of Saffron, valued at Rls. 8,504,773, was exported from the country, mainly to Egypt, Iraq, and India.[2]

The important oil-yielding plants of Iran are the olive, sesame and castor. Olives are grown extensively in the Caspian Sea areas and its annual produce is about 40,000 tons of which the greater portion is used for manufacturing olive-oil for home consumption. Sesame and castor are

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[1]Annual Reports of Custom Administration of Iran, Tehran, 1941.

[2]Ibid.

cultivated on a large scale in most parts of Iran and the greater part of their annual produce of about 6,500 tons and 5,000 tons respectively is exported abroad.[1] The remainder is used locally for manufacturing oil. Linseed is also grown to some extent in Iran; and the oil extracted from it is used in the manufacture of paints. The cultivation of the above oil-yielding plants can also be developed extensively and their products multiplied several times.[2]

Mineral Resources

Coal

The principal coal mining regions of Iran are located on both slopes of the Alborz Mountain north of Tehran, and east and southeast of Mashad near the border of Afganistan. Coal is also found in the vicinities of Tabriz, Isfahan, and Kerman, and is extracted and sold locally. Outcropping of coal seams have also been observed in many other localities, but they are either too thin to be worked, or demand or transportation is deficient.

Of the known coal deposits of the country, those which have been exploited to the greatest extent are in Alborz Mountains north of Tehran. These deposits lie in the rugged region on the north and south slopes of the mountains, and because of the rugged folding, they are nearly devoid of structure and when mined produce slack or powdered coal. The folding has at times been accompanied by heat, with the result that some of the volatile matter has been driven off and the coal does not produce good coke. The coal seams of the Alborz Mountains are usually

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[1] Annual Reports of Customs Administration, of Iran, Tehran, 1941.

[2] Asre Eghtesad, Official Journal of the Chamber of Commerce of Tehran, Vol. I, No. 1, Tehran, September 1946.

thin and average only about 60 centimeters.[1] The known number of coal seams in the coal measures vary with the region, and also with the amount of exploration in the region. All of the known coal deposits are located in steeply dipping anticlines and synclines. The angle of dip varies from about 30° at Kerman, and 35° to 40° near Mashad, to 90° at Zirab.[2] The thinnest vein worked commercially occurs near Tabriz, where the seam is between 10 and 18 centimeters thick. The thickest vein recorded occurs at the Chasheh-Gol Mine near Mashad, where there is an average thickness of 2 meters. The veins of the principal mines near Tehran have an average thickness of about 60 centimeters.[3]

Iron Ore

Approximately 200,000 tons of hematile is mined near Semnan. The mining has proceeded entirely by following the veins of ore and making no attempt to outline or explore the deposit by means of core drill holes. All problems regarding the mining of iron ore are, and must be, purely speculative depending upon the Government's decision as to the construction of the steel mill.[4]

Copper

Copper is found in Iran in three main mining districts which are located near the towns of Anarak, Abbasabad, and Zenjan. Present mines

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[1] Report on Program from the Development of Iran, Prepared by International Engineering Company, Inc., San Francisco, California, U.S.A., for Morrison-Knudsen International Company, Inc., July 1947.

[2] Ibid.

[3] In 1938 the Government began to erect an important iron and steel furnace near Tehran, but had to abandon the project, possibly, temporarily on the outbreak of World War II.

[4] H. Pirnia, A Short Survey of the Economic Conditions of Iran, Published for the Economic Information Bureau, Tehran, March 1945, p. 61.

are substantially the same as those of ancient times, and are now operated at depth.

Iran's copper deposits are very large but are mostly of very low grade. The present method at Anarak, of mining by "filled stope," is the most expensive method which can be used. The average concentration of the Anarak deposit is about 0.25%, although concentrations are known to occur in the deposit in considerable volume having an average value of 6%.[1] Concentratiosn of 1% may be economically worked in large volume by methods of "block caving." It is believed that by careful coordination between testing laboratory and field forces, ore having sufficient value to permit extraction by modern machinery and by some method of mass-excavation may be blocked out.

The mines of Abbasabad have been operated for many years by "open cut" methods. Recently copper values have been found to be reducing with depth of workings, and exploitation of the mines of the area was discontinued in the spring of 1947. The Government has begun the exploration of the district.

Red Iron Oxide

Red iron oxide occurs on Hormoz Island, which is offshore from Bandar Abbas. The material as found is of such purity that it can be used as pigment for paint and as such is purchased by English interests. The availability and quality of the product is not generally known and the amount produced by the limited forces working on the island is between 1,000 and 1,200 tons per year. As the material is found in the pit there

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[1] H. Pirnia, A Short Survey of the Economic Conditions of Iran, Published for the Economic Information Bureau, Tehran, March 1945, p. 61.

are several feet of waste which must be stripped from the deposit. Below this there are several feet of the oxide which is fairly high grade, but is not of paint quality. This material could be used as iron ore. The oxide of paint quality lies below this lower grade material. The quantity of the oxide on the island is enormous but has not been accurately measured. Production of the oxide is entirely by hand methods and after mining it is roughly crushed by wooden mallets.

Miscellaneous Minerals

Iranian mines contain and produce many items of commerce, such as chromium, sulphur, lead, arsenic, magnesite, gypsum, quartz, feldspar, salt, etc. Many of these items are produced in small amounts by private operators and at unit prices far above the corresponding world prices. They are produced and sold at these prices principally because very small amounts are required for Iranian industry, and also because of the difficulties of shipping the material into the country from abroad.

Sulphur occurs in large amounts in an impure state in many parts of the country. The amount required per year will undoubtedly rise as a result of the increased industrial program. At present, less than 100 tons are required per year. This amount is provided by crude furnaces in the desert using sulphur for fuel and producing a surprisingly pure product.

Salt occurs in many parts of the Kavir and Lut deserts, and on Hormoz and Gishm Islands. The domestic requirements are produced from the former sources. The latter are admirably situated for world markets and deposits are of excellent quality.

Lead occurs in small amounts in several locations, including as the most promising, one at Anarak.

The turquoise mines of Neishboor are very famous and have been worked for the past 800 years.[1] There are also turquoise mines in Kerman and Sane.

Petroleum deposits are well known to exist in many parts of southern, northern and western Iran. Because of its importance the petroleum deposits are dealt with in a separate chapter.

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[1] M. Fateh, The Economic Position of Persia, London, 1926.

Chapter III

POPULATION

The population of Iran is officially estimated to be about 16,550,000. Obviously, therefore, the country is very sparsely populated. Its large areas and abundant natural resources with proper development could support a considerably larger population. Natural conditions account for the northern and western parts of the country being more densely populated than the central or southern parts.

Of the total population of Iran, the nomadic tribes constitute probably three million.[1] They are of considerable economic importance to the country for they produce a number of principal articles of commerce, namely, rugs, lambskins, dyestuffs, and medicinal herbs. As great cattle breeders they provide the towns with the products of their flocks; milk, meat, butter, and cheese. In fact, the towns depend for their living upon these products. This became apparent when as a result of the interruption of the traditional tribal life by the tribal settlement program there occurred a serious shortage of animal products in the towns. The tribal elements are scattered throughout Iran. The most important among them are: Kurds, Lurs, Turks, and Qashqais.

The distribution of urban population is indicated by the table which follows:

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[1] Elgin Earl Groseclose, Introduction to Iran, New York, Oxford University Press, 1947. Also: W. S. Haas, Iran, Columbia University Press, New York, 1946.

TABLE II

Principal Cities of Iran with their Population (1947)*

Name of City	Population
Tehran	850,000
Mashad	250,000
Tabriz	214,000
Isfahan	205,000
Shiraz	129,000
Rasht	122,000
Hamadan	104,000
Kermanshah	89,000
Ardebil	64,000
Rezayeh	64,000
Yazd	60,000
Kerman	60,000
Ahwaz	60,000
Ghazvin	55,000
Arak	55,000
Abadan	50,000
Maragheh	50,000
Burujerd	46,000
Kashan	45,000
Ghom	40,000
Zenjan	40,000
Dezful	40,000
Pahlavi	38,000
Khoi	35,000
Babol	34,000
Malayer	33,000
Sanandaj	30,000
Bushehr	28,000
Najafabad	27,000
Ghochan	25,000
Saghez	25,000
Kazerun	24,000
Shah Reza	24,000
Shahrud	24,000
Shushter	24,000
Semnan	23,000
Niriz	23,000
Jahrom	23,000
Behbehan	23,000
Jorjan	21,000
Golpayegan	21,000
Sari	21,000
Lahijan	20,000
Khonsar	20,000
Khoramabad	20,000
Borazjan	18,000
Behshahr	17,000
Zabol	16,000
Lar	15,000
Bandar Abbas	14,000

*Report on Program for the Development of Iran Prepared by International Engineering Company, San Francisco, California, U.S.A., for Morrison-Knudsen International Company, Inc., July 1947, p. 18.

Chapter IV

INDUSTRIES: NATIONAL AND MODERN

National Industries*

In the 19th century the national industries of Iran, which had been developing were hampered by an invasion of cheap foreign manufactured goods.[1] Consequently domestic industries were not in a position to compete with foreign goods. In consequence the national industries of Iran declined considerably. During the last two decades, however, owing to the government encouragement and protection the national industries are improving in quality and increasing quantitatively. Some of these industries which have, by their peculiar artistic qualities and modernized technique, survived the competition of the new industries are discussed briefly below:

Textiles

The evolution of weaving techniques in Iran and the consistantly high level of her achievement in this field bear a definite relation to the fundamental characteristics of her artistic expression. Her creative works in all periods are distinguished by a rich and subtle sense of color, and by an extremely sensitive feeling for beauty of line. Iranian love of color, especially in varied and sophisticated combinations,

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*By national industries is meant the local industries which have existed in Iran from ancient times, and have been created by Iranians themselves.

[1] M. Fateh, The Economic Position of Persia, London, 1926. Also: Tariff p. 58.

resulted in textiles that are remarkable for the many different shades in which the designs are woven.[1]

Rugs and Carpets

The most important textile fabrics are the rugs and carpets, which has a world fame. The time involved in manufacturing the rugs is responsible for the high cost. Since rugs are entirely made by hand, it takes thirty hours to finish a square foot of rug.

The principal manufacturing districts are Kerman, Kashan, Fars, Khorasan, Tabriz, Kordestan, Isfahan, Yazd, Arak, and Nain. On a smaller scale such manufacturing is carried on throughout the nation. Each district holds to its own traditional designs, colors, and materials. About ten years ago the Iranian Carpet Company, a government corporation, was formed. At first, it was charged with the supervision of all carpet looms in the country. This idea was soon abandoned, and the Company became a manufacturing and selling concern. Because of its size the Company exerts considerable influence in the industry.

It seems that for some time to come the greatest single foreign market doubtless will be the United States. For the years 1932 to 1943, the United States took rugs and carpets to the value of about 51,000,000 rials per year.[2]

Next in value to carpets are the woolen fabrics (which produce the beautiful shawls of Kerman), the silk fabrics (the manufacture of which is centered in Yazd, Khorasan, and Kashan), and the "Ghalamkar fabrics"

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[1] N. Andrews Beath and E. B. Sachs, Persian Textiles, and Their Technique from the Sixth to the Eighteenth Centuries, New Haven, Oxford University Press, 1937. Also: Mehmet Aga-Oglu, Safawid Rugs and Textiles, New York, Morningside Heights, Columbia University Press, MCMXLI. Also: R. M. Riefstahl, Ph. D., Persian and Indian Textiles, New York University, New York, 1923.

[2] Annual Reports of the Customs Administration of Iran, Tehran, 1932 to 1943. (One rial is equal to 3.2 cents.)

or chintzes block-printed on cotton or silk tissue (which are make in Isfahan). The latter, small quantities of which are exported abroad, are commonly used for curtains and tablecloths.

Amongst other textiles is "Naghdeh," with small compact floral and personnage designs. Naghdeh consists of strips of gilt-silver woven flat. The brocaded plain cloths or taffetas is also among the famous Iranian textiles. However, their production are greatly reduced in amount.[1]

Metal Works

Metal work has been one of the most renowned of Iranian industries in the ancient period and survives in some sections on a reduced scale. The enamelling in gold, silver or copper is the best surviving relic, being still practiced at Shiraz and Isfahan. At Zanjan, Burujerd, Isfahan, Kashan and Shiraz the work in the precious metals is carried on.

At Shiraz and Abadeh a very ingenious and artistic mosaic of bone and ivory, metal and colored woods arranged in minute geometrical designs, called "Khatam" are executed. Iranian ingenuity has always excelled in carving and at Abadeh carved materials are a notable production.[2]

Modern Industries

Textiles - Cotton

There are now in Iran 26 mills, some of which spin and weave, some spin only, and some weave only. The index of the spinning industry is the number of spindles, as given below:

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[1] Reath and Sachs, Persian Textiles, Oxford University Press, 1937.

[2] M. Fateh, The Economic Position of Persia, London, 1926. Also: H. Pirnia, A Short Survey of the Economic Conditions of Iran, Tehran, 1945, pp. 14-15.

TABLE III

The Number of Cotton Textile Mills

Area	Ownership	Mills	Spindles	Output Tons Per Yard	Output Tons/Spindle Per Year
Isfahan	Private	9	50,000	4,600	.092
Various	Private	15	84,000	5,100	.061
Mazanderan	Government	2	54,000	1,100	.020
Total		26	188,000	10,800*	

*Source of figures, The Ministry of Commerce and Industries, Tehran.

The Government plants now operate only one 8-hour shift, and the private plants two 10-hour shifts. Operating efficiency is low as seen by the output per spindle. Plants and mills need repairs.

There are around 2,000 mechanical looms in Iran.[1] It is not exactly known how many hand looms there are in Iran, but it is estimated that there are about 5,000, producing about 2,000,000 meters per year, or about 400 meters each.[2] Since each should produce 8 to 10 meters per 10-hour day, the estimated production would indicate that the average hand loom is operated about 50 days per year. The hand looms are utilized during the periods when other work is not pressing, hence representing an important source of supplementary income to the operators. They are not in a position, however, to compete economically with mechanical looms. Because of their supplementary income value, the encouragement of their use nevertheless seems desirable.

Textiles - Woolen

There are 10 fairly modern wool spinning and weaving plants in Iran,

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[1]Source: The Ministry of Commerce and Industry, The figures are approximate, but are believed to be substantially correct, year 1946.

[2]Ibid.

5 of which are also engaged in cotton weaving, and have been listed under that heading. In addition, there is an unknown number of small, hand-operated spinning and weaving units, which probably produce about twice the amount of woolen cloth that is produced in the mills. It is estimated that the total annual production is 9,000,000 meters, including woolen cloth and blankets, but excluding rugs and carpets.[1*]

The Iranian wool is coarse, and its products are inferior to those made from the soft Australian wools. In the past, some Australian wool has been imported for making fine woolen goods locally. Iran's own manufacturing will require approximately 20,500 tons of raw wool annually, as compared with a present production of 26,000 tons. Many attempts are being made to improve the quality and quantity of native wool by the importation of better sheep from other countries (i.e. Australia) and by cross-breeding.

Silk

In Iran the silk industry dates back more than 2,000 years. However, only within the last 10 years has the industry been modernized and mechanized, by the establishment of a large filature and weaving plant at Chaloos, with capacity of 1,000,000 meters per year, by the establishment of grain (egg) station and laboratory at Rasht, and by the construction of about 20 "Séchoirs" or worm-killing and cocoon drying stations in the Gilan area. The cocoon producing area centers around Rasht, and extends east along the Caspian coastal strip as far as Ramsar. There are also several weaving plants at Rasht. In all, Iran has a sizeable investment

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[1]Source: The Ministry of Commerce and Industry, Tehran, 1946.

*It is estimated that the total annual consumption is at 12,000,000 meters, with the difference made up by imports of finer British woolens. This gives a total annual consumption of .8 meters per capita, as compared with 5.7 meters per capita in the United States.

in the silk manufacturing industry, with approximately 75,000 laborers employed either part or full time.

The sericulture is an important phase of agriculture in the Gilan and Mazandaran areas. Mulberry trees are often grown along ditch banks, and in small fields not adapted to other uses. The labor required is seasonal, lasts for a short time each year, and is only a fraction of what is required for most other crops. Sericulture is therefore important in providing use for land otherwise non-productive, and in affording an outlet for labor during slack seasons. Its encouragement in spite of the recent developments in making rayon and nylon seems advisable.

The Government conducts the laboratory and grain station at Rasht for reproduction and selection of grain, which is distributed to the worm rearers at the time the mulberry leaves are at the proper stage of growth for feeding. Another function of the laboratory is the examination of grain by microscope for diseases. The laboratory is a vital part of the silk industry since promiscuous reproduction of eggs for the following crop by the rearers would invite propagation of diseases.

The central control and attention in cocoon production is not adequate, resulting in an amount of third and fourth grade cocoons. Generally cocoons are sorted into four qualities: first, cocoons which are perfectly clean and pure; second, cocoons which are otherwise good but which have been stained by crushed cocoons; third, weak cocoons; and fourth, cocoons crushed and badly stained from within. At present only the first and second cocoons are used at Chaloos and stores of the second and third class cocoons have accumulated at the sechoirs. It is stated by experts that under well-regulated producing conditions, the third and fourth grade cocoons would form only a very small portion of the total.

The modern silk-weaving plant is located at Chaloos. The plant was located at this point, so as to be close to a supply of clear water and also to provide employment for the people of Chaloos. The advantage of the present location is that it is closer to the Golandrud coal mines which produce coal almost exclusively for use at this plant. On the other hand, the disadvantage is that the plant is considerably removed from the cocoon producing areas, necessitating additional transportation charges. There are five main divisions in the silk plant: (1) the filature section where the silk is unwound from the cocoons; (2) the spooling section where the silk is unwound from reels and placed on spools and bobbins for weaving; (3) the weaving section, with 270 looms; (4) the dyeing and printing section; and (5) the inspection, ironing, and packing sections. The capacity of the plant is 1,000,000 meters of cloth per year, but it actually produces only about 300,000 meters annually.[1] There is also a small hosiery department which produces about 90 pairs daily. This department has additional equipment on order which is not yet installed.

There were originally four filature sections at Chaloos, each employing about 800 laborers. In order to take advantage of a supply of labor at Rasht, the equipment of one filature section has been moved to Rasht where it is now stored, and plans are made for moving a second. The silk thread to be produced at Rasht will be sent to the Chaloos factory for weaving. One of the principal needs of the industry, in order to produce salable products in competition with rayon, is more attractive designs.

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[1]The Ministry of Commerce and Industry, Tehran, 1946. Also: Report on Program for the Development of Iran, Prepared by International Engineering Co., Inc., San Francisco, California, U.S.A., for Morrison-Knudsen International Company, Inc., July 1947, p. 275.

Textiles - Jute

There are two jute spinning and weaving plants in Iran, one Government-owned at Shahi, and one privately-owned at Rasht. The Rasht plant has a capacity of 3,000 tons per year, and the Shahi plant 2,200.

In Iran jute is used for sacking rice, wheat, sugar, cotton, and for miscellaneous other purposes. Governmental requirements in 1944 were estimated at 3,000 tons. No estimate is available as to private requirements, but it is probable that they were about 2,000 tons. In 1945, 556 tons were imported, at a cost of about 4,660 rials per ton.[1]

Sugar Industry

There are seven factories for extracting beet sugar in Iran. They produce 30,000 tons of sugar per year, but have a capacity of 48,000 tons. An eighth plant at Varamin, not now operating, has a capacity of 5,000 tons. Iran consumes 110,000 tons of sugar annually, and at present imports about 80,000 tons of sugar annually.[2] In general the beet sugar factories are in need of repairs and extension. The establishment of a sugar-cane growing industry, for the establishment of cane-sugar factories is under consideration.

Canning Industry

Iran produces a large tonnage of perishable fruits and vegetables.[3] The present canning and preserving facilities are inadequate to meet consumer demands, and some amount of canned goods is imported each year. Now there are some half a dozen firms engaged in the canning industry,

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[1] The Annual Reports of the Customs Administration of Iran, 1944-1945.

[2] H. Pirnia, A Short Survey of Economic Conditions of Iran, Tehran, 1945.

[3] R. N. Gupta, Iran, An Economic Study, New Delhi, Indian Institute of International Affairs, 1947.

producing quantities of canned fish, meat, vegetables, jam and pickles. The Government-owned fish canning factory at Bandar Abbas produces 2,000,000 tons of fish.[1]

Vegetable Oils

The oil pressing and refining plant at Varamin near Tehran has a capacity of three tons of olive oil and twenty-five tons of cottonseed oil per day. There are also several small cottonseed oil plants, and oil from some is shipped to Varamin for processing.

Portland Cement

At present there is only one cement plant in Iran at Tehran, which produces about 230 tons per day, and the demand exceeds the supply.[2] Portland cement is basic to most industries because it is necessary in all sorts of construction, and, of course, industrial machinery cannot operate until it is placed on foundations and housed. The demand for cement may be expected to increase steadily, particularly if a national development plan is carried out. The raw materials for cement are found in many parts of the country in large quantities. The expansion of this industry appears necessary. There are no figures available to indicate the normal annual demand for cement. It appears, however, that a use of 32 kilograms per inhabitant (totaling 483,000 tons) is rather conservative.

Glass Manufacturing

The largest glass factory of Iran is located at Tehran, producing a variety of dishware, tea glasses, bottles, lamps and lantern globes. The

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[1] H. Pirnia, A Short Survey of Economic Conditions of Iran, Tehran, 1945, pp. 61-62.

[2] The Anglo-Iranian Oil Company alone imports about 50,000 tons annually, (Annual Reports of Customs Administration, 1939-40-41).

capacity of the factory is ten tons per day of a variety of domestic and industrial glassware. Work is in progress at this plant for the installation of a window glass unit for producing 5,000 square meters of window glass per day. The crushing facilities for this unit will also supply the present glass making operations.

The raw materials used, in glass manufacturing in Iran, include quartzite rock from Malayer, near Arak, shipped to Tehran by rail; sodium carbonate, now obtained from England;[1] sodium sulphate from Ghom; sodium nitrate from Hamedan; borax from Soviet Russia; and zinc oxide from the United States.

Steel

At present there is no steel or iron producing industry in Iran. Iron ore deposits are known to exist in the country, and some 200,000 tons of hematite have already been mined near Semnan, but the deposits have not been explored thoroughly as to quality and quantity. Many deposits of coal are known and are being worked, but the production is small. Other coal deposits are reported to exist but have not been investigated. It is known that Iranian coal produces poor coke, but it is not known whether it can be so handled as to produce a satisfactory coke essential to making steel. Petroleum is available in any desired quantity, but so far no petroleum coke has been developed anywhere suitable for making steel.[2]

Before the outbreak of World War II, the Iranian Government contracted with a German firm for the construction of a steel plant at Karaj, a short distance west of Tehran. Some of the foundations were built,

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[1] Attempts are being made to obtain sodium carbonate locally.

[2] Ibid., p. 24

but no equipment was provided and none installed when the war stopped the work. The project has not been resumed.

The normal annual steel consumption in Iran is not exactly known. During 1940, the last year unaffected by abnormal world conditions, Iran had imported as follows:

TABLE IV

Steel Consumption in 1940

	Tons
Castings, sheet, shapes, bar, etc.	23,410
Nails, bolts and nuts	2,797
Manufactured articles and tools	1,079
Other iron products	34,474
Total	61,760*

*The Annual Report of the Customs Administration of Iran, Tehran, 1939-1940.

The annual potential consumption has probably increased in the last few years, and probably now would be at least 100,000 tons annually. A local reliable source of steel at suitable prices would further stimulate demand.

Chemical Industry

This industry is very little developed despite the large range of raw materials found in Iran, chiefly because of the limited factory facilities and shortage of water. It is estimated that Iran has need for production of the following chemicals: ammonia, 7,500 tons per year; sulphuric acid, 25,000 tons per year; nitric acid, 9,000 tons per year; ammonium sulphate, 15,000 tons per year; chlorine, 10,000 tons per year; soda ash, 15,000 tons per year; caustic ash, 12,000 tons per year; and sodium sulphate, 12,000 tons per year.[1] The raw materials for these products fall into two general groups. First, ammonia, sulphuric acid, nitric

[1] Report on Program for the Development of Iran, Ibid, p. 8.

acid, and ammonium sulphate can be produced wholly or in part from the hydrogen sulphide and the hydrogen available at the Khuzestan Oil Fields. Secondly, the caustic soda, chlorine, sodium sulphate, and soda ash are all basically sodium products or produced (chlorine) from sodium compounds (salt).

Alcohol

Industrial alcohol produced in Iran is chiefly the by-product of the manufacture of nitrocellulos at Parchin, near Tehran. There are a number of small plants producing pure alcohol for beverage, pharmaceutical, and medicinal purposes. It is also used as solvent for surface coatings and for cosmetics.

While in other countries a number of different raw materials are used in alcohol production, in Iran the bulk is made from molasses, a by-product of the beet sugar industry. It requires 2 1/2 gallons of molasses to produce one gallon of 190-proof alcohol; it is, therefore, economical to haul the finished alcohol to the point of distribution than to haul the molasses to a distillery near the same point.[1] The demand for alcohol for industrial purposes is increasing in Iran, and additional distilling capacity is required.

Tobacco Industry

The manufacture of tobacco products is in the hands of a Government monopoly, which provides a large percentage of government revenues. The only tobacco factory is located in Tehran. It manufactures about 350,000,000 cigarettes per month, nearly all of which are consumed at

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[1]The Ministry of Commerce and Industry.

home. The supply just about equals the demand. Approximately 350,000 kg. of "narghileh" (water-pipe) tobacco are exported annually, principally to Egypt.[1]

It is estimated that the net profits from the tobacco monopoly are now Rls. 700,000,000 annually, or about $21,800,000.[2] If the monopoly be granted funds to expand its operation, foreign markets could be expanded. Afghanistan (the neighboring country), for example, raises almost no tobacco and, therefore, provides a profitable market for cigarettes.

Miscellaneous Industries

Hides, Skins, Furs

Hides are pelts from large animals, such as cattle, horses, and camels. Skins are the pelts of small animals, such as the sheep, goat and calf. The local supply of hides is short of the country's demand, while there is an annual exportable surplus of approximately 3,500 tons of skins.[3] The local supply of sheep and goat skins could be use more gainfully if instead of being exported they were processed at home into articles of use, such as gloves, luggage, and belts. The fur industry in Iran is confined mostly to famous caracul, or new-born lamb pelts. Much of the domestic tanning is performed in small shops, preparing about 2,300 tons per year. The largest modern plant is located at Mashad. The chemicals required for the tanning processes are obtainable for the most part in Iran.

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[1]The Annual Report of the Customs Administration of Iran, 1945.

[2]The Ministry of Finance, Tehran, 1946.

[3]The Annual Report of the Customs Administration of Iran, 1939-1945.

Soap and Glycerine

Fourteen factories produce annually 300 tons of toilet soap and one thousand tons of laundry soaps. In addition, a Government-owned factory opened near Tehran in 1939 has an annual capacity of 1,200 tons of soaps and seven hundred and twenty tons of glycerine.

Match Industry

The largest match factory in Iran is located at Tabriz. The present annual output of the country is 100,000,000 boxes.[1]

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[1] H. Pirnia, A Short Survey of the Economic Condition of Iran, Published for the Economic Information Bureau, Tehran, March 1945. Also: Gupta, Iran, New Delhi, 1947.

Chapter V

OIL

Historical Background

The existence of mineral oil in Iran has been known since ancient times. Herodotus described how oil was collected from pits at Qirab, 57 miles northwest of Shushtar.[1] Petroleum has been oozing from these springs during a period of at least 2400 years. Bitumen pits have been known from time immemorial, and their prolonged output is the basis of the belief that they must discharge from an extensive subterranean supply.

In 1872 an English adventurer, Baron Julius de Reuter, obtained from Naser-Ed-Din Shah an exclusive right to develop all mines except gold, silver and other precious stones. This doubtless included oil, for, in a second concession granted to the same person, exploitation of the oil fields of Iran is explicitly envisaged. In 1884 a certain Mr. Hoftz, resident in Bushehr, obtained from the Iranian Government a limited concession. He drilled a rather shallow well in Dalaki, but without result. The first practical steps, however, were marked under the D'Arcy Concession, beginning in 1901.

Anglo-Iranian Oil Company

In 1901, William Knox D'Arcy, an Englishman who had made a large fortune in Australia by the promotion of mining enterprises, smelled the oil in Iran. He negotiated with Mozaffer-Ed-Deen Shah, and obtained a concession for the exploration, refining, exporting, and sale of oil, natural gas, asphalt, ozokerite throughout the kingdom, with the exception

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[1] M. Fateh, Ibid, p. 6.

the northern part.[1] The concession was to run for a period of 60 years.[2] The Iranian Government was to receive 16% of the net profit arising from the enterprise.[3] The Iranian Government promised to furnish all the government lands which were necessary for the Company's construction purposes.[4] The concessionaire was authorized to promote one or more companies, with whatever capital he deemed advisable, for exploring of oil.[5] Upon the incorporation of the company, a sum of 40,000 pounds sterling, half in cash and half in shares, was agreed upon to be offered to the Shah by the company.[6] The Iranian Government reserved the right to appoint an agent, at the cost of the company, for the supervision and examination of the accounts of the company.[7]

Two years after the grant of the concession, a company called "The First Exploration Company" was formed with a capital of 600,000 pounds sterling and immediately started investigation. In 1904, two producing wells were brought in, but since these wells were about 600 miles from the Persian Gulf, the exporting was unprofitable. By 1905 D'Arcy and his associates had spent all their investments, however, they were highly optimistic as to the presence of oil of commercial value. Therefore, they began to obtain new capital. The Burma Oil Company gave financial assistance, and further exploration was carried on in the Bakhtiari mountains, marked by a temple called Masjed-Soleyman, in May 1908, a

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[1] Text of Concession, League of Nations, Official Journal, December 1932, Art. 6.

[2] Ibid, Art. 1.

[3] Ibid, Art. 10.

[4] Ibid, Art. 3

[5] Ibid, Art. 9.

[6] Ibid, Art. 10.

[7] Ibid, Art. 11

"gusher," which shot the oil accompanied by gas, high into the air, brought success to D'Arcy.[1]

In 1909, the Anglo-Iranian Oil Company, Ltd., was registered in London, and three years later, upon further expansion of the Company, the British Government decided to provide the additional capital in order to acquire the controlling interest in the Company. With an investment of 2,000,000 pounds the British Government became the majority stockholder.

With World War I and the tremendous demand for oil on the part of Britain, new capital was invested by the British Government and the individual investors.[2]

Dispute between Iranian Government and the Anglo-Iranian Oil Company

On November 28, 1932, the Iranian Government at a meeting of the Council of Ministers announced the cancellation of the D'Arcy concession for the following reasons:

1. The original concession had been obtained under pressure.
2. The amount of royalty paid had been unfairly calculated.
3. The Iranian representative had not been permitted to check the accounts.
4. The Company had refused to pay royalties during the war.
5. The Company had refused to pay income tax to the government.
6. The Company had charged high prices for oil sold in Iran.
7. The Company had failed to exploit its Iranian oil fields.
8. The Company had refused to send a representative to settle the claims of Iran when the Iranian Government had demanded it.[3]

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[1] Anglo-Iranian Oil Company, "The Persian Oil Industry."

[2] Anglo-Iranian Oil Company, Report of Directors and Balance Sheet, 1932.

[3] New York Times, December 14, 1932.

The parties of the dispute directly concerned were the Iranian Government and the Company; but the British Government intervened, and on December 8, 1932 sent a note to the Iranian Government stating that unless the cancellation was withdrawn within a week, she would refer the dispute to the Permanent Court of International Justice "as a matter of urgency." The Iranian Government contended that the Permanent Court of International Justice could not deal with a dispute between the Iranian Government and a private corporation, such as the Anglo-Iranian Oil Company. It was mutually agreed, however, to bring the matter before the League of Nations. While both parties were preparing to present the case before the League, the president of the Company, Sir John Cadman, arrived in Iran to reach an agreement with the Iranian Government.[1]

In April 1933 a new concession was granted to the same company and was approved by the Majless. The new concession is for a period of 60 years, ending December 31, 1993.[2] The area for the Company's operation is restricted to a maximum of 100,000 square miles which the Company is allowed to choose within 5 years from the map which is annexed to the concession.[3] The Company has the privilege of exporting oil and allied products from the country free of duty. It also exempts from all levies the import requirements of the Company, which are exclusively used for construction work in Iran.[4]

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[1] League of Nations, Official Journal, December 1932.

[2] Ibid, Art. 26 of the new concession.

[3] Ibid, Art. 2.

[4] Ibid, Art. 7.

The Company is required to pay as royalty to the Iranian Government 4 shillings per ton of oil produced in the country, in addition to 20% of the annual net profit of the Company after distributing 671,250 pounds sterling as dividends to the common stockholders.[1] The total annual royalthy must never fall below a minimum of 750,000 pounds.[2] After the termination of the life of the concession, or in case the Company abandons the concession, 20% of the reserves of the Company accumulated since the date of the new concession are to fall to the Iranian Government.

Besides the royalties, the Iranian Government receives in the form of taxes during the first 15 years 9 pence per ton on the first 6,000,000 tons, and 6 pence per ton on any excess over that quantity.[3] During the following 15 years, the Company is required to pay 1 shilling per ton on the first 6,000,000 tons; and 9 pence per ton on the additional quantity.[4] For the remaining 30 years of the life of the concession agreement will be made between the two parties in the year 1963. The aggregate sum in the form of taxes to the Iranian Government is never to be less than 250,000 pounds during the first 15 years, and never less than 300,000 pounds during the following 15 years.[5]

For the settlement of the claims of the Iranian Government, the Company agreed to pay a sum of 1,000,000 pounds within one month from the date of the concession.[6] In regard to the sale of petroleum and allied

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[1] League of Nations, Official Journal, December 1932, Art. 10, A, B.

[2] Ibid, Art. 10, G.

[3] Ibid, Art. 11.

[4] Ibid, Art. 11, G.

[5] Ibid, Art. 11, B, D.

[6] Ibid, Art. 23.

products in Iran, the Company agreed to give the Iranian Government a discount of 25%, and the Iranian dealers a 10% discount from the average market price.

The new concession was advantageous to the Company for two notable reasons, namely, the concession cannot be legally cancelled as it is approved by the Majless; and the period of concession is extended.

Iranian Oil Fields

Iran, currently the largest oil producing area in the Middle East, has seven producing fields — six oil fields and one gas field. The estimated proven reserve of this country is 6 billion barrels.[1] There are about 55 producing wells in the fields with a total daily production of 406,000 barrels, as indicated in Table V. In 1938 the country produced 215,000 barrels daily. Iranian fields include Masjed-Sulaiman, Gach-Saran, White Oil Springs, Agha-Jari, Haft-Kel, Pazanun (gas), and Naft-Shah. Each of these fields will be discussed briefly below:

Masjed-Sulaiman, a large elliptical anticline, was discovered in May, 1908, and covers a proven area of some 36,000 acres. Until the end of 1943 about 280 wells had been drilled, of which 258 reached the main producing horizon. All but 95 of these wells were abandoned. Of the 95 wells, 21 produce oil, 19 are shut-in wells, 13 are gas wells, 6 are pressure observation wells, 9 are oil-water contact observation wells, 9 are gas-oil contact observation wells, and 28 are inactive. Of the 21 oil producers, only 3 are on artificial lifts. The Asmari lime of the Miocene-Eocene age is the principal oil producing zone. Top of the pay

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[1]The Oil Weekly, World Oil Atlas, 1946.

TABLE V

PRODUCING WELLS AND OIL PRODUCTION OF IRAN*

	Year of Discovery	Oil Wells at end of 1945			Daily at End of 1946 Barrels	Year 1945 Barrels	Year 1946 Barrels
		Producing					
		Shut-In	Flowing	Total Producing			
Agha-Jari	1937	--	9	9	92,000	17,698,372	30,687,696
Gach-Saran	1926	4	3	3	40,000	14,415,855	14,178,684
Haft-Kel	1925	1	23	23	194,000	71,698,927	66,058,746
Masjed-Sulaiman	1908	11	29	29	60,000	20,210,814	27,797,484
Pazanun	1937	3	--	--	--------	240,000	204,282
White Oil Springs	1934	--	1	1	17,000	2,523,094	5,265,936
Naft-Shah	1923	--	2	2	3,000	620,435	703,638
Total		19	67	67	406,000	127,407,581	144,896,466

*The Oil Weekly, 1947 World Oil Atlas.

ranges from 900 feet on the crest of the structure to 3,500 feet on the flanks. The average thickness of the pay is about 100 feet. At the end of 1943 the field had produce 810,923,596 barrels of oil, of which 107,696,813 barrels of fuel oil had been returned to the reservoir, giving a net production of 703,226,783 barrels. Daily average production in 1943 was 78,215 barrels of which 51,259 barrels were returned to the formation. The gravity of the oil is about 37 degrees (API).

Gach-Saran was discovered in 1926 and the structure, an anticline, is 18 miles long and about 2 1/2 miles wide. At the end of 1943, 13 wells had been drilled including 4 dry holes. Two wells were producing oil and one was a gasser. Daily average production in 1943 was 20,500 barrels, while cumulative production at the end of 1943 was about 20 million barrels. Production is from the Asmari lime in the Miocene-Eocene age. The pay averages 1,000 feet thick.

White Oil Springs was opened in 1934 and at the end of 1943 had 2 gas wells producing from the Asmari lime in the Miocene-Euocene age from about 4,000 feet.

Agha-Jari, discovered in 1937, had 3 oil wells and one gas well at the end of 1943. The number of wells, however, has increased considerably since that time. The anitcline is about 20 miles long and 4 miles wide. Production is from the Asmari lime which is topped at about 8,000 feet.

Haft-Kel is one of the largest producing areas in Iran, having been discovered in 1925. At the end of 1943, a total of 40 wells had been drilled, of which 13 were producing oil. Daily average production at the end of 1943 was 190,000 barrels. Cumulative production at the end of 1942 was 425 million barrels, of which 12 million barrels had been returned to the formation in the form of refinery products. The anticline structure is 18 miles long and 2 1/2 miles wide.

Pazanun, a gas field, was discovered in 1937 and produces from the Asmari lime from about 7,500 feet. Four wells had been drilled by the end of 1943 with condensate production opened in 1943.

Naft-Shah is located on the border of Iran and Iraq. The Iraq portion of the field is called Naft-Khaneh. Daily average production is about 10,000 barrels. Production is from the Asmari with average pay thickness of 300 feet.

A long-range production program is indicated for Iran with Standard Oil Company (New Jersey) and Socony-Vaccum Oil Company having concluded an agreement whereby the two firms would purchase large quantities of crude (reported to be upwards of 100,000 barrels daily) from Anglo-Iranian.[1] The agreement covers a period of 20 years. The 3 companies have formed Middle East Pipe Lines, Ltd. to construct a 300,000-barrel-daily pipe line from Iran to a Mediterranean port.

One of the largest refineries in the world is operated by Anglo-Iranian at Abadan in Iran. This plant has a crude charging capacity of 125,000 barrels. In 1945, the crude runs totaled about 125 million barrels. Additions are planned, including a new catalytic cracker and lubricating unit.

Kermanshah Petroleum Company, an Anglo-Iranian subsidiary, also operates a small plant at Kermanshah. Crude comes from the Naft-Shah field about 40 miles south of Qasr-Shirin on the Iran-Iraq border. The plant has a daily capacity of 2,100 barrels with crude runs in 1946 amounting to 6,000,000 barrels.

The pipe lines in Iran and engineering data of Iranian oil fields are indicated in Table VI and Table VII.

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[1] The Oil Weekly, 1947 World Oil Atlas.

TABLE VI

ANGLO-IRANIAN PIPE LINES IN IRAN*

Origin	Terming	Length Miles	Diameter Inches	No. of Pump Station	Capacity of lines (Bls. Daily)	Year Completed	Status
Masjed-Sulaiman	Abadan	133	10	3	80,000	1916 to 1927	In use
Masjed-Sulaiman	Abadan	133	10	3			In use
Masjed-Sulaiman	Abadan	133	12	3			In use
Haft-Kel	Abadan	136	12	2			In use
Haft-Kel	Marid	124	12	2	205,000	1929 to 1938	In use
Haft-Kel	Kut-Abdolah	61	12	2			
White Oil Springs	Wais	32	10-12				
Agha-Jari	Abadan	97	12			1945	In use
Agha-Jari	Meshur	42	12		136,000	1946	In use
Gach-Saran	Abadan	166	12			1940	In use
Mashur	Abadan	60	12		40,000	1941	In use
Naft-Shah	Kermanshah	146	3	4	2,660	1935	In use

*The Oil Weekly, 1947 World Oil Atlas.

TABLE VII

ENGINEERING AND GEOLOGICAL DATA ON IRAN'S OIL FIELDS*

	Estimated Proved Areas Acres	Gravity of Oil (API)	Producing Formation (feet)			Depths of Wells		Average Thickness of pay (feet)	Type Structure
			Name	Kind	Geological Age	Minimum Top Pay	Maximum Total Depth		
Masjed-Sulaiman	34,560	37.8	Asmari	Lime	Oligo-Miocene	2,000	3,000	1000	Anticline
Haft-Kel	28,800	36.4	"	"	"	3,000	4,000	1000	
White Oil Springs	6,400	33.8	"	"	"	5,600	5,700	1000	
Agha-Jari	19,200	32.7	"	"	"	6,000	9,000	600+	
Pazamun	6,400	66.7	"	"	"	6,000	8,000	700+	
Gach-Saran	38,400	30.2	"	"	"	4,000	7,000	1000	
Naft-Shah	38,400	42.8	Kalhur	"	"	2,600	2,700	250	

*The Oil Weekly, 1947 World Oil Atlas.

For the development of oil in the five northern provinces of Iran, which were not included in the D'Arcy Concession, the Iranian Government in 1923 granted a concession to the Sinclair Company of the United States of American but the concession was cancelled.[1] A few years later, a concession for the exploitation of oil in North East Iran was secured by the Sea Board Oil Company and others, who formed the Ameriranian Oil Company in 1936 at Delaware, United States of America. This company also abandoned the concession during 1938. In September 1944, negotiations for the grant of an oil concession in South East Iran were started by the American Standard and Vacuum Oil Company, The Sinclair Oil Company, and the British Burmah-Shell Company. In September 1944, the Iranian Government decided that the grant of oil concessions during the war should be deferred on the ground that Iran was occupied by foreign military forces.

Iranian-Russian Oil Negotiation

On September 13, 1944, Kaftaradze, the Soviet Vice-Commissar for Foreign Affairs, arrived in Tehran to negotiate the terms of a concession in North East Iran in an area of 110,000 square kilometers from Azerbaijan to Ghuchan. The Iranian Government did not see its way to discuss the matter during the war, when foreign troops were still stationed in Iran. On October 21, 1944, the Government announced that Iran had decided, in reply to the Soviet request, to postpone granting oil concessions to any power until after the war. The Soviet Government resented the very reasonable attitude of the Iranian Government and the Vice-Commissar left Iran.

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[1] M. Fateh, Ibid, p. 6.

On December 2, 1944, a bill was introduced to the Majless by Dr. Mossadegh and duly passed. It incorporated the following provisions: (1) in the matter of oil concessions no Prime Minister, Minister, Acting Minister or Under-Secretary has the right to enter into any conversation having any official or legal effect with any official or unofficial representative of a neighboring or other government, or with any representative of an oil company, or with any other person; nor have they the right to sign any agreement connected with oil; (2) the Prime Minister and the Cabinet may discuss the sale of oil or the manner in which the Iranian Government should exploit and control Iran's oil deposits, but must inform the Majless of such conversations; and (3) offenders against (1) and (2) will be sentenced to solitary confinement for a period of 3 to 8 years and will be permanently dismissed from Government service.[1]

The stand taken up by the Iranian Majless and Government was that so long as there were foreign troops on Iranian soil, no negotiations for the conclusion of an oil agreement could be carried on. All foreign forces, in accordance with the terms of the Allied occupation of Iran, were required to be withdrawn from Iran, six months after the cessation of hostilities with Germany (i.e., March 1945). At the stipulated date, the British and American forces withdrew, but the Russians refused to walk out. The Iranian Government brought the matter before the United Nations Security Council, but before the matter could be finally discussed in the Council, on April 8, 1946, the conclusion of an oil agreement between Iran and the Soviet Union was announced. The terms of this unratified agreement called for a joint Iranian-Soviet Oil Company to be formed in

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[1]Mozakerat Majless, Majless Press, Tehran, 1944. (Discussions of Majless)

Iran to survey and exploit the oil fields in Northern Iran. The conditions specified are: first, during the 25 years of the existence of the Company, 49 per cent of the shares will belong to Iran and 51 per cent to the Soviet Union. During the following 25 years 50 per cent of the shares will belong to Iran and 50 per cent to the Soviet Union; secondly, profits realized by the Company will be divided in proportion to the shares held by either party; thirdly, the boundaries of the Company's operations exclude that part of Western Azerbaijan which lies to the west of the line starting at the point where the frontiers of Russia, Iran and Turkey meet, and running south along the east bank of Lake Rezaich 30 miles west of Tabriz through the town of Miandoab; fourthly, Soviet obligations include the covering of various expenditures, payment to specialists and workers and supply of all machinery and installations; fifthly, the Company will operate for a term of 50 years; and, finally, at the expiration of this term the Iranian Government will have the right to buy the shares held by the Soviet Government or to prolong the agreement. The defence of areas where prosecuting and other work is to be carried out will be the exclusive responsibility of the Iranian security organs and will be undertaken only by them.

The agreement for the formation of this Iranian-Soviet Company was to be submitted for ratification to the Majless. After the conclusion of the agreement, the Russians withdrew their forces from Iran by May 6, 1946. In 1947, the Majless refused to ratify this agreement, and Iran is under Soviet pressure to grant the oil concession. This pressure together with the failure of the past negotiations supports the conclusion that the Iranian oil question once more underlines the need for international cooperative development of the world's raw materials as against exclusive "spheres of influence" control. It seems, however, that the

best method of safe guarding the political and economical interests of Iran and, at the same time, enabling the world to benefit from our rich deposits would be to pool all the oil of Iran, including the area controlled by the Anglo-Iranian Oil Company, Ltd., and set up an international corporation in which Iranian, American, British, Soviet, French companies could share. The management might be entrusted for a term of years to the technical experts of a country not a neighbor of Iran. The whole matter might be referred to the Economic and Social Council of the United Nations.

Chapter VI

TRANSPORTATION

Iran has inadequate communications, including under this term, highways, railways, ports, airfields, and telephone, telegraph, and radio systems. Improvement in communications of all sorts is essential. It will be quite impossible to develop the economy of the country unless the present communications are extended and improved. Iran's main connection with the rest of the world and her chief routes for exporting and importing are through the Persian Gulf ports of Bandar Shahpur and Khoramshahr. These ports are not developed. It is essential that they be developed in a modern manner, because upon their efficiency the nation's foreign business to a large extent depends. Iran is now, and will be for years to come, a predominantly agricultural country, and will have to import many manufactured products, for which she will have to pay with agricultural products, and the bottle-neck for this exchange is in the ports.

The highway system of Iran has only begun. At present there are about 15,000 kilometers (9,315 miles) of roads in the entire country, practically all built within the last 20 years. There is thus about one mile of road for every 71 square miles of territory, or for each 1,700 population. Without a more extensive system social and economic progress is extremely difficult or even impossible.[1] The railway system must be extended to reach more of the country. Some extensions can be justified economically on grounds of anticipated volume of traffic, and development which will result in areas to be served. The extension of railways would

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[1] Ibid, p. 8.

help people in outlying districts, and would also serve to unify the country.

Highways

To provide sufficient means of communication for such a wide and thinly populated country, with enormous mountain ranges and desert plains, is difficult.[1] Nevertheless, as the result of continued efforts directed to this end, the country has developed a fair net-work of highways and railways, although inadequate. It was along these that the continuous stream of arms and munitions were transported to the Soviet Union, during World War II and contributed substantially to the Allied victory. The highway net-work includes: asphalted or good metalled roads totaling 15,000 kilometers; roads fit for cars but which are not in good condition, between localities where there is not much transportation; and old caravan roads for transport by animals. Most of the goods and passenger traffic in Iran is carried by lorries and buses. The number of cars and lorries used in Iran increased very rapidly. It is estimated that in 1925 the number of motor vehicles was 632; by 1928, it had increased to 3,152 and by 1939 to 25,000.[2]

Railways

The construction of railroads has been the desire of Iranian people more than 50 years, but the introduction of it was delayed in Iran because of the rivalry between Great Britain and Russia.[3] The two powers

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[1] Idem, p. 16.

[2] H. Pirnia, A Short Survey of the Economic Conditions of Iran, Tehran, March 1945, p. 19.

[3] W. S. Haas, Iran, Columbia University Press, New York, 1946. Also: M. Fateh, The Economic Position of Persia, London, P. S. King & Son, Ltd., 1926, pp. 56-58.

tried to obtain from the Iranian Government concessions for their respective selfish projects. The Government of Iran, between the two competitors did not see its way to grant concessions to either of the powers. The Russian project was a line between Tabriz-Tehran-Mashad, to link Tiflis and the Caucasus region with the Russian Turkestan. The British plan envisaged a Trans-Persian Railway in the south which was to come from Iraq, then pass through Bakhtiari country, touch Shiraz, and cross into the then British Baluchestan (now Pakistan).[1]

Railway lines at present include: (1) the 85-mile railway from Tabriz to Iranian-Russian frontier at Julfa, with a side line branching off to lake Rezaiyeh, built by a Russian company in 1916; (2) the line between Mirjaveh, on the Irano-Pakistan border, and Zahedan, constructed during the World War I, the length of which is 104 miles; (3) a railway of 7 1/2 miles length between Rasht and Pirebazar; (4) a railway of 35 miles built in 1923, within the territory of the British oil concession; and (5) a line constructed in 1892, covering the five miles between Tehran and Rayy.[2] The location of the lines are indicated on map , Appendix and the length of each line is given in Table VIII which follows.

In May 1925, the Majless passed a law establishing a government monopoly of sugar and tea, the proceeds of which, were to be devoted to the construction of railways. The first project of railway construction was to connect the Caspian Sea with the Persian Gulf; and the second project from eastern Iran to western Iran. The Trans-Iranian Railway construction began in October 1927, and was finished on August 27, 1938.[3]

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[1] W. S. Haas, Iran, Columbia University Press, New York, 1946.

[2] G. N. Curzon, Persia and the Persian Question, London and New York, Longmans, Green and Co., 1892, pp. 614-633, Vol. I.

[3] $150,000,000 was spent for the construction of Trans-Iranian Railway. See: H. Pirnia, A Short Survey of the Economic Conditions in Iran, Tehran, 1945.

The total length of the Trans-Iranian Railway is about 865 miles. Much of the railroad is in rugged mountain canyons of solid rock, and with such steep sides that large proportions of roadway are in tunnels. It has 224 tunnels with an aggregate length of about 275,000 feet -- nearly 54 miles -- and an average length of 1,230 feet. The gauge of the track is 56 1/2 inches.

TABLE VIII

Gauge and Approximate Length
of Railway Lines now Operating

Name of Line	Gauge (mm.)	Length (kilometers)
Bandar Shah-Bandar Sharpur	1435	1665
Khoramshahr-Ahwaz	1435	100
Garmsar-Shahrud	1435	315
Tehran-Mianeh	1435	435
Jolfa-Tabriz	1524	200
Mirjaveh-Zahedan	1720	100
Total		2,815*

*Report on Program for Development of Iran. Also: Compiled from Iranian State Railways Publication.

The last two lines shown are continuations of the Russian and Pakistan railroads and therefore gauged to match those respective lines.

The Iranina railroad has an ample amount of good freight equipment; and it is well-designed and constructed. It has no outstanding debt. It has no serious competition from highway traffic along its lines and no competition from other railroads. The completion of the branch lines to Tabriz and to Mashad, which are under construction, will open up large volumes of traffies from those areas. The industrial development will stimulate the business of the railroad by needed transportation of raw materials and manufactured goods.

At present the Iranian railroad is operating at a loss, in spite of considerable volume of business and adequate freight rates and passenger

fares. Heavy maintenance costs are due in part to the exclusive use of hand methods for both "on track" and "off track" maintenance. This of course can be remedied by moderate investment and acquiring the proper methods and know-how.

Ports

Iran's seaports lie either on the Persian Gulf or on the Caspian Sea. The Soviet Union borders on the Caspian besides Iran. The volume of sea-borne trade with the Soviet Union is very small. However, years ago the Caspian ports did a thriving business.

Among the Persian Gulf ports, Bandar Abbas and Bandar Bushehr were once predominant. But the construction of the Trans-Iranian Railway caused the development of Bandar Shapur and Bandar Khoramshahr.

The following tables show movements through ports in the years 1940 and 1945. These ports are indicated on Map III, Appendix III.

TABLE IX

Volume of Movement Through Ports
(In Tons)
Caspian Seaports, Year 1940

Name of Port	Unloaded Imports	Loaded Exports	Total
Bandar Pahlavi	89,135	57,773	146,908
Babol Sar	606	10,671	11,277
Shahsavar	------	7,543	7,543
Novashahr	4,142	------	4,142
Mahmoodabad	58	5,294	5,352
Fereydoonkenar	194	7,189	7,383
Bandargaz	1,923	267	2,190
Bandar Shah	------	790	790
Khajeh Nafass	977	5,492	6,469
Ashoradeh	1,748	1,280	3,028*
Total for Caspian Seaports	98,783	96,299	195,082

*"Statistique Annualle Du Commerce Exterior de l'Iran en 1319 (21 Mars 1940 a 20 Mars 1941)" Administration Generale Des Douanes.

TABLE X

Volume of Movement Through Ports
(In Tons)
Caspian Seaports, Year 1945

Name of Port	Unloaded Imports	Loaded Exports	Total
Bandar Pahlavi	27,362	5,630	32,992
Babol Sar	1,497	———	1,497
Shahsavar	33	69	102
Novashahr	———	———	———
Mahmoodabad	———	———	———
Fereydoonkenar	———	———	———
Bandargaz	———	———	———
Bandar Shah	———	———	———
Khajeh Nafass	———	———	———
Ashoradeh	———	———	———
Total for Caspian Seaports	28,892	5,699	34,591*

*"Statistique Annualle Du Commerce Exterior de l'Iran en 1324 (21 Mars 1945 a 20 Mars 1946)" Administration Generale Des Douanes.

TABLE XI

Volume of Movement Through Ports
(In Tons)
Persian Gulf and Oman Seaports, Year 1940

Name of Port	Unloaded Imports	Loaded Exports	Total
Chahbahar	673	492	1,165
Jask	102	709	811
Bandar Abbas	15,955	3,678	19,633
Khamir	11	876	887
Lingeh	252	743	995
Bandar Bushehr	3,997	11,450	35,447
Bandar Shapur	147,189	2,920	150,109
Gosheh	16,237	8,939	23,176
Abadan	57,352	6,539,890	6,597,242
Khoramshahr	49,536	25,093	74,629
Other Ports	47,370	525,527	572,897
Total	358,674	7,120,317	7,478,991*

*"Statistique Annualle Du Commerce Exterior de l'Iran en 1319 (21 Mars 1940 a 20 Mars 1941)" Administration Generale Des Douanes.

TABLE XII

Volume of Movement Through Ports
(In Tons)
Persian Gulf and Oman Seaports, Year 1945

Name of Port	Unloaded Imports	Loaded Exports	Total
Chahbahar	28	120	148
Jask	95	75	170
Bandar Abbas	1,408	2,429	3,847
Khamir	14	88,540	88,554
Lingeh	74	63	137
Bandar Bushehr	785	1,178	1,936
Bandar Shapur	146	2,902	3,048
Gosheh	225,880	11,215,907	11,441,787
Abadan	51,251	53,761	105,012
Khoramshahr	1,639	1,585,822	1,587,461*
Other Ports	281,293	12,950,797	13,232,090
Total			

*"Statistique Annualle Du Commerce Exterior de l'Iran en 1324 (21 Mars 1945 a 20 Mars 1946)" Administration Generale Des Douanes.

TABLE XIII

Summary of Volume of Movement Through Ports

All Ports	Unloaded Imports	Loaded Exports	Total
Year 1940	457,457	7,216,616	7,674,073
Year 1945	310,185	12,956,496	13,266,081*

*Source: "Statistique Annualle Du Commerce Exterior de l'Iran en 1324 (21 Mars 1945 a 20 Mars 1946) et en 1319 (21 Mars 1940 a 20 Mars 1941)" Adminstration Generale Des Douanes.

The main ports on the Perisan Gulf are: Khoramshahr, Bandar Shahpur, Bandar Bushehr, and Bandar Abbas.

Khoramshahr, one of the two main southern ports, is located at the confluence of the Karun River with the Shatt-Al-Arab, some 50 miles from the Gulf. The Shatt-Al-Arab is navigable for seagoing vessels as far as Basra, Iraq, 30 miles upstream from Khoramshahr. It is tidal in these

reaches, with a low water depth of 5 meters, and affords adequate anchorage for the ships in the trade. The port of Khoramshahr has one quay, 1.25 kilometers long, which can berth 7 ships. It has quay-side water depth sufficient for 10,000-ton ships and smaller. Khoramshahr is a terminus of the Trans-Iranian Railway, and a double track spur runs along the quay. During World War II a vast amount of shipping passed through Khoramshahr to the Soviet Union.

Bandar Shahpur is the other of Iran's two main southern ports. It is located on Khor Musa, a deep-water tidal estuary at the head of the Persian Gulf. The roadstead provides ample anchorage for ships of any size, but a bar at the entrance of Khor Musa would require dredging to admit vessels of very deep draft. The port possesses two quays, one 854 by 42 feet, the other 1,680 by 75 feet. Four ships can be berthed now; the quays have capacity for five ships, but some dredging is necessary to utilize the full space. Bandar Shahpur is a terminus of the Trans-Iranian Railway. The small port town is located on a tidal flat which has been filled and raised artificially above tidewater, and is entirely surrounded by great marshes. During the World War II the port was used by Allied armies, and vast quantities of material were handled through it.

Bushehr lies on the Persian Gulf, three-quarters of the way from the entrance to the head. The city is on a rocky formation which is almost an island, about 2 miles by 9 miles, the long axis being north and south. About 3 miles of its southern end, the "island" is connected to the mainland by low flats, over which there is a road. The city lies on the north end of the "island" with a population of 28,000. It is the port for Kazerun (population 24,000) and Shiraz (population 129,000), and their surrounding populations. The harbor lies on the east of the "island," north of the connection to the mainland. A bar extends off to the north

from the north end of the "island." Maximum depth of water over this bar is about 6 feet at low tide, but behind the bar is an area some 500 feet wide and 30 feet deep. At present, ships anchor outside the bar about 2 miles northwest of the "island," and goods are lightered. The east side of the "island" is rock, sloping off rapidly until it reaches a water depth of 30 feet about 300 feet from shore. The tidal range is about 5 feet, and quite uniform throughout the year.

Bandar Abbas once was the chief port of Iran. At present it is a town of 10,000 people; it lies on a slightly rolling sandy bench about 20 feet above sea level, and looks out on the Persian Gulf. The harbor in front of the town is protected by three islands, Ghishm, Larak, and Hormoz. Ghishm is a large island, 15 by 85 miles in size, and the eastern end is some 12 miles south of the city. Larak lies about 20 miles south and slightly east, while Hormoz lies 11 miles to the southeast. There is fishing and canning industry, and some mining in Bandar Abbas. Hormoz Island is rich in minerals. There is a very rich deposit of red iron oxide, now being worked. There is very little trade through this port, and it serves a limited area of a very sparsely settled desert and mountain country. The harbor is very shallow; seagoing vessels lie about 3.5 miles from land, and goods must be lightered. Lighters land as a steel-frame, wooden-decked dock about 12 feet wide and extending out 500 feet, on which there is a narrow gauge track for hauling goods ashore. At low tide the depth of water at the outer end of this dock is 1.5 meters.

The main ports on the Caspian Sea are: Bandar Shah, Pahlavi and Bandar Novshahr.

Bandar Shah, at the southeast corner of the Caspian Sea, is the present northern terminus of the Trans-Iranian Railway. It has 3 piers, one about 170 meters by 21 meters, another about 85 by 14 meters, and a

third about 800 meters long; the outer 180 meters or so being about 18 meters wide. The port lies behind a long spit several miles out to sea.

Pahlavi, this harbor is located at the southwest corner of the Caspian Sea. It is at the entrance of an estuary leading from the sea to a large lagoon. A small river runs into this lagoon. The city of Pahlavi (population 37,000) lies on the west side of the estuary, and the port (Bandar Pahlavi) on the east. Breakwaters extend out to sea on each side of the mouth of the estuary.

Novshahr is located near the center of southern coast of the Caspian Sea, directly north of Tehran. The town was located and the port built entirely new just before the World War II. The harbor works consist of two moles with converging curvature, one about 1,200 millimeters long and the other 850 millimeters, extending out into the Caspian. The entrance width between mole heads is 180 millimeters. The construction is of heavy rock (up to 20 tons) and 12-ton concrete blocks. The ship docks are at the shore ends of each mole, and are built of heavy cut-stone masonry, 30 millimeters wide and about 200 millimeters long. During the World War II the port was used to capacity, but at the present time the traffic amounts to about 3 small ships per month exporting rice and lumber.

Air Transportation

At the present time, Iran is served by the Iranian Airways Company, which maintains service between important Iranian cities, as well as an international service to Bagdad, Cairo, Lydda, and Europe as far as Paris. The following European airlines also provide international service to Tehran: B. O. A. C. (British), A. B. A. (Swedish), Air France (French), and Russian Airways (Russian).

Since Iran is sparsely settled with isolated centers of population separated by long distances, high mountains, ridges and great deserts, and with inadequate existing communications, air transport is the logical development to connect the country and knit it into a national unit. Furthermore, Iran occupies a strategic geographical position. Since ancient times, the trade routes between the east and the west have flowed through the corridor between the Caspian Sea and the Persian Gulf. Iran stands at the gateway to India and Pakistan from Europe and, in the air age, Iran is at about the half-way point on the great circle routes from Europe to India. It is an excellent position to profit by the development of commercial aviation.[1]

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[1] W. S. Haas, Iran, Columbia University Press, New York, 1946.

Chapter VII

TARRIFF

Historical Background

Before the Russo-Iranian war of 1828, Iran had no national tariff. The only duties levied on trade took the form of tolls, road taxes, and town octrois. These taxes were levied on imports, exports, and transit goods, without any invidious discrimination. No allowance was made for similar fees already paid in other parts of the country. Under this system the more distant the locality to which the merchandise was destined, the higher were the charges. The existence of internal taxes was one of the chief reasons why Russian merchandise could not flow freely towards southern Iran to compete with British goods, and vice versa.

After the conclusion of the treaty of Turkamanchai on February 22, 1828, it was agreed that the goods imported into or exported from Iran by Russian subjects should be liable to 5% ad valorem duty. Therefore, the Russian merchants were in a much more advantageous position than the merchants of other countries having mercantile intercourses with Iran, because Russians were exempted from all the internal duties. The British, who naturally objected to this discrimination, demanded and received a corresponding "Farman"* in 1838, which put British merchants and goods on the same footing as Russian.[1]

The only tax the foreigners had to pay was 5 per cent ad valorem. The Iranina merchants were, in addition to the 5% duty, subject to all

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*Decree.

[1] E. B. Yaganegi, Recent Financial and Monetary History of Persia, New York, 1934.

the internal charges. Therefore, they were at a disadvantage as compared with foreign merchants.

The Tariff Convention of 1903

The tariff regime founded on the Treaty of Turkamanchai in 1828 prevailed until 1902, when Russian demanded a revision of the customs tariff. The resulting tariff, effective February 8, 1903, was placed on a specific basis. Export duties were largely eliminated, and the duties on Russian imports into Iran were reduced to negligible rates.

This tariff convention, which was forced on Iran, was designed entirely in the interest of Russian domination of the commerce and industry of Iran. Morgan Shuster, in his "Strangling of Persia," states that the tariff was "absolutely prejudicial to the interests of Persia and so grossly partial to Russian interests and trade as to render it the most conspicuously unsuccessful tariff in the world, from the view point of the people in whose behalf it is supposed to be framed."[1] However, the tariff convention of 1903 was not entirely disadvantageous to Iran. The limited advantages may be stated under the headings of: (1) the abolition of 5% export duty which for over three-quarters of a century had penalized exports and had therefore prevented the development of the export trade of Iran; (2) the abolition of internal taxes on merchandise which were a great burden on the consumer of both domestic and imported articles, and an addition to the cost of exports which consequently reduced the foreign trade of Iran; and (3) the abolition of the old system, and the organization of centralized customs administration.

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[1] W. Morgan Shuster, Strangling of Persia, The Century Co., New York, 1912, p. 313.

On February 9, 1903, an agreement similar to that of the Russo-Iranian Convention of 1902 was signed between Iran and Great Britain,[1] and subsequently with other countries. The decisions of the Convention were in force until 1920, when a new tariff declaration was signed by Iran and Britain. The object of the new tariff was to raise the rates of these commodities imported from Russia.

The Tariff Autonomy

The Second International Conference on Opium, on March 12, 1926, dispatched a League of Nations Commission to Iran, to study the opium question, with special attention to the problem of substitute products.[2] The Commission after studying the problem in Iran, presented its report to the League. In order to promote gradual restriction of opium cultivation, the Commission recommended the encouragement of home industries, and substitution for opium of silk, wool, sugar, dried fruits, lime, cement, etc., with a view to curtailment of the imports of these products by Iran.[3] The Iranian representative explained that the carrying out of the Commission's program of substitution of other crops for opium was considered by the Iranian Government to be in the existing tariff situation an "expensive experiment." The representative of Iran to the League declared that unless Iran had an independent tariff to protect newly established industries, the Iranian Government could not submit to the Majless (Parliament) a program for opium reduction. Iran requested the League to give its consideration to the question of Iran's tariff autonomy as vital not only

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[1] A. C. Millspaugh, The American Task in Persia, The Century Co., 1925, p. 59.

[2] League of Nations Official Journal, 1928, Supplement No. 64, p. 258,

[3] League of Nations Official Journal, 1927, Supplement No. 59, pp. 18-27.

to the solution of the opium question, but to Iran's economic independence as well.[1]

In September 1927, a special Commission was appointed by the General Assembly of the League to study the problem, with special attention to the views of the Iranian Government.[2] This Commission accepted the views of the Iranian Government regarding the necessity of tariff independence and, on September 13, 1927, the General Assembly unanimously accepted the proposals of the Iranian Government.

After this success, the Iranian Government proposed to the Majless an autonomous tariff. Accordingly the Majless voted a new tariff law on May 3, 1928, authorizing the Government to negotiate treaties with foreign countries for a period not to exceed eight years. The new tariff consists of a maximum and a minimum schedule. Practically all the countries with which Iran has trade duly signed the new agreements. The minimum tariff has generally prevailed ever since the execution of the law. The tariff consists of both ad valorem and specific rates, but the specific rates are more common. The minimum ad valorem levies do not exceed 25%. (There are three exceptions: articles made of gold and silver carry a rate of 50%, tobacco and cigarettes a rate of 50 to 60%, perfumes a rate of 50%.)

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[1] The Eighteenth Quarterly Report, App. 3, League of Nations Official Journal, Supp. No. 59, 1926-1927, p. 18.

[2] League of Nations, Commission of inquiry into the production of opium in Persia. (I. Observations of the Persian Government on the Report of the Commission... II. Extract from the minutes of the sixth meeting of the forty-fourth session of the Council), Geneva, Imp. Atar, 1927 also:
League of Nations, Commission of inquiry into the production of opium in Persia. Report to the Council. Chambery, Imp. reunies, 1927 also:
League of Nations, Commission of inquiry into the production of opium in Persia. Report of the Fifth Committee to the Assembly, Geneva, Imp. Jent s. a., 1927.

Chapter VIII

FOREIGN TRADE

Historical Background: 1875-1914

In the early days, owing to its geographical situation and the existence of two navigable seas at its border, Iran played a prominent role in the mercantile intercourses between east and west. The ancient caravans travelled across the Iranian deserts and plateaus and conveyed merchandise from India and China to the Mediterranean. Phoenician and Greek marines landed on the shores of the Persian Gulf and exchanged their products for Persian silk and pearls. For five centuries after the post-Islamic period, the Arabs, Genoese, Florentines, Venetians, Turks, and Armenians successively established trade relations with Iran. In the beginning of the sixteenth century, the Portuguese flag appeared on Persian waters, and for a period of over a century the Portuguese held an absolute monopoly of all trade on the Persian Gulf. They were succeeded in the early seventeenth century by Dutch marines and merchants, who received permission from Shah Abbas II to settle in Hormoz and opened factories in Bandar Abbas. In the middle of the same century, a Dutch envoy visited Ispahan and secured a monopoly on the spice and sugar trade of southern Iran.

Numerous attempts had been made by the British, both from the north and from the south to acquire trade concession and privileges, as early as 1598;[1] but while all possible favors were granted by the Iranian

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[1] See G. N. Curzon, Persia and the Persian Question, London and New York, Longmans, Green and Co., 1892, Vol. II, p. 574. Also: Jonas Hanway, An Historical Account of the British Trade over the Caspian Sea, London, 1754.

monarchs, most of the early commercial expeditions of the British were doomed to failure, largely on account of Russian competition in the north and Portuguese and Dutch ascendancy in the south. It was not until towards the close of the eighteenth century that Great Britain, after a series of war with Holland, succeeded in acquiring all the colonial possessions of her great rival in the eastern seas; and she thereby also established her supremacy in the Persian Gulf. In 1763, British agents selected Bushehr as the headquarters of the Gulf trade. At the beginning, only one vessel was dispatched annually to Bushehr with a cargo of iron, muslin, and about one hundred bales of cotton fabrics.[1] In 1800, Sir John Malcolm was sent to the court of Fath Ali Shah, and a commercial and political treaty was negotiated, by which English and Indian merchants were permitted to settle and transact business free of taxes in any Iranian port. They were to be protected by government agents in the exercise of their trade, and they were allowed to import British and Indian iron, steel, lead, and broadcloth free of duty. As a consequence, the trade between Iran and Great Britain increased rapidly, until in 1810 the importation of British cotton goods alone amounted to six hundred bales.

During the nineteenth century as a result of improvement in the art of navigation, the cheapening of maritime freight rates, and the opening of the Suez Canal (1869), the British succeeded in conquering the whole southern market of Iran. By the last decade of the nineteenth century out of a total Iranian trade of 7,500,000 pounds, England and the British possessions absorbed 3,000,000 pounds trade of which 2,000,000 pounds consisted of imports.[2]

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[1] Curzon, Persia and the Persian Question, London, 1892, Vol. II, p. 553.

[2] Statesman's Year Book, Macmillan and Co., London, 1890.

The British predominance in the southern provinces was balanced by the Russian ascendancy in the northern and richer provinces. By the Treaty of Golestan, which gave Russia the sole right to maintain vessels in the Caspian Sea, the Tsar's subjects were placed in a much more favorable position than those of any competitive power. The monopoly of the Caspian Sea was confined again by the Treaty of Turkamanchai of 1828; and the Russians, as a result, created a large merchant marine in the Caspian. The final subjugation of the Caucasus, the connection of Tiflis and Batum by rail with Baku, and the construction of the Trans-Caspian Railway across southern Turkestan, opened new gateways into Iran, and made Russian avenues of approach both by land and by water, for easier and less costly than those of their competitors. The expansion of the oil industry in Baku, the nearest Russian port on the Caspian Sea, was another factor which gave impetus to the Russo-Iranian trade in the north. Consequently, Russia claimed out of the total trade of Iran in the nineties, about 2,000,000 pounds a year, of which about one-half consisted of imports.[1]

Aside from English and Russian interests, there were other minor European commercial interests active in Iran in the nineteenth century. As early as 1664, the French East India Company sent two representatives to Iran, who received commercial privileges from Shah Abbas II.[2] This was the beginning of the Iranian-French trade relation. In 1708, another "Farman"* was granted to M. Mitchel, a commercial envoy from Louis XIV. During the time of Napoleon, the trade relations between the two countries reached a climax. From then on in the face of English and Russian competition, the French trade began to decline.

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[1] Ibid, Statesman's Year Book, p. 63.

[2] Curzon, Persia and the Persian Question, London 1892, Vol. II, p. 548.

*Decree

The German and Austrian factors appeared in Iran in the latter part of the nineteenth century and initiated trade relations. The former supplied a great deal of manufactured articles, and the latter, the major part of the matches imported into Iran. In return, they bought Persian silk, lamb skin and carpets.

It is only since the beginning of the twentieth century, as a result of the introduction of Persian rugs into America that the volume of trade with the United States has been growing.

The figures for the external trade of Iran from 1875 to 1914 are given in Table XIV.

The outstanding feature of the foreign trade of the country as disclosed by the data in Table XIV is its continuous and steady growth. In the course of the twenty-five years from 1875 to 1900, the total trade in terms of silver Krans more than tripled. The growth of exports, however, did not keep pace with the growth of imports. During this period, we find that the imports increased from 60,000,000 Krans to 125,000,000 Krans. The main reason for this lag in exports seems to be the existence of an export duty of 5% ad valorem, established after the Treaty of Turkamanchai. This duty penalized the marginal exporters, which often could not profitably engage in foreign trade under the burden of such charges. Another reason perhaps as important, was the fact that while in the latter part of the nineteenth century the technique of production and transportation and the Art of Navigation had improved in other parts of the world, Iran was engulfed in political troubles, and, moreover, was ruled by the monarchs who were not interested in the promotion of trade and commerce. The third reason is that the silk trade of the country, which had previously played an important role in its exports, had failed

TABLE XIV

Foreign Trade from 1875-1914

Year	Imports 1,000 Krans	Exports 1,000 Krans	Total 1,000 Krans*
1875-1877	60,000	60,000	120,000
1877-1880	60,000	40,000	100,000
1880-1885	126,000	100,000	226,000
1885-1890	145,000	100,000	245,000
1890-1995	154,000	110,000	264,000
1895-1900	250,000	125,000	375,000
1900	255,380	147,323	402,703
1901	298,557	150,598	449,175
1902	273,443	189,020	462,463
1903	385,036	254,775	639,811
1904	349,915	247,961	597,876
1905	386,463	293,143	679,606
1906	431,040	353,377	784,717
1907	408,434	317,081	725,515
1908	372,484	326,207	698,691
1909	442,429	371,526	813,955
1910	484,508	375,427	859,935
1911	570,208	420,487	990,995
1912	567,576	436,333	1,003,909
1913	647,165	455,840	1,103,005**

*12.40 Krans = one dollar.

**Compiled from the following sources: From 1875-1900 from British Consular Reports, Statesman's Year Book, and Lord Curzon's "Persia and the Persian Question." From 1900-1914, Annual Reports of Customs Administration of Iran, Tehran.

in 1878, owing to a blight, and no attempts were made for its revival.[1]

From 1900 to 1913, we find that the rate of growth of exports has been faster than that of imports. Total exports rose from 147,000,000 Krans in 1900 to 456,000,000 Krans in 1913, or more than 300%; while imports showed a gain of only 250% or from 255 million Krans in 1900 to 647,000,000 Krans in 1913. The Russo-Iranian tariff convention of 1902, which abolished the 5% ad valorem rate on exports, seems to be the explanation for the rapid growth of the exports.

[1]Statesman's Year Book of 1880, Macmillan and Co., London.

From 1875 until the beginning of World War I, with the exception of the first two years, 1875-1877, we find that commodity imports have always exceeded the commodity exports; and this adverse trade balance has shown a constant increase. From 1877 to 1900, the average yearly excess of visible imports over exports amounted to some 52,000,000 Krans. From 1900 up to 1914, the adverse figures practically doubled. During the latter period, this adverse balance averaged 101,000,000 Krans annually.

Foreign Trade: 1914-1932

The figures of trade with Russia from 1914 to 1931 are given in given in the table below:

TABLE XV

Trade with Russia:1914-1931

Year	Imports 1,000 Krans	Exports 1,000 Krans	Total 1,000 Krans
1914	280,000	262,464	542,575
1915	266,754	267,170	533,934
1916	227,413	299,429	526,842
1917	107,482	162,076	269,558
1918	33,387	52,933	86,320
1919	84,966	75,473	160,439
1920	20,103	8,615	28,718
1921	41,732	26,489	68,221
1922	73,446	62,123	135,559
1923	105,159	158,014	263,173
1924	125,670	244,669	370,339
1925	211,764	281,142	472,900
1926	184,484	163,912	348,398
1927	209,159	199,072	408,231
1928	291,061	166,288	457,349
1929	274,716	148,587	423,303
1930	234,242	158,827	393,069
1931	268,585	250,953	519,538*

*Annual Reports of the Customs Administration of Iran, Tehran, 1914-1931.

The comparison of the figures of the pre-World War I era, with those of the War and post-World War I, indicates that in general, the Russian-

Iranian trade has shown no increase. In fact, when we take into account the depreciation of the Krans, we realize that there has been a decided fall in the gold value of the total trade.

From 1915 until the close of 1918, we find that in spite of the depreciation of the Rouble, Iranian exports to Russia exceeded the imports from that country. The explanation for this seems to be that, during the war, Russia was greatly in need of Iranian raw materils and food products. From 1919 until 1923, the balance of trade became unfavorable to Iran, and imports exceeded exports. The main reason for this was that during this period the Rouble witnessed the sharpest decline in the history, and consequently the price of Russian goods became cheaper than prices of imported goods from other countries in Iranian markets.

From 1923 until 1926, Iranian exports to Russia again exceeded the imports from that country. This was due to the fact that Russia in 1923 controlled its currency. Consequently, the Kran fell sharply in terms of the chervanetz-rouble. The result was a higher purchasing power of Roubles in terms of Iranian products. Therefore, exports were stimulated.

From 1926 on, trade became unfavorable to Iran and imports exceeded exports in a considerable degree. This was due to the breach of the spirit of the Soviet-Iranian Trade Agreement of 1927 by the Soviet trade organizations in Iran.

The Soviet authorities by the end of 1925 estimated that Russia's adverse trade balance across the Asiatic frontiers amounted to more than 1,500,000 Roubles. Fearing that this adverse trade balance might continue to increase and might endanger the position of the Rouble on the foreign exchanges, the Soviet Government took drastic measures.

In February 1926, the Soviet Government declared an embargo on all Iranian exports to Soviet Russia except cotton. This embargo continued

throughout the year. As this measure disastrously affected the Iranian national economy, the Iranian Government dispatched an envoy extra-ordinary to Moscow to attempt to make terms with the Soviet authorities. The outcome was the Soviet-Iranian Trade Agreement of October, 1927. Under this agreement, a trade quota was established between the two countries. Accordingly, the maximum exports to Russia for the first five years of the agreement was set at 50,000,000 Roubles (250,000,000 Krans). Of this, thirty per cent was to consist of raw materials and twenty per cent of food stuffs and manufactured articles.

In Article II[1] of the trade treaty for 1927, it was agreed that the quota for subsequent years should be the subject of further negotiation, but that the new quota for subsequent years should never fall below that of the next preceding year. In Article IV of the same treaty, it was agreed that in case the Soviet trade organizations failed in any one year to buy from Iran the stipulated yearly quota, the Iranian merchants and commercial organizations could export the balance into Russia during the first month of the following year. Only ten per cent of the value of merchandise sold to Soviet agencies by Iranians could be paid for in foreign exchanges; the remaining ninety per cent was to be bartered against Russian goods (Art. V). "One natural consequence of this (bartering)," writes Sir A. T. Wilson, "has been that Russian goods have tended to displace such competing articles as British, Indian and Italian cottons. The Soviets prevented the Trade Agreement of 1927 from achieving the desired effect; namely, to establish approximately equality in the value of imports from Russia." This comment by Sir Arnold, explains the lag of

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[1] J. R. Childs, Perso-Russian Treaties and Notes of 1828-1931, Tehran, 1935.

exports behind imports during the period which followed the Russian Embargo of 1925.

The figures of exports and imports to the United Kingdom since 1914 are as follows:

TABLE XVI.

Trade with United Kingdom: 1914-1931

Year	Imports 1,000 Krans	Exports 1,000 Krans	Total 1,000 Krans
1914	148,071	88,321	236,396
1915	169,319	76,285	245,604
1916	229,513	87,170	316,685
1917	313,136	110,739	423,875
1918	383,381	114,832	498,213
1919	448,578	81,604	530,182
1920	365,927	106,738	472,666
1921	462,128	159,036	621,165
1922	419,032	298,553	717,585
1923	424,310	403,653	827,964
1924	445,241	453,047	898,288
1925	467,729	438,968	906,697
1926	385,608	554,599	940,208
1927	400,014	448,448	845,462
1928	315,198	536,778	851,875
1929	536,430	763,638	1,120,068
1930	368,621	653,005	1,021,626
1931	176,813	671,402	848,215*

*From Annual Reports of Customs Administration of Iran, Tehran, 1914-1931.

Trade between the United Kingdom and Iran, contrary to the situation as between Russia and Iran, has shown a growth. However, the chief reason for this growth of imports from 1916-1920 seems to be due to the fall of the pound sterling. In 1920, a sudden drop of about twenty per cent in the value of imports as compared with 1919, is noticed. This was due to the rise of about thirty-five per cent in exchange value of sterling. In 1928, the imports from the United Kingdom dropped sharply. This drop was due to the declaration of tariff antonomy by Iran, and the raising of

rates on practically all imports. In 1931, the imports fell to about fifty per cent of the year 1930. The main reason for this was the enforcement of the Government Trade Monopoly Act and exercise of strict regulation on imports and exports. Iran's exports to the United Kingdom continually increased during and after the war, until 1923. In 1923 matters reached a stage where exports exceeded imports. This is due to the growth of Anglo-Iranian Oil Company as a result of which the volume of oil exports to the United Kingdom annually exceeded considerably the total of all commodities exported from Iran to the latter.

The following figures show the excess of oil export over all other exported commodities. Before the World War I, Soviet Russia surpassed

TABLE XVII

Oil Export and Other Commodities:1923-1931

Year	Oil Export 1,000 Krans	All Other Exports 1,000 Krans
1923	317,701	85,952
1924	367,054	85,993
1925	359,004	79,964
1926	439,068	115,531
1927	356,978	91,470
1928	432,919	103,859
1929	661,313	102,325
1930	509,452	143,553
1931	512,544	158,958*

*Annual Reports of the Customs Administration of Iran, Tehran, 1923-1931.

the United Kingdom in Iran's foreign trade, but after the war, United Kingdom came to the front. However, if oil be excluded from the exports to the United Kingdom and the capital goods imported from the United Kingdom for use by the Anglo-Iranian Oil Company too, then it will be noticed that Soviet Russia holds the predominant place in the foreign trade of Iran.

The following figures show the trade of Iran and France during the years of 1914-1931. During the World War I, owing to the international

TABLE XVIII

Trade with France: 1914-1931

Year	Imports 1,000 Krans	Exports 1,000 Krans	Total 1,000 Krans
1914	11,096	1,121	12,217
1915	311	509	820
1916	1,910	15	1,925
1917	1,172	48	1,220
1918	828	75	903
1919	2,637	1,256	3,894
1920	3,552	1,970	5,523
1921	8,634	5,162	13,796
1922	20,694	11,599	32,293
1923	22,744	9,346	32,093
1924	32,363	8,103	40,466
1925	24,446	22,636	47,072
1926	37,621	45,105	82,726
1927	33,759	86,258	120,017
1928	39,835	80,099	119,934
1929	61,360	118,234	179,594
1930	27,185	81,477	118,662
1931	14,572	9,195	23,769*

*Annual Reports of the Customs Administration of Iran, Tehran, 1914-1931.

situation, trade with France and her colonies fell to a negligible figure. Starting from 1919, both exports and imports began to recover, until 1922 they reached the pre-war level. Devaluation of the franc was responsible for the rise of imports after 1925. The collapse of the Kran together with the trade restrictions in Iran caused the sharp fall of 1930 and 1931.

The figures of trade between Iran and Germany are given in Table LXX. During and immediately after the World War I, trade between Iran and Germany was reduced almost to nothing. From 1918-1923, currency inflation and rising prices in Germany retarded the growth of trade. After the

rehabilitation of the Mark, both exports and imports showed a continuous and steady increase. The rising of import duties after the declaration of tariff antonomy by Iran does not seem to have affected the imports from Germany. The main reason for this was the fact that during the period the Iranian Government was buying each year from Germany most of her requirements for the construction of the Trans-Iranian Railway. Moreover, Germany during this period was the chief source of munitions and war supplies for Iran. The increase of exports was chiefly due to the sale of oil to that country.

TABLE XIX

Trade with Germany: 1914-1931

Year	Imports 1,000 Krans	Exports 1,000 Krans	Total 1,000 Krans
1914	17,795	1,410	19,206
1915	401	116	517
1916	1,442		1,442
1917	26		26
1918	30		30
1919	144		144
1920	536	175	711
1921	3,004	239	3,243
1922	8,485	354	8,839
1923	17,671	1,064	18,736
1924	23,069	1,908	24,977
1925	32,690	1,831	34,527
1926	39,349	4,503	43,883
1927	32,215	33,660	65,876
1928	47,236	41,628	88,865
1929	60,086	60,180	120,267
1930	56,777	55,991	132,768
1931	42,040	63,427	105,467*

*Annual Reports of the Customs Administration of Iran, Tehran, 1914-1931.

Trade with the United States, which before the World War I formed only nineteen per cent of the total yearly trade of Iran, since then it shows growth. Table XX shows the trade with the United States. The

growth of trade between the United States and Iran is due to the increasing demand for American automobiles, trucks, and tires, in the Iranian market, on one side, and the increasing absorption of Persian rugs and carpets in the American market on the other side.

TABLE XX

Trade with the United States: 1914-1931

Year	Imports 1,000 Krans	Exports 1,000 Krans	Total 1,000 Krans
1914	432	4,413	4,845
1915	268	8,440	8,708
1916	286	9,418	8,705
1917	415	7,271	7,686
1918	113	2,387	2,500
1919	6,419	13,009	19,428
1920	5,122	22,844	27,966
1921	5,483	29,529	35,062
1922	5,553	61,193	66,846
1923	3,531	58,979	62,510
1924	6,233	53,548	59,782
1925	10,255	69,741	79,997
1926	20,669	76,660	97,330
1927	24,961	81,043	106,004
1928	39,213	80,686	119,900
1929	72,692	86,534	159,226
1930	25,091	66,265	91,357
1931	42,756	79,715	122,472*

*Annual Reports of Customs Administration of Iran, Tehran, 1914-1931.

Foreign Trade Monopoly Act of 1931

The Act was passed by Majless on February 25, 1931, in an effort to balance the commodity exports with imports, development of industries, and the protection of agriculture. The monetary factor was also responsible for the enactment of the law. According to this Act[1] the rights to

[1]Foreign Trade Monopoly Act of 1931, Art. 1.

export and import all agricultural and industrial products became the monopoly of the government; however, the government could cede this right to individuals and organizations.[1] The Act required that for every dollar's worth of imports into Iran there should be an equivalent amount of exports from the country.[2] The exporters were supposed to secure export licenses from the government as soon as their merchandise was ready for export. They had, also, to guarantee to dispose of the foreign exchange proceeds to the government or to authorized banks within one year after securing the license;[3] and the government and the authorized banks were to dispose of this foreign exchange at official rates to legitimate imports.

For the execution of the Trade Monopoly Act, an act of 21 articles was passed by the Majless on April 19, 1931. According to this act, an import permit department was established in the ministry of national economy with three members, one from the Ministry of National Economy served as director, one from the Customs Administration, and one from the Bank Melli Iran.[4] The Ministry of National Economy was required to publish for the benefit of importers, a list of all commodities which could be ligitimately imported into Iran. The importers, in return, had to submit a written application to the import permit department specifying the amount of goods they desired to import. The import permit department was then to issue permits to importers in the following order of priority:[5]

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[1] Foreign Trade Monopoly Act of 1931, Art. 3.

[2] Ibid, Art. 2.

[3] Ibid, Art. 7.

[4] Ibid, Art. 1.

[5] Ibid, Art. 6.

(1) applicants who were also exporters and who had disposed of the foreign exchange proceeds of their exports to the government agents at official rates of exchange; (2) applicants who were also exporters and had export licenses in their hands, but had not yet sold their foreign exchange to the government; (3) applicants who had export licenses which had been transferred to them by the original exporters, the proceeds of whose exports had already been sold to the government; and (4) applicants with transferred export licenses, the proceeds of which had not yet been sold to the government.[1]

Foreign Trade Control

From February 1931, from the enactment of the above mentioned Act, the bulk of Iran's foreign trade was rigidly controlled under a system of official monopolies having as its general object the balancing of imports and exports, as well as the encouragement of exports, the maintenance of the exchange value of the currency, and an increase in government revenues. After the summer of 1941, the system of foreign trade monopolies was considerably liberalized, and the exchange regulations were relaxed and simplified. Thereafter, Iranian trade policy was directed so as to encourage imports and to discourage exports, even to prohibit some exports. Representative Iranian export products could be exported only in exchange for an equal value of needed imports.

In the period prior to 1931, the restrictive monopoly controls were strengthened by drastic control over foreign exchange operations; and these measures were further supplemented by a system of import quotas, of

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[1]Ali Amini, L'Institution Du Monopole Du Commerce Exterieur En Perse, Paris, Rousseau and Cie, 1932.

export certificates linked with import permits, and of clearing and compensation agreements between Iran and Germany and the Soviet Union, respectively. The purpose of such agreements was to obtain necessary imports without payment in foreign exchange. Nevertheless, several important categories of both imports and exports were from the start excluded from application of the official control and various special monopoly and foreign exchange procedures were developed and modified from time to time. Under the Law of February 25, 1931, however, the Iranian Government has a monopoly over all foreign trade.

In actual practice, however, a substantial part of the import trade and the greater part of the export trade are not subject to official control. The uncontrolled imports chiefly comprise equipment and supplies imported by the Anglo-Iranian Oil Company, and commodities imported by the Mahie Iran Company of the Caspian Sea. They include, furthermore, imports by government departments and members of foreign diplomatic corps. The value of these "free" imports over a recent six year period (roughly from the middle of 1936 to the spring of 1943)[1] ranged between fifteen and forty-five per cent of the total value of Iran's import trade. The uncontrolled exports comprise two groups of commodities, the petroleum products of the Anglo-Iranian Oil Company and the fishery products of the Mahie Iran Company; their value ranged between fifty-six and eighty-five per cent of the total value of Iranian exports in the six year period.

For the important commodities in both imports and exports, specific monopolies were established and the operation of the monopolized trade was assigned to a quasi-official agency or private company. The government

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[1] Annual Reports of the Customs Administration of Iran, Tehran, 1936-1943.

exercises general supervision over the monopolies and collects the monopoly taxes. Moreover, both for monopoly products and for all other imports subject to official control, the government annually extablished global quotas of permitted import items, and published the list of prohibited imports. Both lists varied considerably from year to year according to changes in the economic conditions of Iran, particularly its foreign trade and exchange situation. However, exchange control did not affect the mercantile intercourses between Iran and Germany, because of the Irano-German payment clearing agreements of October 30, 1935.

In virtue of this agreement importers of German goods were exempted from the obligation to support their applications for import licenses with certificates of export from Iran. This gave Germany, at the time, an advantage of about 17 1/2 per cent (the cost of the export certificate 15 per cent, and the issue of an import license for only 85 per cent of the value of the certificate) over other countries which had no similar agreements with Iran. While exchange was free other countries could compete but when the control of exchange came into force the advantage of importing goods from Germany was greatly enhanced as local currency was paid into the Bank Melli Iran for automatic transfer through the clearing account. Imports from Germany naturally increased; the percentage of the total in 1934-1935 was 9.1 per cent; in 1935-1936, 14.8 per cent; and from provisional figures, for the first nine months of 1936-1937, 12.8 per cent, while imports from the United Kingdom in the same periods represented 14.6 per cent, 10.5 per cent, and 5.3 per cent. The exports of Iran to Germany was increased considerably too. Soviet Union's trade with Iran being on the barter system, the control of exchange does not effect trade between the two countries. The composition of the foreign trade of Iran is given in Appendix IV and Appendix V.

Chapter IX

FINANCE AND BANKING

Monetary Reforms

The Iranian monetary system was based on silver until the beginning of 1933. The standard coin was a silver Kran, which weighed 71.4 grains, 1/10 fine.[1] This coin was legal tender up to any amount.

By the dawn of the twentieth century practically all the European and South American countries had adopted the gold standard. As a consequence of these successive demonetizations of silver, the monetary demand for silver at the beginning of the twentieth century was restricted to subsidiary coinage in those countries which were on the gold standard, and to standard coinage in Iran, China, Indo-China, and a few other countries.

Iran, China and Indo-China, which were on a silver standard, were greatly embarrassed by the rise of the foreign exchanges.[2] In Iran, where practically all the import trade was paid for in bills of exchange drawn in the currency of the country of origin — generally in gold or gold exchange units -- the sudden drop of about 20% in the exchange value of the Kran in the last quarter of 1929 imposed very serious hardships on importers and also on the government since both had contractual obligations to meet in gold exchanges. The situation became increasingly difficult with the growing severity of the world economic crisis.

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[1] The Kran was introduced by Fath Ali Shah. It originally weighed 108 grs., but it was later debased to 84 and 78 grs. by Mohammed Shah.

[2] L. C. Jaine, The Monetary Problems of India, Macmillan and Co., Ltd., London, 1933.

On February 25, 1930, an emergency law was passed by the Majless providing for the establishment of a commission to fix buying and selling rates of all foreign exchanges. Persons who wished to remit over 200 Krans abroad had first to apply for a permit.[1] In the middle of July, 1930, a supplement to the Act was passed requiring every exporter to sell to the Government or to authorized banking institutions, at the official rate, 90% of the proceeds of his exports in foreign exchanges. But if he was also an importer, he had to dispose of only 50% of the declared value of his exports in the custom house at the port of exit.[2] The same Act made transactions in foreign exchanges through other banking channels illegal and subject to severe punishment.[3] This Act resulted in the Trade Monopoly Act which came into the picture later.

On March 13, 1930, the Government pegged the r ate of exchange at 60 Krans to the pound sterling, or 12.40 Krans to the dollar. The average daily price of silver in New York during the same month was 41.65 cents per five ounces. At this rate the parity of the amount of pure silver contained in 12.40 Krans was 76.012 cents, leaving an unusually wide premium of 23.988 cents in favor of the Kran at the pegged rate. The above pegged rate -- namely, 12.40 Krans to the dollar -- was in force until February 13, 1931, when it was raised and pegged at 18 Krans to the dollar.[4]

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[1] Commerce Report, April 28, 1930, p. 255; Commerce Report, June 30, 1930, p. 836.

[2] Text of the Supplement to the Foreign Exchange Inspection Act, Art. 1 and 2.

[3] Ibid, Art. 8.

[4] Yaganegi, E. B. Recent Financial and Monetary History of Persia, New York, 1934.

Neither the pegging device, nor the Foreign Trade Monopoly Act[1] could achieve the objective which the legislature had in mind, namely, the stabilization of the external purchasing power of the Kran, as long as the country's unit of value was based on silver because the real value of the Kran, on such a basis, would be determined by the international price of silver and not by the value of exports and imports, except possibly, within short periods of time.

By the license method commodity exports and imports were ultimately balanced in 1932, but still the Kran was selling in the market on the basis of its silver content. There was a fair premium on the Kran, but nevertheless its purchasing power on imported commodities was far below what the legislature expected it to be. The pegging device, with the aid of the Foreign Trade Monopoly Act, would have been far more effective for stabilizing the Kran on foreign exchanges, had the Government ear-marked part of its sterling balance in London[2] early in 1930, and had it then been willing at any moment to sell sterling bills to those who were legitimately in need of them. Stabilization of the Kran, as long as it was based on silver, would have been possible only by stabilizing the price of silver. In order to achieve the latter, as long as silver was regarded as a commodity by all the important countries of the world, it would have been necessary to stabilize general commodity prices. This step was naturally beyond the power of Iran, or any other country as well.

Gold Standard

The only possible way of stabilizing the Kran on the foreign exchange

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[1] Idem, p. 62.

[2] Government Savings from the Anglo-Iranian Oil Company Royalties.

was to change the currency unit from silver into gold. On March 18, 1930, immediately after the foreign exchanges came under government control, the Majless passed a gold standard bill, changing the legal unit of Iranian currency into a new unit called the Rial. A Rial was to contain .3661191 grams of fine gold.[1] A gold twenty-rial piece, named Pahlavi, was to contain 7.322382 grams of fine gold and was to be equal to one Sovereign. The fiduciary coins were to consist of the following: (1) silver Rials containing 4.5 grams of fine silver, equivalent to the previous standard Kran, representing a gold Rial; (2) multiples and fractions of silver Rials, consisting of two-Rial, five-Rial, and half-Rial pieces, which were to be legal tender; (3) nickel and copper coins -- the former, with denominations of one and two Dinars.[2] These coins were to be legal tender only to the amount of two Rials.

A minimum reserve equivalent to the total outstanding subsidiary coins was to be kept by Bank Melli Iran either in its vaults in Iran, or in the form of deposits in foreign banks.[3] The Government mint was to be open to the public for unlimited coinage of gold; but coinage of silver was to be the exclusive privilege of the Government.[4] The Act prohibited the importation of silver, but gold could be imported free of duty.[5] Bank Melli Iran, as government representative, was authorized to purchase fine gold from the public at a rate not exceeding 2721.35 Rials per kilogram.[6] Accorging to the Act all fiduciary issues were to be backed

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[1] Art. III of the Act.

[2] One Dinar is equal to one-hundredth of a Rial.

[3] Art. 9 of the Act.

[4] Ibid, Art. 4.

[5] Ibid, Art. 12.

[6] Ibid, Art. 13.

100% by gold.

On March 13, 1932, an amendment was made to the original Act. The relation of the Rial to the Pahlavi was modified. The weight of the gold Rial, the standard coin, was reduced from .3661191 grams to .07322383 grams, and was to be equal to one-hundredth of a Pahlani, instead of one-twentieth. The pure silver content of the subsidiary silver Rial, representing the gold Rial, was reduced from 4.5 grams to 4.14 grams.[1]

At present, theoretically, Iran has a gold standard, but in practice, there is no obligation on the Government to pay out gold in return for notes.[2] The former gold coins are treated as bullions and their value is determined by their demand. The currency in circulation consists of paper notes, and silver and nickel coins. The bank notes are issued by Bank Melli Iran in demoninations of 5, 10, 20, 50, 100, 500, and 1,000 Rials. There are also subsidiary coins of bronze of 5 and 10 Dinars, while the minting and circulation of token silver coins of 1, 2, 5, and 10 Rials were authorized by the Majless in December 1943.

Paper Notes

The bulk of the currency in circulation in Iran is in the form of bank notes. The total amount of paper money in circulation in Bahman 1325 (February 1947) has been about 7,800 million Rials.[3] The Iranina Currency Law of November 1942, provides that all notes issued in excess of a total of 3,500 million Rials must be covered to the extent of their 60% value by

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[1] Art. I.

[2] "Merely specifying by law that the currency unit shall consist of so much gold is insufficient, however, to establish the gold standard effectively. For the gold standard really to exist, in the sense that gold is the true standard of value, it is necessary that the value of the currency unit (any unit) and the value of the defined weight of gold be kept equal to one another." P. T. Ellsworth, International Economics, The Macmillan Company 1938, p. 177.

[3] Bank Melli Iran, Bull. No. 86 (February-March 1947) Vol. XIV, Tehran.

gold. And the remaining 40% must be covered by foreign exchange convertible into gold.

The bank notes are backed by the following items:

Gold in Bank Melli Iran, Tehran	1,176,643,871/25 Rials
Gold in foreign countries	2,822,353,195/00 Rials
Silver in Iran	310,477,874/75 Rials
Foreign Exchange	1,457,341,593/85 Rials
Crown Jewels	344,201,581/20 Rials
Government Liabilities secured by excess value of Crown Jewels	1,400,000,000/00 Rials[1]

During the war years, because of the occupation of the country by the armies of the United States of America, the Union of Soviet Socialist Republics, and the United Kingdom, there was a very marked expansion in the total amount of paper currency in Iran. Before the war, the paper currency in circulation amounted to about 1,400 million Rials. By October 1943, this amount had increased to 4,838, and by March 1945, to 7,500 million Rials. The expansion of currency was necessitated by the colossal, then, Allied expenditures in Iran. The economic and financial crisis, during this period, may be traced to the following causes: (1) increased purchasing power of the masses; (2) unbalanced budget resulting in large borrowings by the Government from Bank Melli Iran; (3) the failure of the Government in price controls; and (4) speculation and hoarding of goods.

Banking*

Modern banking in Iran began in the year 1888 when the New Oriental

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[1]Bank Melli Iran, Bulletin No. 87 (April-May 1947) Vol. XV, Tehran.

*Generally speaking, banks in Iran have developed on the "branch-bank" basis, rather than on the "unit" basis.

Banking Corporation, Ltd. established itself in the country and opened branches in Tehran, Mashad, Tabriz, Rasht, Isfahan, Shiraz and Bushehr. This bank did not acquire any concession from the Iranian Government, and engaged itself in ordinary commercial business. Its business was taken over by the Bank Shahanshahi Iran,[1] which purchased for 20,000 pounds the Tehran lease and the whole equipment of the Bank,[2] in 1890.

Imperial Bank of Iran

This bank was established in Iran in 1889, under a omnibus concession given by the Shah to Baron Julius de Reuter on the 25th of July in 1872. The concession was of such a monopolistic and all-inclusive nature that it was found politically impracticable. It included full trading rights in addition to banking, the exclusive right of note issue under prescribed safeguards, exemption from taxation, and the exclusive right of mining except as to precious metals and precious stones, and without prejudice to existing mining concessions. The mining rights which were to lapse if and in so far as they were not exercised within ten years were not in fact exercised and they lapsed accordingly. The banking concession, including the note issue, was for sixty years. The royalty payable to the Iranian Government on the profits of the mines was to be 16% and the bank royalty was fixed at 6% of the net profits. The Imperial Bank was established in October 1889. Its capital of 1,000,000 pounds was subscribed fifteen times over, at a premium of 2 pounds per 10 pound share, which was paid to Baron de Reuter as the price of the concession. Until the year 1928, when the Iranian Government started its own bank, the Imperial Bank

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[1] Imperial Bank of Iran.

[2] Sir Arnold T. Wilson, Persia, p. 266

constituted the sole trustee of the Government's banking affairs and the principal channel of the financial concerns of the public. It advanced loans to the Government and enjoyed the sole right of the note issue. It earned record profits and made its reserve fund swell to many times its paid-up capital. Under an agreement dated May 13, 1930, its right of note issue was withdrawn, in consideration of the payment to it of 200,000 pounds by the Iranian Government. At present the bank has its branches in all principal towns in Iran. Its credit, in 1945, amounted to 10 million pounds.[1]

Banque d' Escompt de Perse

The year 1889, which gave birth to the Imperial Bank of Iran, records also the opening of the Banque d' Escompt de Perse, a subsidiary of the Russian State Bank. The bank with a capital of 30,000,000 Roubles started its operation. It was mainly a political instrument of the Tsarist government, its object being cut-throat competition with the Imperial Bank of Iran. Since it was a political institution, its operations were not by any means conducted along legitimate business lines. Aside from loans to the Government, the bank also extravagantly extended credit, on frozen assets, to various influential people of the country. In 1906 it was reported that the outstanding investments of the bank on frozen assets in the city of Tehran alone amounted to 16,000,000 Roubles.[2] The Soviet government, in the Russo-Iranian Treaty of 1921, not only cancelled the gigantic loans, but also offered the remaining assets of the bank as well as all the Russian investments in Iran — both public and

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[1] H. Pirnia, A Short Survey of the Economic Conditions of Iran, Tehran, March 1945, p. 22.

[2] Jamal Zadeh, Ganje Shayegan, Kaviani Press, 1916, p. 104. Also see: M. Afschar, La Politique Europeane en Perse, Berlin, 1921.

private -- except the Caspian fisheries, as a free gift to the Iranian people. The bank is still in the process of realizing the old debts and settling the claims of depositors. It, however, transacts no business and may be said to be under liquidation.

The Ottoman Bank

It is a British owned bank constituted in the year 1863. This bank has branches all over the Middle East countries. It has two branches in Iran, at Kermanshah and Tehran, opened in the years 1921 and 1923 respectively.

The Banque Russo-Persane

It is a Soviet bank, opened in Iran in 1924, and now has its branches at all important towns in the north. This bank is mainly concerned with the financing of Russo-Iranian trade.

The Bank Sepah

The capital of this bank was borrowed from the army pension funds. The bank does a moderate internal business in loans, discounts and inland bills. The capital of the bank is 4 million dollars and a total of 40 million dollars of credits.

The Bank Melli Iran[1]

The autonomy in the financial structure of Iran begins with the establishment of this national enterprise. It was established by an Act of the Majless passed in September 1928. The capital of the bank amounting to 300 million Rials has been provided by the Government, and it is

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[1] A. A. Pour Homayoun, La Banque Nationale de l'Iran et son Role dans le Developpement Economique du Pays, Paris.

now the principal repository of the Government's internal balances. Since 1930, the bank has enjoyed the sole right of note issue. It has its branches throughout the country. The total amount of credit guaranteed by the bank in 1945 amounted to 3,700 million Rials of which about 2,500 million Rials were provided by the Government. The gross profit of the bank for the year 1325 (March 21, 1946 to March 20, 1947) amounts to 452 million Rials which exceeds the gross profit of the previous year by 31 million Rials. The net profit of the bank is 231 million Rials which, compared to the figures of the previous year, shows an increase of 16 million Rials.[1]

The National Savings Bank

The National Savings Bank was established by virtue of a legislative act in 1938. The number of saving accounts in the country with the total amount deposited in them since that year until the end of 1325 has been recorded as shown in Table XXI.

TABLE XXI

Number of Savings Accounts and the Amounts Deposited

Year	Number of Accounts	Amounts
1318 (1939-1940)	22,307	22,433,000 Rials
1319 (1940-1941)	55,153	37,862,000 Rials
1320 (1941-1942)	54,647	30,933,000 Rials
1321 (1942-1943)	65,405	53,594,000 Rials
1322 (1943-1944)	97,416	144,747,000 Rials
1323 (1944-1945)	144,781	296,646,000 Rials
1324 (1945-1946)	207,623	454,891,000 Rials*

*Bank Melli Iran, Bulletin No. 82 (June-July 1946) Vol. XIII, Tehran.

[1]Bank Melli Iran, Bulletin No. 88 (June-July 1947) Vol. XV, Tehran.

A comparison of the figures in Table XXI will clearly show that the number of saving accounts and the balances of deposits have increased in a satisfactory manner. The National Savings Bank has endeavored to encourage the habit of saving among the people. In accordance with Article 14 of the Regulation concerning the National Savings Bank, approved in 1318, by the Council of Ministers, it is provided that "...Seventy-five per cent of the net profits of the Savings Bank shall be divided every year among the depositors in the form of prizes awarded by lottery so that the number of prizes shall form one-tenth of the number of saving depositors." The total amount of prizes which was 400,000 Rials in 1318 rose to 1,500,000 Rials in 1324. Table XXII gives a complete comparison of National Savings deposits since 1938.

TABLE XXII

National Savings*

Year	Deposit Balance for all Iran	Tehran Province	Other Branches	Number of Depositors In All Iran	Tehran Province	Other Branches
1318	22,443,265.65	12,108,319.75	10,324,945.90	22,307	11,604	10,703
1319	37,862,840.35	18,930,757.60	18,932,082.75	55,153	21,110	34,043
1320	30,933,377.85	14,788,883.15	16,144,494.70	54,647	24,591	30,056
1321	53,594,592.70	26,423,569.70	27,171,023.00	65,405	28,480	36,925
1322	144,747,298.40	79,730,579.35	65,016,719.05	97,416	31,176	66,240
1323	296,646,205.65	149,334,477.30	147,312,728.35	144,781	58,682	86,099
1324	454,891,771.70	231,231,970.75	223,659,800.95	211,044	82,694	128,350

*Bank Melli Iran, Bulletin No. 82 (June-July 1946), Vol. XIII, Tehran.

The Agricultural and Industrial Bank

The bank was established in 1933, mainly with the object of granting credits for agricultural improvements and industrial developments. It has a capital of 300 million Rials of which only 180 million has been

paid.[1] The total amount of credits granted by this bank to agriculturists and manufacturers, up to March 1945, amounted to 250 million Rials.

The Mortgage Bank

This bank was established in 1939 with a capital of 200 million Rials for providing the capital to people for the purpose of construction. According to the balance sheet of the bank for the year 1325 (1946-1947) the amount of loans paid out by the bank against real estates was approximately 240 million Rials, and the value of the mortgaged estates amounted to 1,097 million Rials (at the minimum rate of evaluation). The gross profit of the bank for the year 1325 amounted to 28 million Rials and the net profit has been 14 million Rials.[2]

The Industrial and Mining Bank of Iran

This bank was established in 1945 with a capital of 2,500,000,000 Rials entirely subscribed by the Government and represented by the estimated price of the factories and other industrial establishments owned by the Government and the special rights and privileges appertaining to them. The shares of the bank are therefore entirely owned by the Government and not transferable except by special law and then only in favor of Iranian citizens. The principal duties of the bank are: (1) management of the industrial establishments, government factories and mines, (2) application of the general industrial policy of the country, (3) creation of new industries and provision of necessary facilities for the existing industries, (4) foundation of companies for or participation

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[1] R. N. Gupta, Ibid, p. 6.

[2] Bank Melli Iran, Bulletin No. 88 (June-July 1947) Vol. XV, Tehran.

in mine exploring operations, and (5) foundation of companies for the exploitation of mines and provision of necessary credits for the purpose. The bank is also authorized to perform the following banking transactions: (1) granting credit facilities to industrial establishments and owners of industries, (2) purchase or provision of credit facilities for the purchase of machinery, spare parts and tools on its own account or on account of industrial establishments, (3) payment of advances to producers of raw materials on its own account or on account of industrial establishments, (4) purchase and sale of shares and stocks of industrial companies on account of others, (5) sale, purchase, acceptance as security, importation and exportation of industrial and mineral products, and (6) issuance of loan bonds subject to the previous sanction of the Council of Ministers.[1]

Iran and the International Bank for Reconstruction and Development.

Small nations try to avoid borrowing from foreign countries. This precaution is, of course, quite natural. The International Bank of which Iran is also a member (and one of the shareholders), is happily like a joint stock company which belongs to the owners of the shares.[2] Every member-country, indeed, possesses votes in proportion to the number of its shares and has proportionate authority and responsibility. The difference between borrowing from the Bank and from a State is, that no ill influence can be exercised by the Bank, since its assets do not belong to one Government alone. Iran has notified the International Bank of her intention to apply for $250,000,000 to develop her resources. In accordance with the statutes which have been approved by the Parliaments of the

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[1] Asre Eghtesad, Ibid, p. 11.

[2] Iran has subscribed 240 shares, the price of which is $24,000,000. Iran's number of votes is 490. See: Intern'l Bank for Reconstruction and Development, Second Annual Report 1946-1947, Washington, D. C.

member-countries, the bank cannot grant a loan to a member-country unless it knows the purpose for which the loan is asked. Loans must be spent on production schemes. With regard to the assurance that the amount to be provided should be exclusively applied to productive expenditure, the Iranian Council of Ministers has passed a decree containing two important points. This decree was sanctioned at the session held on the 19th of Mordad 1325 (1946-1947). Section five and six are as follows: section 5, to prepare bills to be provisionally approved by the Council of Ministers and finally sanctioned by the Parliament to the effect that all credits related to the execution of the plan shall be exclusively applied to that purpose and that no other expenditure should be payable from the said credits; section 6, drawing up of a bill concerning the Statute of a Committee of Control in the execution of the plan.[1] The Iranian Government contemplates, after taking into consideration the urgent needs of the country in the order of priority, to submit a bill to the Majless for an economic plan. The Government of Iran has not yet taken a decision and cannot contract a loan with the approval of the Majless. The only step which has been taken so far is, that Iran has asked the International Bank for credit up to $250,000,000, to carry out projects for economical and social reforms.[2]

The Budgetary System of Iran

In order to study the budgetary system of the country, it is necessary to define the fiscal year. The fiscal year begins from Farvardin

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[1]Bank Melli Iran, Bulletin No. 86 (February-March 1947), Vol. XIV, Tehran, p. 1108.

[2]The reader's attention is also called to Appendix VI.

(April) of each year and ends at Khordad (June) of the next year. In other words the period of the fiscal year is fifteen months (21 March - 21 June of the next year). Iran's State income is divided into two sections, namely, "General Incomes" and "Special Incomes." Out of the general incomes all expenditures approved in the budget are paid and from special income only special expenditures are spent according to special law for each special income. The Ministry of Finance in the first seven months of each year tries to collect figures and information of next year's revenues. Having obtained the total approximate revenues, it then determines the amount which could be spent on each item of the budget. Such figures are communicated to the ministries and independent departments, and they prepare their budgets within the limit of the communicated figures. The General Budget Department of the Ministry of Finance is in charge of examining the various budgets of the ministries and to make notes in so far as the additional items are concerned. This Department prepares a report for the Council of Ministers. After investigating the report and the budget, which is prepared by the General Budget Department, the Council of Ministers prepares the bill and submits it to the Majless for approval.

Tables XXIII and XXIV show the revenues and expenditures of the Government.

TABLE XXIII

Revenues of Iranian Government, Iranian Year 1325
(March 21, 1946 to March 20, 1947)

Direct Taxes	587,807,100 Rials
Tax on Kerosene and Petrol	192,058,300 Rials
Excise, Butchery and other Indirect Taxes	139,167,900 Rials
Opium Monopoly (Foreign Sales) Revenues	141,584,000 Rials
Tobacco Monopoly Revenues	1,234,000,000 Rials
Revenues collected thru Customs	1,330,810,000 Rials
Royalty from the Anglo-Iranian Oil Company	676,811,400 Rials
Royalty from the Caspian Sea Fisheries Co. and from the Fishing Concession in Riners	6,317,000 Rials
Revenues of the Ceded Estates and of the Domains	125,000,000 Rials
Revenues of the Posts	30,000,000 Rials
Revenues of the Telegraphs	90,000,000 Rials
Revenues from the Commercial and Economic Transactions of the Government	497,096,000 Rials
Other Revenues of the Country	366,054,800 Rials
Total	5,416,706,500 Rials*

*Figures from the Ministry of Finance, Tehran.

TABLE XXIV

Expenditures of the Iranian Government
Iranian Year 1325
(March 21, 1946 to March 20, 1947)

The Imperial Court Ministry, the Majless, and the Prime Minister's office	52,661,600 Rials
The Ministry of Labor and Propaganda	42,586,800 Rials
The Ministry of Interior, the Gendarmerie, the Police and the Census and Registration Department	1,307,168,500 Rials
The Ministry of War	1,541,500,000 Rials
The Ministry of Justice	131,824,900 Rials
The Ministry of Health, including the Pasteur Institute	177,984,500 Rials
The Ministry of Foreign Affairs	77,630,600 Rials
The Ministry of Education	516,935,000 Rials
The Ministry of Commerce and Industries	39,197,000 Rials
The Ministry of Roads, Railway Construction, Administration of Posts, and the expenses of asphalting of roads	230,644,200 Rials
The Ministry of Finance (General Budget)	311,940,000 Rials
The Customs, Monopolies, Ceded Estates, Mint, Construction, other exploitation charges and extraordinary expenses	986,266,900 Rials
Other general expenditures of the Country	565,376,600 Rials
Total	6,093,773,100 Rials*

*Figures from the Ministry of Finance, Tehran.

Chapter X

LABOR CONDITION

Wages

The socio-economic development of Iran envisages a social evolution which involves the life and labor of the toiling population in agriculture, handicrafts, and modern industry. This evolution is continuing in full vigor. But perhaps it is unfinishable in the sense that an immense number of the people will remain in agriculture and handicrafts, even though there are signs that industrialization is assuming increasing importance and will undoubtedly draw more workers to its ranks in the days to come.

The migration of the peasants and the artisans to the city in order to engage in modern industries is of rather recent origin. Therefore this mode of life and its special problems is also of recent root. Certain fundamental problems of the peasants, the handicraftsmen, and the city workers are basically similar, that is -- low wages. The social process in which a special group of people attempt to adopt themselves to a new social environment is revealed, with their success and their failure.

Agricultural workers receive a very low wage.[1] Payment is often made in kind, according to an invidious ancient tradition which divides the produce of the land into five parts, to be alloted respectively to the owner and to the suppliers of water, draft animals, seeds, and labor. The peasant who provides the labor may receive as little as one-fifth, while four-fifths may go to the landlord.[2] During the period of wartime, however,

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[1] Monthly Labor Review, September 1946, p. 364.

[2] Idem, p. .

the agricultural workers were better off, they probably obtained more food than city workers and did not live or work under conditions as crowded and insanitary as those in the cities.

Wages of town workers have varied widely from place to place, even within the same city, for the same type of work. The cost of living at one time rose to a peak of 1,100 (1936-37 = 100),[1] and in April 1946 stood at 816, while wages lagged far behind. An unskilled industrial worker received about 30 rials per day in 1936. However, in addition to money wages, during the war some workers received allotments of sugar, tea, bread, and clothing. Wheat and rice were bought by the Government and sold to industrial workers at the price of September 1941.

Piece rates have been prevalent in the textiles and rug industries. Both labor and management favor piece rathern than time rates, however, the unions contend that the piece rates are very low and that raising them would result in greater output. Wages of industrial workers have been somewhat higher and working conditions better in the north than in the south of the country, probably with the exception of textile factories in Isfahan. The difference may be attributed to the fact that many northern plants are Government-owned and union activities have been greater in the north.

Wages have been the chief cause of industrial disputes in recent years. Substantial increases were obtained, largely as a result of union activity, between 1943 and 1946. After a strike against the Anglo-Iranian Oil Co., Ltd., the cash wage was nearly doubled in June 1946 (from 18 to 35 rials a day), but payments for lunch, sugar, and tea, and special

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[1] Bulletin Bank Melli Iran, Tehran, Years 1936, 1937, 1941, and 1946.

prices for certain goods in the company's stores, were cancelled.

There is a diversity in the practice of payment for national holidays or for Friday, the traditional religious day of rest. Some workers have received a 2-weeks' paid annual vacation.

Labor Legislation

Prior to the labor law of 1946, little labor legislation had been passed in Iran. A workmen's compensation law in 1943 replaced a previous statute which provided for a relief fund financed only by worker contributions. Factory construction and sanitation was regulated by a law of 1936, but enforcement of safety provisions has been intermittent. The labor law of 1946 specifies duties and obligations of employers and employees. The same law assures workers in the same factory or trade the right to form unions. These unions must register their articles of association. As a penalty for exceeding its rights or disturbing the public peace, a union may be required to elect new officers, or may be dissolved or suspended. Violence in connection with strikes is forbidden.

To aid in the settlement of disputes, factory councils are to be established, representing the workers, the employers, and the Ministry of Labor. Disputes involving a number of workers or a union, if not settled by the factory council, shall be referred to a 3-member arbitration board composed of a representative of each party and a third member selected by the other two. Failing an award within 20 days, the dispute is to be referred to a higher board, set up in the locality, the award of which is to be final and binding. Pending action by these bodies, strikes and lock-outs are prohibited.

The law also establishes a Ministry of Labor, with power to make safety and health regulations and to fix minimum wage rates, which, it is

specified, shall cover the living costs of a family. Hours of work are fixed at 48 a week, overtime to be paid at 35 per cent above the regular rate, with regulation of the total amount of overtime to be permitted. The granting of a weekly paid day of rest (Friday) and a paid annual vacation is required. In addition, the workers are to be paid for 6 specified holidays.

The law regulates employment of women and children, sets a minimum age of 13 years, prohibits night work, provides for maternity leave and factory creches, and sets up contributory funds for social security purposes. It also regulates the payment of wages, requiring equal pay to men and women for equal work, and, in certain cases, notice and compensation for dismissal.

Chapter XI

POSSIBILITIES OF FUTURE DEVELOPMENT

In previous chapters the present economic conditions of Iran were surveyed. In this chapter an attempt to appraise the possibilities of future economic development will be attempted. The discussion is divided into two parts; Agricultural Development and Industrial Development.

Agricultural Development

Agriculture is the industry of food production and, like any other industry, it can benefit by utilizing the resources of modern technology. But agriculture is more than the industry of food production; in the case of Iran, it is also a way of life. In order to improve the agriculture of the country, a combination of sociological and technical advances should be achieved. In the following pages the obstacles to agricultural development are discussed. These will be treated as follows: the social factor, the technical factor, the increase in the cultivated area, and new agricultural products.

The Social Factor

Land tenure is based on an ancient and complicated system.*[1] There should be a radical change in the system of land tenure before there can be much hope for agricultural development. It is futile to expect agricultural improvements, or a higher level of living, so long as the ancient

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*The produce of land is usually divided into five parts each being the return for one factor in production. Viz: land, water, labor, implements with draught, animals, and seeds. The peasant who provides often only labor receives as little as one-fifth, while four-fifths will go to the landlord. See:

[1]Sandjabi, Essaisur l'Economie Rurale et le Regime Agraire de la Perse, Paris, 1934. Also: Elgin Earl Groseclose, Introduction to Iran, New York, Oxford University Press, 1947, pp. 196-197.

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system is permitted to remain. The very security of the nation and of every Iranian citizen within the kingdom is seriously threatened by this long outmoded form of land tenure. A country which is predominantly agricultural and which derives a high proportion of its national income from the productions of its peasants cannot afford to neglect such a valuable asset. According to the best estimates at least 80 per cent of the people of Iran are engaged in agriculture, and they produce about 90 per cent of the national income.[1] There are two essentials for the cultivator on which the rural betterment must be founded: security of tenure, and, with it, the knowledge that it is worth his while to improve his own holding.[2] But not all the land is in the possession of large landlords or absentee owners; there are numbers of peasant proprietors as well. The Iranian Government is seeking a method in order to ensure an orderly change. In 1946 the Government issued a comprehensive decree for the encouragement of small land owners.[3]

The Technical Factor

The technical disadvantages of the old system of farming are great. In Iran agriculture should become mechanized as soon as possible in large dry-land farming areas and in irrigated valleys where populations are low. The amount of available labor, size of individual farms and type of crops produced should govern the degree of mechanization and the type of implements to be introduced. Much money and time will be saved if all equipment is standardized on a community or village basis. This will bring about interchangeability of tractor parts, tractor attachments and tools, and

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[1] B. A. Keen, The Agricultural Development of the Middle East, London, 1946.

[2] H. B. Allen, Studies in Rural Education in Iran, by Authority of the Imperial Government of Iran, Tehran, 1943.

[3] Bank Melli Iran, Ibid, p. 88.

will reduce the amount and number of repair parts to be maintained for efficient operation of all pieces of equipment. In small farm areas, garden type tractors with suitable tillage, seeding and cultivating attachments, and harvesting equipment, will suffice. Types of mechanical equipment urgently needed are: tractor-drawn plows, small self-propelled combines that will operate in small tracts of land without destroying any of the standing grain, tractor-drawn seeding and planting equipment, land levelling equipment, and cultivating equipment suitable for row crops.[1]

A misguided mechanization program will waste millions of rials of money and retard for many years much of the mechanization progress which should take place in Iranian agriculture. It seems advisable that the Agricultural Machine Corporation of Iran in the Ministry of Agriculture should have responsibility for the establishment and the direction of the program.

Increase in Area of Cultivated Lands

An increase in area of cultivated lands is essential in agricultural development of Iran. Only about 10 to 15 per cent of the total land area is under cultivation. A further 20 to 30 per cent could be cultivated if irrigations were available.[2] The irrigation possibilities of the country have hardly been touched. A program of reclamation should be instituted immediately, starting with the simpler and more obvious projects.[3] The larger and more expensive projects can be safely undertaken only after the

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[1] Report on Program for the Development of Iran, Ibid, p. 8.

[2] B. A. Keen, Ibid, p. 101.

[3] M. Ezekiel and others, Towards World Prosperity, Harper and Bros., London and New York, 1947.

appropriate areas are mapped, and adequate information has been acquired as to the precipitation and stream flow.

A large part of Iran is irrigated with water obtained from "ghanats."[1] Maintenance is, in many cases, quite expensive because of continual caving. The flow from most ghanats tends to vary with the precipitation, and they are naturally wasteful of water, because they flow all the time regardless of whether water is needed. Many of these ghanats should probably be replaced by wells, which would be pumped only when necessary; the water thus remaining in underground storage when it is not needed.

In the case of Iran probably the most important of the essential measures for agricultural development, as well as industry, are the construction and maintenance of irrigation works. No amount of know-how and improved management can have any considerable effect where water is seriously limited.[2]

In recent years a few irrigation projects have been completed. The Khuzestan project was started when the Agricultural Bank founded the Agricultural Corporation of Khuzestan. Before that time there was only a dam constructed by the Department of Agriculture. The corporation prepared a project for two dams, one across the Karun, near Ahwaz, the other across the Karkheh River. Each of these dams was calculated to yield 70 to 100 cubic millimeters per second. Lack of capital and the difficulty of obtaining the necessary cultivators were major obstacles, and so the Government decided to abandon the ambitious project and to start on a more modest basis. The Agricultural Corporation planned to bring under

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[1] Idem, p. 6.

[2] Conference on Middle East Agricultural Development, Middle East Supply Center, The Nile Press, Cairo, 1945.

cultivation an area of 70,000 to 100,000 hectares, situated mainly near Ahwaz between the Karun and Karkheh Rivers. In 1941 about 15,000 hectares were under cultivation. Irrigation is achieved mostly by pumping. Only one small dam has been constructed, in an affluent of the Karkheh River.

The Shabankareh project services the plain of Shabankareh (province of Fars) covers a surface of 80,000 hectares and includes more than forty villages. The water of the two rivers traversing the plain has now been dammed by a barrage yielding 8 to 10 cubic millimeters per second. The irrigation of about 15,000 hectares is thus provided for.

The fertile plain of Ravansar is situated northeast of Kermanshah. The plain is watered by the Kara-Su River. A barrage has been constructed with a power of about 3 cubic millimeters per second. A system of canals which is partly finished will permit the irrigation of about 10,000 hectares.

A Behbahan Corporation has been formed by the Agricultural Bank and the landowners to bring the water of the Marun River to Behbahan. A dam, a tunnel, and a few miles of canals are needed. New villages have been built in the region.

The Agricultural Corporation of Khorasan, founded by the Agricultural Bank, has begun to improve the lands in Khorasan. The improvement concerns a great number of widespread villages and consists in the development of "ghanats."

For the Semnan project, a dam has been constructed to collect the underground water for the needs of the town.

Some of the Projects Under Consideration

Tehran -- Construction of a tunnel from the Lar River to the Djajrud and from there to Tehran has been proposed, with the intention of using

the difference of the level for hydro-electric power. The Lar valley is about 40 kilometers northeast of Tehran.

Lorestan -- A project to bring the water of the Kalrud River to the town of Burujerd has been under consideration.

Sistan -- Construction of two great reservoirs in Zabol.

Zaiandeh and Karun Rivers -- The plan conceived by Shah Tahmaseb and Shah Abbas II, viz., to divert some of the water of the Karun at its source into the Zaiandeh River seems to have been revived in another form. Whereas Shah Abbas tried to cut across the Kuhrang hills, the idea now is to achieve the communication by dams and tunneling. The purpose is to increase the water of the Zaiandeh River that irrigates the plain of Isfahan and particularly to use the power for industrial aims.

It is obvious that the irrigation problem in Iran has just been undertaken. Indeed compared to what could be done, the achievements -- important and promising as they are -- cover little ground.

New Agricultural Products and Expansion of Present Products

The soil of Iran is adapted in many places to growing plants not now cultivated, in the products of which there exist tremendous world shortages, or which offer other marked advantages. At the present time (1948) there is a world shortage of sugar. Sugar cane is not now commercially grown in Iran, although in the past it has been grown. There are areas suitable for cane sufficient to produce more sugar than Iran now consumes. These areas are suitable because the soil is not alkaline; the winters are mild enough so the cane will ratoon and it will not be necessary to replant each year. There seems to be no question but that it can be grown successfully, particularly in Khuzestan.

There is a world shortage of linseed oil and linen, both produced from flax. Flax is adaptable to many localities in Iran. In the south, it can be grown as a winter crop; in higher altitudes, where the growing season is shorter, as a spring and early summer crop. The growth of flax would permit the establishment of a linen industry.

There is considerable room for improvement in the quality of and quantity of present agricultural products such as tobacco and tea.

Tobacco is an important revenue producer for the Government, the manufacture of cigarettes, cigars, and pipe tobacco being a Government monopoly. The factories are among the best managed industries in Iran. Tobacco growing in the most scientific manner should be encouraged and the factories enlarged.[1]

At present, Iran imports $10,000,000 worth of tea annually. Because tea requires rather special climatic conditions, ample moisture, good drainage, and an acid soil, the areas where it can be grown, in Iran, are limited. However, it is estimated that there are approximately 11,300 hectares (28,000 acres)[2] of suitable soil in northern Iran, on the Caspian Sea, and this area could produce all the tea the country needs. A carefully supervised program could be introduced, involving all phases of plant selection, planting, harvesting, grading, and drying. At present, the tea grown is improperly harvested, and the product is not as good as it should be. It can be so handled that it will compare favorably with the better grades of imported teas.

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[1] Ibid, p. 8.

[2] Ibid.

Soil Conservation

The soil of Iran is being continuously robbed of its fertility by improper cropping. The same crops are raised year after year, and little is returned to the soil. Its humus content being continually reduced, thus, it tends to erode and to lose its moisture by evaporation more rapidly. The soil is being ruined and lost because of over-grazing. Limited water for livestock tends to concentrate livestock on certain areas, so that these areas are over-grazed. The Iranian soils are principally derived from limestone formations, and are consequently high in lime, calcium, and potash. However, much of the readily available supply of nitrogen and phosphorous has been depleted through centuries of consumption. Nitrogen should usually be supplied through the use of legumes. The phosphate should be supplied by the use of commercial fertilizer applied primarily to the legume.

Agricultural Information

Today's agriculture requires the application of the agricultural sciences of land preparation, the maintenance of soil fertility, soil and water conservation, seed improvement, planting, harvesting, storage, livestock disease control, weed control, plant pest and disease control, etc. Agricultural extension and training is one of the newly developed activities in agriculture which makes these sciences and their application available to land owners and tenants. It brings before the farmer the results attained in experiment stations. The development of Iranian agriculture will largely depend upon how successfully this activity is carried out. At present, in Iran, little opportunity exists for the average landowner or tenant to get new up-to-date agricultural information. The

factors contributing to this situation are: the present Ostan[1] agricultural directors and staffs have little transportation to get out to farms; they are usually tied down to directing administrative work; few field and experiment tours and demonstrations are carried on; few bulletins are published; and agricultural discussion groups and meetings are inadequate.[2]

Industrial Development

The industrial development of a country under modern conditions, depends largely on State patronage and protection, particularly in the case of under-developed countries.

Before the World War I, Iran did not enjoy any tariff autonomy. Her tariff policy was dictated by the opposing powers.[3] Because of this and other unfavorable factors, all earlier attempts to industrialize the country have failed. It was only after the year 1925, when a vigorous protective policy of industries was followed by the Government. The most important factor which opened the way for the introduction of modern industries in Iran was the passing of the "Trade Monopoly Act" by the legislature.[4] Under the provisions of this Act, all private trading was severely restricted; imports were discouraged; and the Government began to take a direct interest in the economy of the country. Just before the World War II a large number of new industries had been started in the country and old industries revived, but all further schemes of the

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[1] Province

[2] H. B. Allen, Rural Education and Welfare in the Middle East, London, 1946.

[3] Idem, p. 57.

[4] Idem, p. 62.

Government were upset by the war. During the period of hostilities, no imports of machinery could take place and the country was menaced by an economic crisis of an unprecedented character.[1]

Now, it is the time to establish a program for the development of various industries in Iran. The country's industries are generally rather small and usually incapable of supplying the needs of the population. Industries may be grouped under two main classifications; basic and secondary. Basic industries are those whose products are essential to other industries; among them would be cement, steel, sulphuric acid, and the cruder ceramics. Secondary industries are those whose products are either directly ready for the consumer or require only a finishing or shaping process.

Characteristically, Iran's industries are nearly all secondary. This condition is holding back the country's progress, particularly at this time; the flow of basic materials from foreign sources not yet having recovered from the disorganization caused by the war. This situation should be corrected as far as reasonably possible, and in many cases, the establishment of basic industries is entirely feasible.

In Iran there exists a wealth of natural resources admirably adapted to the basic chemical industries. There are large deposits of salts which can be used in the production of sodium carbonate, caustic soda and chlorine. Many other chemical basic industries are desirable. Ammonia, sodium sulphide, sodium hypochlorite should all be manufactured.[2] Portland cement is essential to almost all modern construction, yet in Iran this

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[1] See: H. Pirnia, A Short Survey of the Economic Conditions of Iran, pp. 25-28, "Iran Under the Stress of War." Tehran, March 1945.

[2] Ibid, p. 8.

industry is not adequately developed. The present plant produces only 240 metric tons per day. Portland cement can be made of very common materials, limestone, clay and gypsum, all of which are found in abundance. There is plenty of oil for fuel. Mills should be established in several of the larger cities to meet the nation's ordinary needs.

The field for secondary industries is almost limitless. Textiles now rank first among Iran's industries, with about 150,000 cotton and 48,000 wool spindles, in sixteen cities. There is also a tremendous amount of hand spinning and weaving. These industries are well established, but are not well operated and machinery needs repairs. They should be put in good order and expanded, because there is a great demand for silk, cotton, and woolen goods. The secondary industries utilizing agricultural products should be expanded. There is considerable beet sugar produced now; it is suitable that sugar cane be grown; new mills for producing beet and sugar should be built, and if the program is pursued vigorously, there is no reason why Iran should not become an exporter of sugar.

BIBLIOGRAPHY

This bibliography contains not only those sources which are cited in the foregoing pages, but also it contains such additional sources as have been consulted for the present study. These additional sources have a bearing on the problem of my study either directly or indirectly. In this bibliography; there is no indication of pages referred to in any particular passage of the text. Since such references have already been made in the footnotes, repetition would not serve any useful purpose.

Adley, C. C., Memorandum of the Advantage of Persia as a Through Route to India: With the Prospects of a Railway in that Empire, London, 1888.

Afschar, M., La Politique Europeane en Perse, Berlin, 1921.

Ahmadi, A., Le Chemin De Fer Transiranian, Son Role Politique Et Economique, Fribourg, 1945.

Alami, E. K., Le Redressement Economique de l' Iran, Universite de Paris, Paris, 1936.

Allen, H. B., Rural Education and Welfare in the Middle East, H. M. Stationery Office, London, 1946.

Ben-Horin, E., The Middle East, Crossroad of History, New York, 1943.

Boveri, M., Minaret and Pipe-Line, Oxford University Press, 1939.

Chardin, Sir John, Sir John's Travels in Persia, London, 1927.

Conference on Middle East Agricultural Development, Cairo, 1946.

Curzon, G. N., Persia and the Persian Question, London and New York, Longmans, Green and Co., 1892.

Djazaeri, Chams-ed-Dine, La Crise Economique Mondiale et ses Repercussions en Iran, Paris, 1938.

Ellsworth, P. T., International Economics, The Macmillan Company, 1938.

Ezekiel, M., Towards World Prosperity, Harpers and Brothers, London and New York, 1937.

Fateh, M., The Economic Position of Persia, London, P. S. King and Son, Ltd., 1926.

Groseclose, E. E., Introduction to Iran, New York, Oxford University Press, 1947.

Gupta, R. N., Iran, An Economic Study, New Delhi, Indian Institute of International Affairs, 1947.

Haas, W. S., Iran, Columbia University Press, New York, 1946.

Hamzavi, A. H., Persia and the Powers, London, New York, Hutchinson and Co., Ltd., 1946.

Hanway, J., An Historical Account of the British Trade over the Caspian Sea, London, 1754.

Humphery, B., Middle East Window, New York, 1942.

Jaine, L. C., The Monetary Problems of India, Macmillan and Co., Ltd., London, 1933.

Jamal Zadeh, Ganje Shayegan, Kaviani Press, Berlin, 1916. (In Persian)

Keen, B. A., The Agricultural Development of the Middle East, H. M. Stationery Office, London, 1946.

Kazemi, P., Le Commerce Enterieur de la Perse, Paris, 1930.

Khalathary, Abbas, L' Iran et le Pacte Oriental, Paris, 1938.

Lingeman, E. R., Report on the Finance and Commerce of Persia 1925-1927, London, 1928.

Millspaugh, A. C., The Financial and Economic Situation of Persia, Boston, Pinkham Press, 1926.

Mehmet Aga-Oglu, Safawid Rugs and Textiles, Columbia University Press, New York, MCMXLI.

Naficy, H., L' Impot et la Vie Economique et Sociale en Perse, Paris, 1924.

Pirnia, H., A Short Survey of the Economic Conditions of Iran, Published for the Economic Information Bureau, Tehran, 1945.

Pour Homayour, A. A., La Banque Nationale de l' Iran et son Role dans le Developpement Economique du Pays, Paris, 1937.

Reath, N. A. and E. B. Sachs, Persian Textiles, New Haven, Oxford University Press, 1937.

Reynier, L., De l' Economie Publique et Rurale des Perses et des Pheniciens, Geneve, 1819.

Riefstahl, R. M., Ph. D., Persian and Indian Textiles, New York University, New York, 1923.

Safinya, Esteghlale Gomrokye Iran (Custom Independence of Iran), Tehran, 1307 (1929).

Sandjahi, K., Essai sur l' Economie Rurale et le Regime Agraire de la Perse, Paris, 1934.

Shuster, W. M., Strangling of Persia, The Century Co., New York, 1912.

Siassi, A. A., La Perse and Contact de l' Occident, Paris, 1931.

Sotoudeh, H., L' Evolution Economique de l' Iran et ses Problemes, Paris, 1936.

Stamp, L. D., Asia, New York, 1935.

Stateman's Year Book, London, 1880.

Sykes, Sir Percy M., Persia, Oxford, 1922.

_____, A History of Persia, London, 1921.

Warriner, D., Land and Poverty in the Middle East, Royal Institute of International Affairs, New York, 1947.

Wilson, Sir Arnold T., The Persian Gulf, Oxford, 1928.

Wilson, C. M., Oil Across the World, New York, 1946.

Worthington, E. B., Middle East Science, London, 1946.

Yaganegi, E. B., Recent Financial and Monetary History of Persia, New York, 1934.

Government Publications

Great Britain. Report on Trade and Transport Conditions in Persia, London, 1922.

Great Britain. Department of Overseas Trade, Persia: Review of Commercial Conditions, London, Years 1922-1945.

Great Britain. Department of Overseas Trade, Economic Conditions in the Persian Gulf, London, 1934.

Great Britain. Foreign Office, Persian Gulf, London, 1920.

Great Britain. Treaty Between His Majesty in Respect of the United Kingdom and India and His Imperial Majesty the Shah of Persia in Regard to the Tariff Autonomy of Persia, Tehran, May 10, 1928.

U. S. Bureau of Foreign and Domestic Commerce, Economic Conditions in Turkey, Syria, and Iran in 1940 and early 1941, Washington, U. S. Government Printing Office, ~~1915-1919~~. 1942

U. S. Tariff Commission, U. S. Imports from Asia, Washington, 1941.

U. S. Tarrif Commission, Trade Agreement Between the U. S. and Iran, Washington, 1945.

U. S., Reciprocal Trade Agreement and Supplementary Exchange of Notes Between the U. S. A. and Iran, Washington, U. S. Printing Office, 1944.

League of Nations, Official Journal, December, 1932.

League of Nations, Official Journal, Supplement No. 64, 1928.

League of Nations, Official Journal, Supplement No. 59, 1927.

League of Nations, Commission of Inquiry into the Production of Opium in Persia. (1. Observations of the Persian Government on the Report of the Commission . . . II. Extract from the minutes of the sixth meeting of the forty-fourth session of the Council), Geneva, Imp. Atar, 1927.

League of Nations, Commission of Inquiry into the Production of Opium in Persia. Report to the Council. Chambery Imp., 1927.

League of Nations, Commission of Inquiry into the Production of Opium in Persia. Report of the Fifth Committee to the Assembly, Geneva, 1927.

Journals, Pamphlets, Bulletins

Asre Eghtesad, Official Journal of the Chamber of Commerce of Tehran, Tehran, Iran, 1946.

Bank Melli Iran, Bulletin, Tehran, 1945-1946-1947.

Foreign Commerce Weekly, Washington, D. C., 1941-42-43-44.

Middle East Journal, Washington, D. C., 1947.

Mozakerat Majless, Tehran, 1944-45-1946. (Proceedings of Majless)

Text of the Foreign Exchange Control Act, Tehran, 1933.

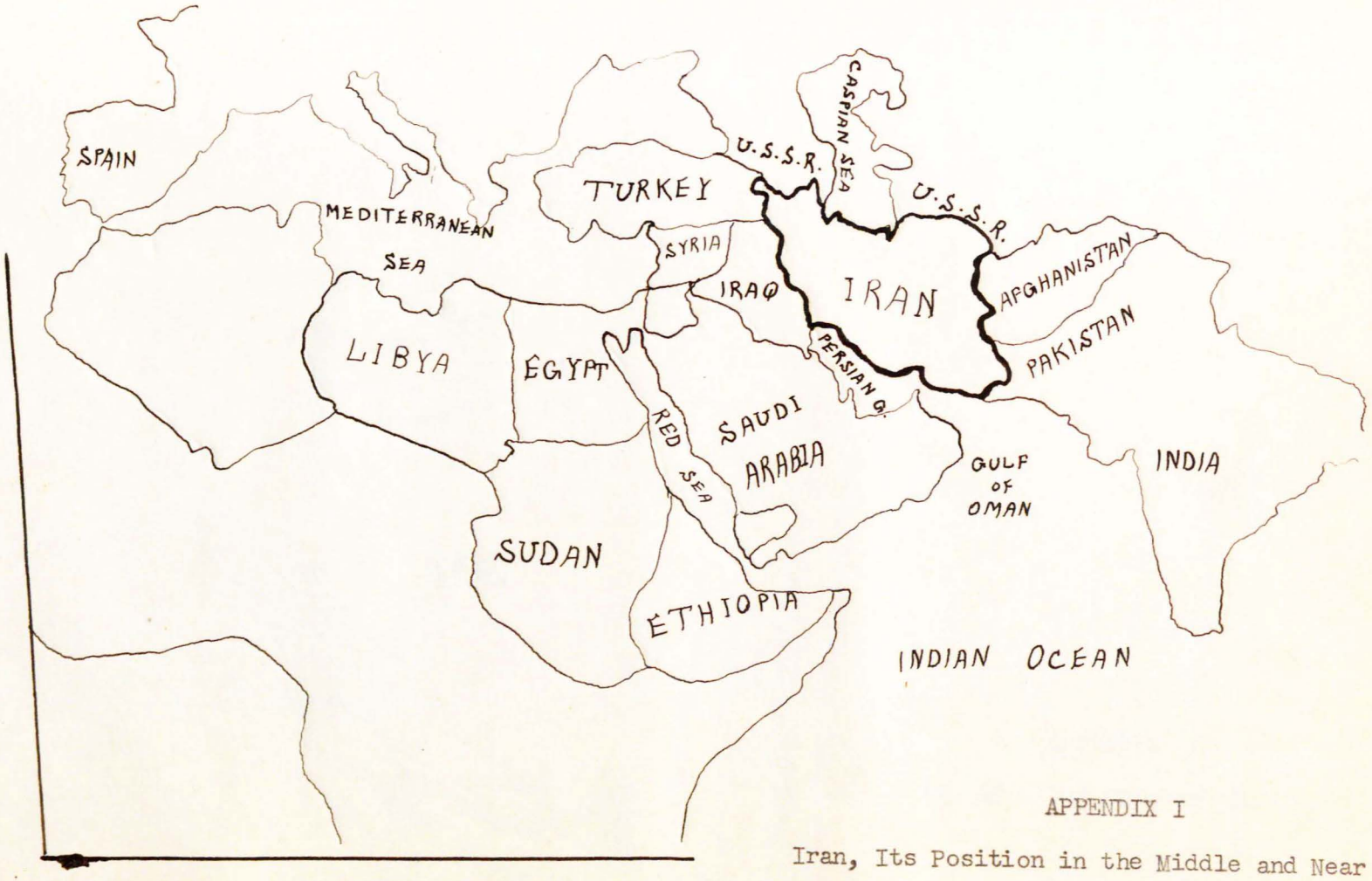
Text of the Supplement to the Foreign Exchange Control, Tehran, 1933.

Text of the Foreign Trade Monopoly Act, Tehran, 1931.

Annual Reports of Customs Administration of Iran, Tehran, 1914-1946.

Quarterly Reports of the Administration General of the Finances of Persia, Tehran, 1923.

International Bank for Reconstruction and Development, Second Annual Report, 194 -1947.



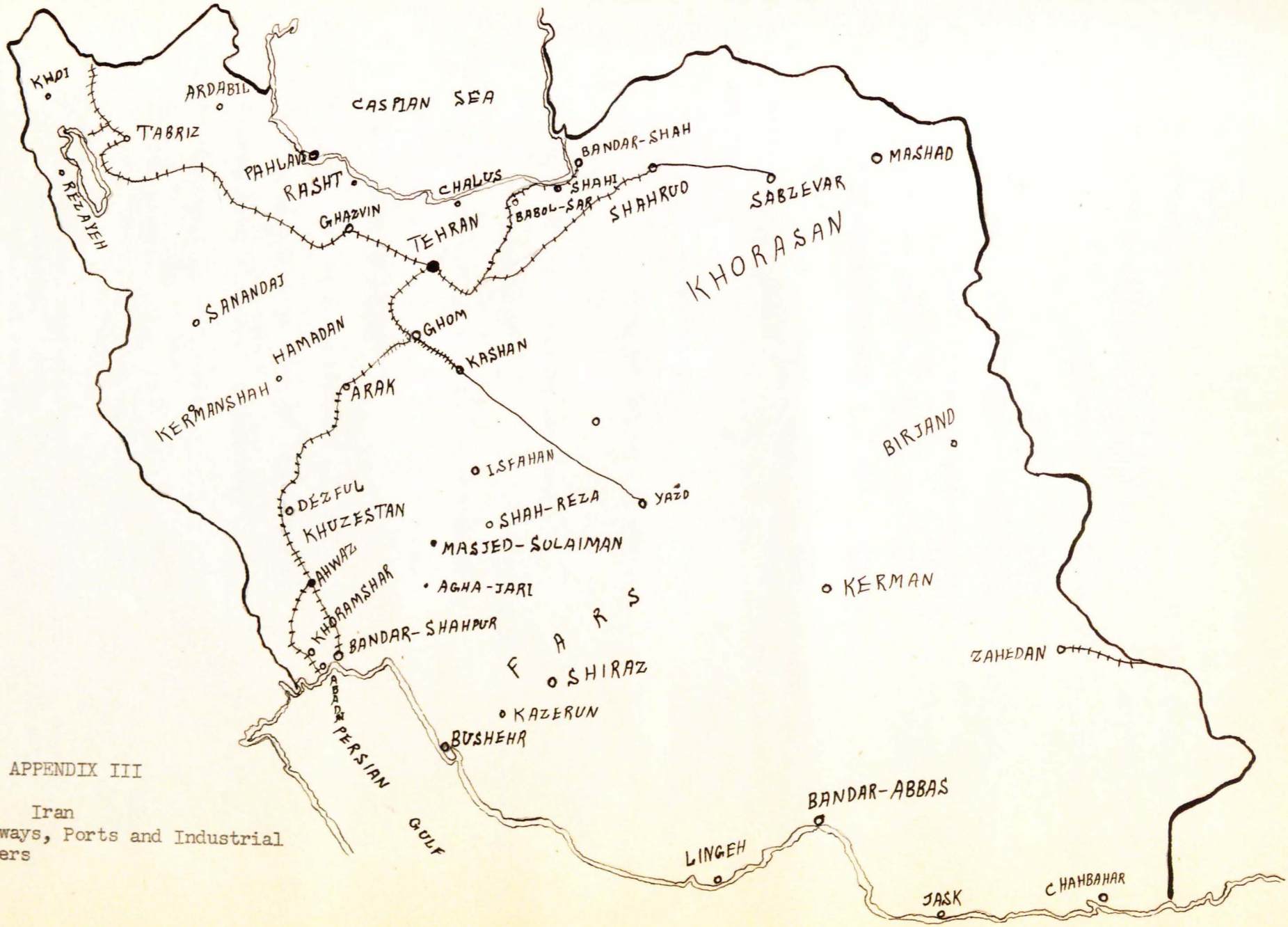
APPENDIX I

Iran, Its Position in the Middle and Near East



APPENDIX II

Map of Oil Concession in Iran



APPENDIX III

Iran
Railways, Ports and Industrial Centers

APPENDIX IV

The Foreign Trade in 1324 (21 March 1945 to 20 March 1946)

The total foreign trade of Iran in the financial year 1324 (21 March 1945 to 20 March 1946) amounted to Rls. 11,237,167,282 made up as follows:

A-EXPORTS:

1. Value of commercial exports (actual exports)		Rls. 1,698,268,907
2. Value of exports of petroleum products of Anglo-Iranian Oil Company		5,611,698,046
3. Value of exports of Iran Fishery Company		8,789,673
Total		Rls. 7,318,756,626

B-IMPORTS:

1. Value of commercial imports (actual imports including imports of gold and silver)		Rls. 3,106,600,888
2. Value of goods exempted from payment of custom duty	759,377,042	3,865,977,930
C-Value of Commercial goods that passed through the country in transit or were returned to the country of origin		51,145,434
D-Value of commercial goods returned to the country of origin or other countries without customs entry or transit formalities		1,213,757
E-Value of commercial goods trans-shipped in Iranian waters.*		73,535
Total		Rls. 11,237,167,282

*Iranian official statistics are kept in two parts, the one relating to so-called "commercial" imports and exports, the second, to other imports and exports. The Iranian authorities do not include in the statistics of "commercial" imports the values of those goods which are imported free of

duty, viz. materials, etc., imported by the Anglo-Iranian Oil Company, the Société Mahie Iran, Government departments, banks, etc. Similarly in the case of Iranian "commercial" exports the statistics do not include the values of oil exported to various countries by the Anglo-Iranian Oil Company or of fish exported to the Soviet Union by the Société Mahie Iran.

The justification for excluding from the statistics of "commercial" trading the values and quantities of the imports and exports of the Anglo-Iranian Oil Company, and similar considerations presumably apply in the case of the Société Mahie Iran lies in the fact that the Company pays the Iranian Government an annual lump sum as a condition of its concession, and the Company's imports required for the efficient operation of the concession as well as the exports of oil products affect primarily the finances of the Company and only indirectly the finance of the Iranian Government.

COMPARISON OF EXPORTS AND IMPORTS
IN 1324 WITH THE FIGURES
FOR 1323.

Exports in 1324	117,085,041	Kilogrammes	Rls.	1,698,269,907
Exports in 1323	61,447,131	"		792,066,080
Difference	55,637,910	"	Rls.	906,202,827
Imports in 1324	151,241,163	Kilogrammes	Rls.	3,106,600,888
Imports in 1323	126,348,975	"		2,956,789,304
	24,893,088	"	Rls.	149,811,584

As shown by the above figures, an increase of over 100% has been obtained in both the weight and value of the exports of 1324 as compared with the previous year and this increase covers all the export items of the country in almost equal proportion.

Food products, urgently needed by most of the foreign countries, rank first as regards this increase of export and the exports of dates, raisins and rice show an increase of about 10,000, 5,000 and 18,000 tons respectively. The exports of wool and carpets also show an increase of approximately 3,000 tons each. This increase of exports is the result of the conclusion of the World War and the re-opening of the commercial routes.

As regards imports also, although the quantity of gold and silver imported in the year 1324 was less as compared with the previous year, nevertheless an increase of over 24,000 tons as regards weight and about 150,000,000 rials as regards value was obtained. The increase in the imports of the year 1324 was also due to the conclusion of the war and the need of the local market for various kinds of goods. Of course, the sale of the allies' army surplus goods to Iranian merchants at the time of evacuation of the country also affected the increase in the quantity of goods imported.

The Actual Foreign Trade of Iran in 1324 in United States Dollars at the mean rate of Rls. 32.50 to the dollar:

Value of Imports	U. S. $95,587,710
Value of Exports	" 52,254,420
Total	U. S. $147,842,130*

*Asre Eghtesad, Official Journal of the Tehran Chamber of Commerce, Tehran, September, 1946.

APPENDIX V

COMPOSITION OF FOREIGN TRADE

1. List of Iranian Export Commodities.

Carpets - Soft Skins (lambs, sable, stone-marten, beaver, fox, etc.) Gum Tragacanth - Gum Arabic - Opium - Sheep and Goat skins - Cotton - Wool-Casings - Nap - Raisins - Petroleum Products - Crude Pearl - Mother of Pearl - Turquoise - Dried Fruits - Sultanas - Red Oxide - Asafoetida - Almonds - Pistachios - Walnuts - Hazelnuts - Wild Almonds - Edible Oils - Silverware - Timber - Tobacco - Tombac - Lemon Juice - Roasted Nuts - Millet - Wild Rue - Bones - Fleawort - Dried Cherries - Dried Prunella - Dried Plums - Pomegranate Seeds - Dried Figs - Origanum - Scrap Iron and Broken Machines - Plantain - Tobacco Leaves - Engraved Brass Work - White Succary - Flax Seed - Wild Pistachio - Dried Quince - Quince Pips - Cat's Paw - Feather - Maidenhair - Pomegranate Peel - Poppy Peel - Pigskin and Hogskin - Walnut Shells - Pennyroyal - Onion - Refuse Pieces of Lamb skins - Sunflower Seeds - Cotton Seeds - Mellon Seeds - Vegetable Seeds - Eggs of Domesticated and Prey Birds - Pumpkin Seeds - Castor Beans - Parsley Seeds - Thyme Seeds - Lucerne Seeds - Persian Manna - Turcoman Belts - Dried Mulberries - Salep - Jajeems - Woollen Sacks - Tan Bark - Soapwort - Henna - Colocynth - Rocket Seeds - Poppy - Mustard - Dates- Santoniaca - Truffle - Fennel - Ox Casings - Vegetable Oils - Silk and Woollen Textiles - Blanket - Table Cloth - Madder Root - Liquorice - Rhubarb Maize - Indian Wheat - Barberry - Orpiment - Saffron - Aniseed - Hyssop - Animal Hoofs - Jujube - Calcinated Salt - Hermodactyle - Nigella Seeds - Dried Apples - Horns - Manna Tighal - Purgative Manna - Mushroom - Hedge Mustard - Embroidery - Ghalamkar - Tar - Dried Whey - Sesame - Tamarix - Manifera - Rosewater - Dried Pears - Bole Armoniac - Violet Flowers - Marjoram - Rose - Carbonate of Lime - Buglose - Morning Glory

Crude Sulphur - Gives - Fish (fresh, smoked or dried) - Myrthle - Shallot - Hair (horse mule and pig) - Beeswax - Medical Herbs - Goathair - Starch Spearmint - Salt.

2. List of Iranian Import Goods.

Cotton and Woollen Piecegoods - Silks - Hosiery - Harberdashery - Stationery - Paper - Toilet Requisites - Tea - Sugar - Machinery and Tools - Trucks and Touring Cars - Automobile Tyres and Accessories - Bicycles and Motor-Cycles - Electrical Equipments - Electric Refrigerators - Agricultural Machinery and Implements - All kinds of Metals and Ironwares - Pharmaceutical Products and Surgical Instruments - Optical Goods - Dentistry Requisites - Building Materials - Chemicals - Spices - Pepper - Mineral Oils - Ladies' and Gents' Hats - Umbrellas and Raincoats - Crockery - Cutlery - Telephones and Accessories - Radios and Spare Parts - Window Glass - China and Glass Wares - Aluminium and Enamel Wares - Looking Glass and Mirrors - Electric Lamps and Bulbs - Kerosene Lamps - Heating Stoves and Cooking Ranges - Sewing Machines - Safety Razors and Blades.

APPENDIX VI

Iran and International Bank

In 1946, the Majless authorized the Government to sign and deliver to the government of the United States of America the document purporting the approval of the Bretton Woods Agreement, concerning the establishment of an International Monetary fund and International Bank.

In this connection the Majless approved the following articles:

I. The Government is authorized to take part in the International Monetary Fund, hereinafter called "The Fund," and in the International Bank for Reconstruction and Development, hereinafter called "The International Bank," the Statutes of both of which were drawn up as given in the annexed protocol, at the International Conference held at Bretton Woods in the United States, with representatives from Iran taking part in the proceedings.

II. The Government representatives for the Fund, and the International Bank and their substitutes shall be nominated by approval of the Council of Ministers upon the proposals of the Ministry of Finance.

III. The Government, or its representatives, cannot ask for a change in the parity rates of Rials in relation to the currencies of other countries which are members of the Fund, or agree to any such change, or accept any modification in the shares allotted to Iran in the Fund and International Bank, without the previous approval of such change by the Majless.

IV. Use of resources of the Fund and the financial facilities afforded by the International Bank can be obtained solely through, or with concurrence of, the Bank Melli Iran, and any deposits belonging to the International Bank or the Fund, shall be kept at the Bank Melli Iran.

V. The Issue Department of the Bank Melli Iran (Banknote Reserve Control Committee) is authorized to deliver over gold to the Fund on account of the 25% share thereof allotted to the Iranian Government in accordance to the Statutes of the Fund, and amounting to six million two hundred and fifty thousand dollars. The receipt document obtained by the Bank Melli Iran from the Fund against the said gold shall be considered as part of the gold backing held in reserve against banknotes.

VI. Upon call made for payment of the remaining 75% of the share allotted to the Government, the Bank Melli Iran is authorized to put Rials, up to the limit of the equivalent of 18,750,000 dollars, at the disposal of the Fund and, when necessary, to turn over to the Issue Department of the Bank Melli Iran any foreign exchange or credit obtained from the Fund against the said Rials. The Issue Department is authorized to have such foreign exchange or credit obtained in the above-mentioned manner credited to the account of the backing held against issued banknotes.

The Government may issue non-interest-bearing, untransferable debentures up to the limit of the above amount and to hand them over to the Fund on account of its Rial share in the Fund.

VII. The Issue Department of the Bank Melli Iran is authorized to leave on demand at the disposal of the International Bank up to the limit of $19,680,000 from the gold or foreign exchange reserves, on account of the 18% remaining share of the Government in the Bank.

Non-interest promissory notes, given by the Government to the Issue Department of the Bank Melli Iran as the counter-value of the share of Iran in the International Bank shall be counted as part of the backing held against banknotes.

VIII. Currencies of countries which are members of the Fund shall be acceptable as part of the reserve backing held against issued bank-notes, provided that the same should have been obtained at the time when the member-country was entitled to have the benefit of the resources at disposal of the Fund.[1]

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[1] Bank Melli Iran, Bulletin No. 79 (December 1945 - January 1946) Vol. XIII, Tehran.