Chapter III

INDUSTRIALIZATION BEFORE 1956

For thousand of years Iran has been recognized as the agricultural country. Like all other countries which lack developed industries, Iran's agriculture has overshadowed her other resources, but due to the lack of fertile lands and lack of water and because of the availability of natural resources and mines, especially fuel and power if energetic actions were to be taken in the industrial fields doubtlessly the industrial aspect of the country would have overshadowed the agricultural aspects of the country. If we analyse the evolution of industrial development of Iran in historical perspective we distinguish two eras. The first goes back to the decade preceding World War II when relatively large number of industries were established through direct government investment during the reign of the late Reza Shah the Great. The second era begins in the aftermath of 1950's. At the time of Reza Shah Pahlavi's accession to the throne of Iran in 1925 the major working population of the country was engaged in agricultural sector and the industrial sector was lagging far behind. The industries well-equipped with modern implements, heavy machines and modern techniques of
production was a rare phenomenon. Some manufacturing industries which were in operation set to rug and silk, had to depend on animate energies of men and beasts. The articles produced by the manufacturing during this period were entirely hand made. Foreign investors were not permitted to contribute. Reza Shah, therefore, under these circumstances, in order to increase the national income and consequently the purchasing power, launched the policy of industrialization. Since this accession of Reza Shah to the throne of Iran and introduction of a policy towards industrialization, Iran presents a most interesting example in the middle east of a state-directed efforts at economic organization.

Various interests of different countries in the oil of Iran proved to be an important obstacle in the way of smooth and harmonious development of different sectors of the economy. Moreover these oil disputes interrupted the first seven year plan. To quote Middle East Business Digest "In March 1951 the oil industry in Iran was declared nationalized and immediately afterwards the National Iranian Oil Company came into existence. With the formation of national National Iranian Oil Company a completely new situation arose in Iran."

1. Middle East Business Digest Volume VIII No.113
   April 1964 P.37
Prior to the industrial revolution in Europe, articles like carpets and rugs, woollen fabrics and silk, namdas and felts, metal-wares and embroideries were export items to Egypt, China, Italy and other European countries. Apart from these carpets, woollen industry and enamelling works in gold, silver and copper deserved pride.  

Among the factories which had been established prior to the 1921 rug, refinery and a match factory had to be closed as a result of their incompetency to compete with foreign commodities.

In order to escape this phenomenon, the urgency of development of technical schools and workshops was realised and accordingly certain technicians were imported from Germany. A technical school which was opened under the direction of German teachers survived, flourished well and expanded. This school survived throughout the 30's.

The import of capital goods were encouraged by way of tariff exemptions in 1925. The government activities in the field of industrialization were accelerated in 1930's when they encouraged the private sector to come up and the law was framed which allowed five years tax holiday to the privately owned factories. But the existing condition did not coincide with the more active private entrepreneurial activities in Iran and consequently the private sector did not

provide healthy result, which may be attributed to the lack of capital the contentment of the land owning class with their luxurious standard of living, a tendency to hoard savings in silver or gold or invest them in real estate and a comparative lack of faith in any long range political stability and the willingness or the ability of the Government to protect private investments. It appears from the report "The progress of industries long established in Iran, has been slow in the past, particularly during the Second World War when industrial activity was slowed down. During the last few years when the political and economic conditions of the country have become more stabilized in comparison with the past and as a result of the encouragement of the government towards industrial development as well as the granting of industrial loans out of the funds obtained from the revaluation of bank-note coverage, and again by the ratification, of the law relating to foreign investments, much interest has been shown by individuals in the increase of production and the establishing of factories."  

Therefore the government thought it proper to impose strict control and promote industrial activities in the desired direction. The task was assigned to the Department of

of Industries and Mines in 1936 to govern the regulations regarding the industrial affairs. Priority was given to the cotton, woollen and silk textiles which were established in Mazandaran, Isfahan and Tehran. The woollen industry which centred at Isfahan, was referred by the people as the Manchester of Iran. Silk factory was established in Chalus, Mazandaran, which did not only fulfil country's demand but also gave a little surplus for export. Different yarn spinning factories were also established, yet these factories could not fulfil the needs of the cotton mill fully and consequently the deficit had to be imported. The government encouraged and aroused among the people, a feeling of the use of home made clothes and ultimately military and various schools uniforms were made exclusively with home made materials. In order to promote the development of silk industry, the government prohibited the importation of silk fabrics by creating a brisk contraband trade in luxury items including stockings.

The use of sugar in Iran was very high and climatic conditions in Iran proved most suitable for growing sugar beets, but unfortunately prior to the Reza Shah's accession it seems no attempt was made to produce sugar locally except the Belgium concerns which made a vain attempt to build a sugar refinery in Kahrezak (eight miles south of Tehran).
Therefore much attention was paid towards the sugar production and eventually eight state owned refineries were built in different parts of the country and the old Kahrezak plant was also put to operation. As a result, the domestic production of sugar rose from 2419 metric tons in 1932-33 to 56636 tons in 1940-41. The landlords in vicinity of these refineries were encouraged to grow sugar beets. Subsidies and aid were, however, extended to the landlords. But subsidies and aid did not please the tenants because they were not getting modern equipments for the betterment of processing, storing and distribution of other products. In the process of industrialization, factories which were opened with the help of foreign exports, the most important among them was the grain elevator which was constructed by Russian experts.

Danish experts constructed a number of factories like Backeries, plant for fruits drying and packing, rice cleaning and meat canning, vegetable oil, refineries, wineries, distillaries and an excellent sardine packing plant on Persian Gulf.

In the wake of an increasing need of the construction work in the country, different cement factories were constructed which partially fulfilled the total requirement of the country. The government established miscellaneous light consumer goods industries like paper, matches and cigarettes.

Apart from this, the government established soap and glass industry with the help of the Italian Engineer and all
of these were reported to have been in operation by 1941.

Due to the wide needs of railroad and construction operation, the urgency of Steel Mill was realized during the reign of Reza Shah. Accordingly in the last two of the dying years of the Reza Shah's reign, the work for the establishment of an Iron Foundary and a Steel Mill in Iran was started and the machinery was imported from Germany. The preliminary plans were completed during the time of Reza Shah though much was yet to be done in Reza Shah's country of 1941.

Since the Department of Industry and Mines was operating all the state owned factories at the instance of the Ministry of National Economy of Iran, it provided wide job opportunities to young engineers. The engineers who were studying abroad in Europe got an inclination and returned to their country.

In the pre-war period industry in Iran was based mostly on handicrafts and artistic aspect and there were only two spinning factories established in the year 1900 and 1910. For the rest of her requirements Iran was dependent on foreign countries. Early steps towards industrialization were taken after First World War and the consumption goods industries were established. It began with flour milling, the first factory of which was established in 1920. The cotton and wool spinning came into operation and gradually jute and silk industries were established in 1937. Sugar, cement, leather and polish making
industries were put into operation in 1933. The foundation of 22 factories was laid by the Government. A large number of new industries had been started just before the World War II and old industries revived. The emergence of war upset further schemes of the Government. From 1937, soap making, oil extracting, fruit preserving, tobacco industry, matches and glass making industries were founded one after another. Metal foundary, making lead and copper ingot which was traditional in Iran since very old times, became industrialized and a wool impreg­­nating plant was established for railways traverse, the tar of which was produced by distilling of coal in another small plant.

During this period, the main policy was to meet not only the principle requirements of the people but army's needs of glycerine, soap, conserves, copper, lead and textile as well as gas-proof masks etc. The same policy has been carried out in the infrastructural establish­­ments such as building of cross-roads and railways of the country and ports. During the period 1926-41, about 750 million dollars had been invested in the whole economic affairs.

Since the people were not acquainted with industry in that period they were not prepared to invest in the industries other than food and textile. Therefore before the World War II most of the factories in Iran were estab­­lished by the Government.
Condition of Industries of Iran in 1945:

There were 227 factories in Iran in 1945 excluding electricity, which were as follows:

Textile Industry: There were 196,000 of spinning machines and 700 sets of weaving machine with a capacity of 14 million meters textile and 450 ton cotton yarn through consumption of 155,000 tons cotton per year. There were only two jute factories with 3,600 spinning machines and 142 weavers which produced 3 million sugar bags and 100 tons of jute yarn through consuming of 3,500 tons of jute. There were also 6 factories for woollen textiles with 23,880 spinning machines, 378 sets of weaving machines and 296 sets of hank weavers with a capacity of 136 million meters of woollen materials.

A Government owned spinning and weaving mill, opened in 1927 with an annual capacity of one million meters silk with 220 weavers, produced only 500 meters materials.

Sugar Industry: The first sugar mill in Iran was established in 1893 with a capacity of 150 tons of sugar beets per day. In 1945, the number of Government owned sugar mills was 8 with a total capacity of 3,300 tons of sugar beets producing only 20 thousands tons of sugar and lump sugar in the same year. The daily capacity of these mills was 350-700 tons of sugar beets.
Food Industry: Besides flour and rice mills spread all over the country with a total capacity of 161 thousand tons of flour and 48 thousands tons of rice, other food industries included fish processing plant in Bandar Abbas with a capacity of 5 tons of sardines in one shift, the production of which was only 365000 tons of 140 and 280 grams because of the shortage of fish caught in 1945. Another food processing plant was established in Shahi in 1942 with a capacity of 4 tons of meat and 2 tons of vegetable for providing army's need but it did not operate in that year. Installation of vegetables oil extraction plant took place in the same year with a capacity of 20 tons per day.

Alcoholic beverages plants and soft drinks plants were founded in Iran in 1939 and 1950 respectively. The production of alcoholic drinks in 1945 was 39 thousands litres annually. Tobacco plant was established by the government in 1937 and its production had been 3100 tons of several types of cigarettes, 2530 tons tobacco and tobacco leaves in 1949.

Chemical Industry: Soap making has been traditional in Iran since old times by using lard and fat vegetable alkali. The first industrialized plant in this respect was operational in 1940, the production of which amounted to 2850 tons and the glycerine was used for military needs(supplying nitroglycerine)

4. Economic Condition Banke Iran va Khavar Miyanen. Tehran, Iran 1956 p.7
sulfuric acid plant also supplied army's needs through burning the sulfur gained from local mines. The Chloriaeric acid plant with an annual capacity of 100 tons by electrolyzing met the requirement of the time and the resulted caustic soda were used in other industries.

Tanning industry in Iran was established in 1932 and its production in 1945 amounted to 530 tons of sole leather and 1.2 million feet top leather. Match making industry started in 1925 in Iran and its production was about 223 million numbers in 1945.

Polish making industry came into operation in 1933 and its production amounted to 112 thousand tons in 1945.

Non-metal industries: The first cement plant was founded in 1934 and its production amounted to 35500 tons in 1945. The first glass making factory with an annual capacity of 10 tons per day was established in 1939 but its production did not reach over 300 tons of several types of glass in 1945. Bricks and refractory clay making plant was operational with a capacity of 10 tons per day in 1942 and the production of the same was 3000 tons in 1945.

Metal industries and metallurgy: In addition to the small metal shops, industrialized mask making factory started operation in 1940 which was used for rubber products and army uniforms making from 1945. Copper and lead melting which
had been traditional from old days in Iran in the clay furnaces was industrialized for the first time in 1939 by the establishment of copper refining and metallurgy (by electrolyzing) with a capacity of 5 tons per day to meet the army requirements in that time. The production of the above mentioned factory did not exceed 450 tons of pure copper in 1945 because of deficit in raw materials. The said copper was extracted from 5-8 percent copper ores.

For Steel Mill a contract was concluded with Demage Group with a capacity of 300 tons per day which was not fulfilled because of war and delay in transport of the plant. Lead melting was done in the old clay furnaces with an annual capacity of 330 tons.

From 1937 when the Steel Mill contract was concluded exploitation of iron, coal and discovering of chromite, magnese, refractory clay and dolomite etc. came under programme but because of the postponement in the establishment of steel mill the excavation and exploitation of such minerals was limited. In 1945 approximately 92 thousands tons of coal, 1270 tons chromite and 165 tons red clay were exploited. Copper excavation amounted to 10 thousand tons of ore and lead about 4500 tons of 10 percent ores.

In 1945, installed capacity of electric power was 21000 kilo watts not taking into account the textile, sugar and other factories which had their own electric power
generating sets.

In post war period there was a lack of spare parts for different factories, which resulted decrease in the volume of industrial production.

As regards the investment in modern industry in 1938-39 it was estimated to have been 1400 billion Rials, one third in state enterprises. 40 percent of the total investment was in machinery and equipment and 60 percent in real estate. The number of industries was reported to have increased between 1931 and 1945 from 38 to 635.

Numerically the bulk of industry concentrated in Tehran (378 out of the 635 establishment) but the average capital in the provinces amounted to 3035000 million Rials as against 1919000 million Rials in Tehran. This showed that the larger heavily capitalized concerns were located in the provinces. Market-dependent industries were clustered in and around Tehran, while industries that had to be close to sources of raw materials, developed in the provinces. In the Capital, the commercial and financial centre of Iran, industry had less than a third of the total incorporated capital in the provinces. Also in the provinces, the average capitalization was considerably heavier in industry than in other enterprises while in Tehran the reverse was the case.