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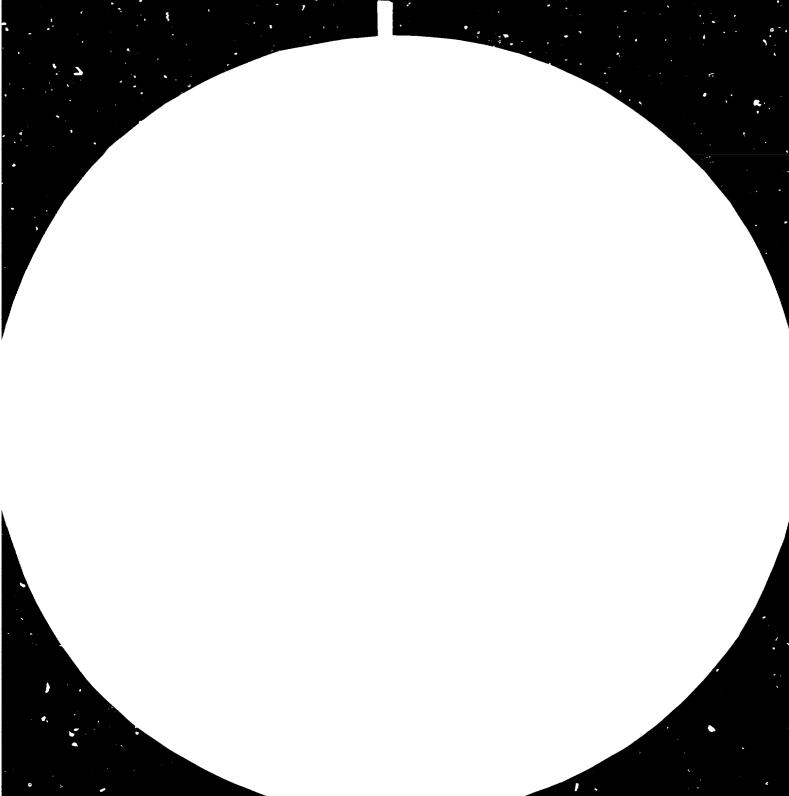
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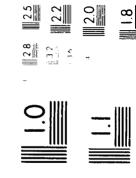
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TOBACCO INDUSTRY IN IRAQ

presented by the

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PREFACE

This document, Tobacco Industry in Traq, is one of 18 studies presented as supporting material to the Iraq country paper about the development of agro-industries and state of agricultural production and suplementary industries. We thought of presenting them to assist the reader in getting acquainted with the pioneering experiment in Iraq in the development of this field of our economic activities. This documentation reflects the great development achieved within the years that have already elapsed since the uprising of 17th July Revolution under the leadership of Arab Baath Socialist Party that simed at achieving economic and social welfare for the people by rational use of the natural resources and elevating our country to the rank of advanced countries within a considerable period.

From the point of view of the Revolution leadership in Iraq, what has been achieved so far in the field of irrigation development, drainage, mechanization of agriculture, animal production, other agro-industries, and other infrastructural development in this field, are deliberate and effective steps towards reaching our aspiration.

In those studies we have tried to highlight the main development features, the negative sides as well as the positive results achieved so far with the objective of presenting our experience to brotherly and friendly countries in particular to those whose conditions and potentialities are similar to our country. This exchange of experience is not only a necessity but a duty imposed on us by our principles and the current international circumstance in which food weapon becomes one of the important weapons raised by imperialism in the face of developing countries. If those countries do not support each other and exchange national experience their task in achieving their food security will be, if not impossible, difficult to achieve.

We hope that our contribution together with that of other participating states and organizations will contribute to the success of this ministerial meeting on development of food industries in developing countries.

Preparatory Committee

for the Round-Table Ministerial Meeting

on Agro-Industry Development

TOBACCO INDUSTRY IN IRAQ

Tobacco Cultivation and Industry

Introduction:

Tobacco cultivation and consumption in Iraq has been known for (400) years. Cultivation depended until 1934, on local species called Reshok, the origin of which is unknown. This specie is still produced in the mountainous regions of the country. As for tobacco industry, it was until 1862 represented by different ways of mincing and was mostly consumed locally.

In 1862, the Ottoman authorities issued a law that prevented tobacco import as well as taxes on producing and trading tobacco. They, however, kept the freedom for local production and commerce within the Ottoman territories. This law was kept until 1874 and was changed by another, which established the Ottoman tobacco management to organize production and trading, by licencing factorics and supervising sales. This management continued until 1884, when the French Regie obtained the licence for (30) years and expanded for (15) more years due to the Balcan wars. Thus, the Regie Law continued until 1929. The Regie organized agricultural production in a new method and improved tobacco industry which was, until then, undeveloped. After World War II and the liberation of Iraq from Ottoman Empire, successive governments tried to improve tobacco cultivation and industry. Experiments on Turkish, Bulgarian and Greek species, such as the Samson, Sersostramos, Bafra, Basma and Khandak were carried on. Improved tobacco projects were established first in Kwaisanjak and Arbil, then in Sulaimanyah, and Nenava. The cultivation

of these species was later spread in different productive regions in the north. Experiments on some Virginian tobacco, to be mixed with Oriental tobacco, improved the quality of cigarettes to the point that they became similar to the foreign ones. As for the experimented species, they were:

- 1 High Life
- 2 Golden Ball
- 3 Cleanz
- 4 Yunanza

Expert reports confirmed in the beginning the success of these species but climatic and environmental conditions affected the crop and caused a change in its physical and chemical characteristics. Farmers started to cultivate Virginian tobacco, but because of the above-mentioned reasons and long ripening time involved, larger leaves of these species, obliged the farmers to return to the cultivation of Oriental tobacco. Oriental tobacco was at first preferred by consumers because of its good species and the suitable conditions in these region for production, but as time passed and because of the lack of governmental supervision on tobacco cultivation, these species became cross-bred, so, bad quality tobacco appeared and good quality ones disappeared. Tobacco cultivation and industry continued under the Regie's control until 1939 when the Tobacco Monopoly Administration became responsible for the cultivation, industry and trade of tobacco.

Tobacco Cultivation Regions

Tobacco is cultivated in the north region of IRAQ along the mountainous chains near the Persian and Turkish borders and some of the high plains which are 650-1200 above sea level. 85% of the crop grows in Sulaimanyah, the rest in Arbil and Duhok.

Species Distribution On Productive Regions According to Environment

Environment means soil type, elevation from sea level, heat, and humidity degrees. In order to preserve the original characters of any crop, there should be a conformity of environmental conditions in the productive regions and the original one, this was not the case with the local and foreign species which acclemated in the beginning and was mixed with each other, for morfological characters should be guarded for each species and compared with the species cultivated in the original region. This was done by the concerned Organization, the Ministry of Agriculture and Agrarian Reform (the directorate of tobacco research). Experiments and research are carried out in research stations for the local and imported species (such as watching, acclematizing, and technical, statistical and economic studies). After attaining success in these experiments the species are then introduced in IRAQ.

There is a basic point that should be studied scientifically and that is the environmental conditions that Oriental tobacco are cultivated in (relative humidity during cultivation period). Since cultivation regions in IRAQ are not humid in summer, to avoid the negative consequences, plants should be irrigated each 7-10 days which will effect normally such chemical and physical characters of tobacco (as nicotin and sugar rate, elasticity, nitrogen compound, aroma, leaf volume, fibre and veins thickness and their capacity for maintaining moisture...etc.).

Production fluctuated enormously during the last ten years as a result of many factors such as farmers immigration to the cities, seeking work in factories. The following table shows tobacco product during the period 1969-1978.

Year	Cultivated Surface/donoum	Production/Kg.	
1969	60000	9089496	
1970	58000	15200000	
1971	55610	17000000	
1972	30000	9626487	
1973	38500	11254000	
1974	38500	4483230	
1975	38000	6734000	
1976	33898	6718000	
1977	44217	8 682000	
1978	32188	9250000	

Tobacco is the main income source for a large segment of the population like farmers and workers. Moreover, it is an important revenue source for the government. The role of the Ministry of Agriculture and Agrarian Reform (the directorate of tobacco improvement) is to supervise tobacco production, to decide cultivation land limits, offering tobacco cultivation licences, offering agricultural directives, insect and assistance for disease control. The State Organization for food industries supervises tobacco related commerce activities. The government fixes the prices, annually, for selling and buying tobacco. The cigarette companies receive the crops from farmers, store, grade and manufacture it.

Iragi Tobacco and its Characteristics

Iraqi Tobacco is of oriental and semi-oriental tobacco origin. It has good specifications suitable for cigarette industry, its nicotin rate is 70.6-1.5, sugar % 10-18, its leaves are medium and small sizes, and have good, natural taste, some of it has aroma and good taste, all types are of good burning quality. The color ranges from clear yellow to dark yellow to nearly red. Cultivation timing varies according

to regions and the climatic conditions, plants are irrigated because of the dry climate during growing season, leaves are cut in succession for 3-5 times, gathered in threads (necklace shape), then spread on the ground to be transported on open wood spreaders under open air and sun. After it is dried for 12-16 days, the farmer dampens his tobacco then presses it in cubic forms, each contains 40-50 kg. then gives the crop to the receiving committees for grading and classifying and then stored in appropriate regions.

Iraqi Tobacco Classification

The base for quality evaluation of tobacco is to classify the coop in several degrees which are:

- A hereditary characteristics for each sort.
- B environmental conditions climate, soil; tobacco is classified to mountainous, semi-mountainous and plain production.
- C agricultural processes, serving methods and crop preparing method.
- D leaf color.
- E leaf size.
- F tobacco capacity for maintaining moisture and fabric kind.

Iraqi_Tobacco are graded to:

- 1 Excellent.
- 2 First grade.
- 3 Second grade.
- 4 Third grade.
- 5 Fourth graie.

As for the ingraded tobacco, these are refused for their loss of characters and being unsuitable for utilization.

These are destroyed.

Virginian Tobacco

Research studies on different sorts of Virginian tobacco have proved the success of their cultivation in certain regions of the north. Several analyses done by specialists and evaluated by foreign and Iraqi experts proved the success of cultivation on the condition of providing necessary requirements, such as cultivation methods, storing and curing systems. Allocations are decided to implement the project of generalizing the cultivation of Virginian tobacco according to the plan prepared by the Ministry of Agriculture and Agrarian Reform for the period 1979-1980.

Developing and Improving Iraqi Tobaccos

The State Organization concerned with tobacco cultivation has made the necessary steps to improve Iraqi tobacco production by applying scientific methods in the following ways:

- 1 Establishing agricultural experimental research stations to select the best Oriental and Virginian tobacco having good taste at quality that could be cultivated in Iraq, and to grade and improve local species. These experiments were done in the productive regions, and good results were achieved in finding the species that are most suitable to the productive regions.
- 2 Distributing nursery plants free of charge to farmers. These plants are produced in the plantations of the Organization, spread in the country to ensure the right cultivation.
- 3 Supervising farmers and directing them to the right agricultural method to develop the agricultural process by using modern technology to increase productivity in the mountainous region suitable for tobacco cultivation and to provide the country with the cultivation of the successful

species known by their good quality and high productivity and to improve tobacco quality used in the cigarette manufacturing.

- 4 Surveying tobacco producing lands, classifying these lands and forbiding the non-suitable lands for cultivation.
- 5 Establishing storage and systems in every productive region.
- 6 Send commissions to the developed countries in tobacco cultivation and industry and invite tobacco experts.
- 7 Establishing laboratories to analyse tobacco and cigarettes.
- 8 Encourage those farmers who produce good quality tobacco by grants and incentives.
- 9 Encourage farmers to improve and increase their production by loans, (oriented loaning system did not exist before the revolution).

Development of Tobacco Industry

The responsibility of receiving, classifying, grading tobacco is left to the industrial companies. Other responsibilities are left to the Ministry of Agriculture and Agrarian Reform.

To facilitate grading and receiving process the government established a high committee representing the ministries of: industry, agriculture and agricultural societies, to supervise, market and follow-up other processes. Twenty centers are established to assist farmers. Receiving crops is done properly and payments are made directly to farmers upon receiving their products to avoid agents and usurers, and to encourage farmers to look after their production and apply instructions. The high committee presents other services to farmers such as transporting crops from production points to receiving points and paying transport fees as well as packing materials. These measures facilitated the following.

- 1 Ensures that tobacco from a certain productive region is not mixed with another which might have different characteristics and specifications. This has facilitated the central storing, grading, brewing and preparing the mixture.
- 2 Simplifies the operations of receiving and grading tobacco.
- 3 Facilitates transportation from the farm to the nearest receiving center. The productive regions (especially the mountainous ones) are rugged for transport which makes getting tobacco to the centers a hard operation.
- 4 Creates positive relations between farmers and the government which has an important role in production supervision.
- 5 Helps in the control of smuggling.
- 6 Encourages production in the mountains which are known by their good quality products.

Mechanization Origins in Tobacco Industry

Tobacco used in cigarette industry until 1964-1965 was without grading or brewing. After 1965, the responsible authorities felt the necessity to grade Iraqi tobacco in order to reach the scientific and technological level of the developed countries. A grading factory (Tonka) was established with the productive capacity of (1500) ton annually in 1965. After the consumption growth of Iraqi tobacco, a big factory was established in 1970 with the productive capacity of (6000) ton per annum. This factory can classify tobacco in (3) grades.

The result of improving Iraqi tobacco quality using the grading system, local and foreign demand on Iraqi cigarettes increased, which transformed the country from an exporting country to an importing one. The volume of manufactured tobacco increased from (9) thousand ton in 1974 to (21) thousand ton in 1979.

Future Prospectives of Tobacco Industry Development

1 - The establishment of an artificial brewing factory.

Brewing is considered to be the continuation of the chemical changes and reactions which started during the drying phase and stopped temporarily. Tobacco leaf qualities improve after brewing which gives it the odor and aroma. Bitterness and harshress (which is noticed in cigarettes before brewing) disappear, leaf color improve and the green shadows disappear. Brewing also affers the clasticity needed for magnificaturing.

There are two sorts of (Fermentation):

- Natural Fermentation:

This is done slowly inside stores and in normal climate where temperature is below $20-27^{\circ}$ and humidity is between % 65-75. This operation can be controlled by opening doors and windows and by rearranging tobacco packs in the stores. This operation takes from (6.12) months according to the climatic conditions.

-- Artificial Fermentation:

This is done to get the same result in a shorter period (5-10 days only). This period differs according to tobacco type, grade and specification. It is carried on in special closed fermenting chambers, temperature and humidity are controlled artificially. After completion of feasibility studies to establish the artificial fermentation factory, the state company for tobacco allocates the needed money in the 1980 budget. Its productive capacity will be (10) thousand ton per annum, capable of fermenting all sorts of Iraqi tobaccos after grading them. This project will be located in Sulaimanyah governate in the north region of the country.

2 - The establishment of re-manufacturing tobacco remains factory (manufactured tobacco folio).

Most cigarette companies have been considering the possibility of using tobacco remains, which could not be used in cigarette manufacturing, by transforming them to manufactured tobacco folio which is used as a mixture for cigarettes, cigars and pipe tobacco. This has saved hundreds of million dollars annually.

The mixture is produced by grinding tobacco remains (dust, broken and tobacco dust, tobacco) and mixing them with cellulosic and chemical materials and water to make a paste and pulled by special machines and transformed to folios and it is then cut and dried and used as substitute to the ordinary cigarette paper. A study has been prepared to establish a folio factory implementation.

CIGARETTE INDUSTRY

1 - Historical Review:

After World War I, imported manufactured cigarettes became known among rich and foreign people. While cigarettes were still prepared manually until 1926, when the first factory was established in Baghdad, it was the first national trade mark and was called Al-Ghazal. Sc 1926, is the birth year for cigarette industry in Iraq.

This industry continued its horizontal enlargement since.

Many companies were established during the thirties and fourties.

They depended on local totacco produced in the north region,

all these factories belonged to private sector.

In 1964, the tobacco industry was nationalised and in 1965, tobacco companies were unified in one company called Iraqi Tobacco Company. Three years before that, the Sulaimanyah factory of the socialist sector was established in the tobacco producing region.

During 1970, the implementation of the cigarette industry development project started and was completed in 1973. This development project included the enlargement of one factory by supplying it with modern machines, and increasing its production capacity. Other factories were eliminated. The whole production of the company became filtered cigarettes.

During 1969-1974, a new factory was established in Arbil to absorb the annual surplus of production and to cover the increasing demand for cigarette. This factory started to produce filtered cigarettes in 1973.

During 1975-1979, machines and tools were added to the Baghdad and Sulaimanyah cigarette factories which brought substantial increase in the production capacity. Moreover, the company bought filter machines. Local filters are depended upon \$100 in the three factories.

Development of Cigarette Industry During 1969-1978

Production Capacity

The development of production capacity during the last ten years was in two parallel directions - the first is the development of actual factory capacities; the second is the establishment of a new factory in Arbil and a new section for filter production. The development is represented in modernizing the technology used. The following table shows the development of actual capacities during these years.

Year	Capacity Million Gross	
1969/1970	35	
1970/1971	35	
1971/1972	35	
1972/1973	62	
1973/1974	83	
1974/1975	104	
1975	104	
1976	105	
1977	125	
19 78	125	

Development of Production and Productivity

Production has developed in fast paces during the last ten years, reaching to double the volume of the 1969-1970 production. This production increase is the result of the development of capacity and the utilization of modern technology. The following table shows production volume and trends during the last ten years:

Year	Production Volume*	Year	Production Volume
69/1970	27	74/1975	44
70/1971	29,5	1975**	43
71/1972	31	1976	55
72/1973	31,5	1977	66,5
73/1974	37 , 5	1978	5â , 5

^{*} Unit = Million gross of 200 cigarettes

After comparing the table of production capacities development with that of production volume development, we can see the utilisation level of these capacities and machine productivity during the last ten years. The following table shows utilisation percentage of the available capacities:

Year	Exploitation Percentage	Year	Exploitation Percentage	
69/1970	% 77 , 1	74/1975	½ 42,3	
70/1971	% 64,3	1975	% 55 , 1	
71/1972	% 8E,5	1976	[€] 63,3	
72/1973	% 50,8	1977	% 53,2	
73/1974	% 45,2	19 78	% 54,8	

^{** 1975} represents (9) months only (1.4-31. 12. 1975).

A study of the above table shows that a sharp decrease in machine productivity has taken place. The reason for that is the sudden technology modernization and the in-ability of manpower development to cope with it as well as the shortage of skilled and trained manpower, the unsatisfactory working and maintenance systems.

Quality Development

Since the establishment of cigarette industry was profitable for its owners, their only care was to increase their profit. without developing this industry or to improve its quality. Working conditions were bad, tobacco processing was primitive, packaging and filling was manual.

Cigarettes were without filter, the tobacco used was local, mixture limited in quantity and composition.

After the nationalizations of 1964 and the unification of these companies in 1965, interest was expressed to develop cigarette quality. The starting point in this direction was mechanical packing, then the new mixture of Baghdad cigarettes with filter. Virginian tobacco was used for the first time. The development of Iraqi cigarettes quality stumbled until the 17-30 July revolution, and till the reorganization of Iraqi Industry. Quality was a main objective in the technological development process mentioned above. New cigarettes appeared with improved quality compared to previous production. Virginian tobacco importation increased and it became possible to produce good mixtures, packing and packaging methods improved considerably. King size and super length cigarettes were produced. Nevertheless, the development achieved is still less than the expected level. Pressing, demand, plus as mentioned before, the existence of some bottlenecks in some factories have resulted in the inability of this industry to reach its objectives in producing good quality cigarettes that could compete with international digarettes.

Future Prospectives for Cigarette Industry in Iraq

The increasing growth of the market requires increasing production capacities. To reach better quality requires utilizing advanced technology, developed working systems, developing manpower by training and providing healthy working conditions.

The development in production and consumption during the last ten years shows a trend for the average annual increase of about % 10, i.e. the demand volume for 1985, will be (130) million cigarettes.

The expected investments in this industry for the next ten years might exceed (100) million U.S. Dollars in order to establish a new factory and to enlarge and develop the existing ones. The projected direction for this industry is to use advanced modern technology and to generalize the utilization of computer control systems and managerial information systems.

This trend will lead to allocating part of the investments to develop manpower by training them to work and maintain these machines efficiently and effectively.

For the next ten years, produced cigarettes will develop in quality as a result of:

- Removing the actual bottleneck points in the factories.
- Using high quality tobacco and other raw materials.
- Utilizing modern machines and systems in quality control.
- Developing manpower capacities in quality control.
- Importing developed knowledge in production and improvement and possibly producing digarettes under the license of a well-known international trade mark.

CIGARETTE MARKETING

1 - Markeling System:

Cigarette marketing in Iraq is central i.e. there is only the Bureau for Selling and Distributing Cigarettes and Matches which is responsible for trading cigarettes in the country.

The Bureau receives the produced cigarettes from the factories (except export share) and distribute it all over the country through its branches in the governates and through direct selling to the retail agents.

Distribution is based on the sales plan which considers:

- Social development and living standards.
- Population density.
- Tourism and religious regions and their particular conditions.
- Economic aspects.
- Border regions.
- Average sales rate for previous years.
- Sudden fluctuations and exceptional changes.

Moreover, the Iraqi "Sttores Company" is responsible for cigarette importation and distribution.

As for exported cigarettes, it does not represent an important rate of the produced cigarettes volume. It is carried on by Iraqi Exporting Company. Iraqi cigarettes are exported to the Arab Gulf countries and to the Socialist countries.

2 - Sales Development During the Last Ten Years.

The production volume was the major limit to sales volume, all production was sold. Some trade marks have not however, been

accepted in the market, but were nevertheless sold during the periods of shortage which is known in the market from time to time.

The following table shows local sales and exporting volumes during this period.

Year	Total Sales*	Local Sales*	Ø P	Export	8,
42 1 222			22 65	22502	
69/1970	27203136	27169546	99,68	33590	C, 12
70/1971	29486910	29438170	99,83	48740	C,17
71/1972	29710228	29661790	99,84	48438	0,16
72/1973	32643000	32602000	99,87	41000	0,13
73/1974	35764500	35764500	100		
74/1975	43349500	43287000	99,66	62500	0,14
1975**	40576000	4045350C	99,70	122500	0,30
1976	57663500	57366000	99,48	297500	0,52
1977	63779000	63 125 500	9 8 ,9 8	653500	1,02
1978	67750000	67293500	99,33	456500	0,67

- * Unit = Gross of 200 cigarettes.
- ** 1975 represents the period (1.4 13.12.1975).

The most important aspect shown in the table is the low quantities exported (more than % 1 of the production volume). The reasons for this are:

- lack of production surplus.
- lack of quality competition.
- Lack of price competition.



