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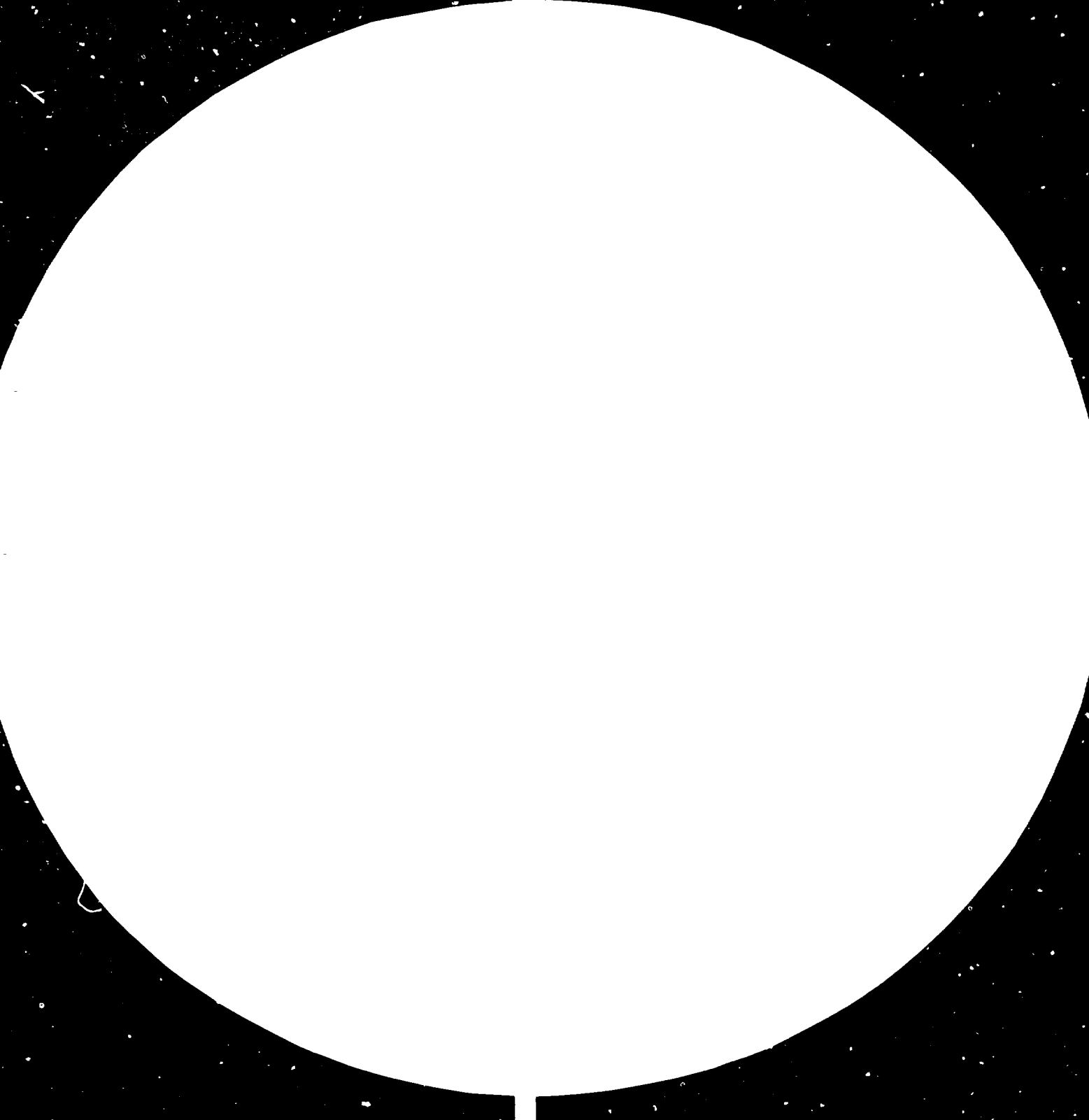
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CANNING INDUSTRY IN IRAQ

presented by the

Government of Iraq

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PREFACE

This document, Canning Industry in Iraq, 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 supplementary 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 aimed 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 infra-structural 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 circumstances 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

CANNING INDUSTRY IN IRAQ

Introduction:

The revolutionary government of IRAQ has given special attention to the industrial sector including food industry sector, which has faced many problems such as employment, raw materials, bad management and delay in the implementation of many existing projects or those under construction. Serious efforts to specify problems and obstacles were made after the revolution with respect to manpower development, eliminating the delay in projects as well as developing new projects and factories with high productivity. Among important industries which progressed after the revolution is one of canning industry. Canning, or food industries as a whole, have an important role in the national economy, this industry involves the following activities: -

1. Transfiguration of fast damaged products to more resisting ones which could be stored for days, weeks, months or more according to canning system. This is of great importance in providing food during scarcity periods.
2. Organization of commercial balance of foodstuff to prevent price decline in high production seasons which encourage farmers to continue producing these products and to provide them in scarcity seasons so that consumers are not forced to pay high prices for fresh foodstuff.
3. Provision of high nutritional value food at low prices compared to fresh food after consideration of transport, processing and canning costs.
4. Food industries have a direct effect on encouraging other relevant industries such as glass bottle industry, plastic and paper package industry, processing machines, ...etc.
5. Substitution of processed food importation and saving of foreign currencies that could be used in other fields.
6. Canned food is important in cases of natural disasters and war.

History of Canning Industry in IRAQ

The first canned food product was produced in IRAQ in 1962 when the Kerbela Canning Factory started production.

This factory was supposed to be a good start for this industry and a model of good quality canned food, of management and of organization system. But in reality facts were contrary to hopes, for six years it could not solve financial, commercial and managerial difficulties as well as technical manpower problems, as a result, big losses were registered.

After the 17th July Revolution, financial and technical support were accorded which permitted its reactivation and new hopes of development and growth were felt.

Expenditures on canning projects during the period 1958-1970 were about (500.000) ID, while the development plan 1970/1974 allocated (5 million) ID, i.e. an increase of ten times. As for expenditures for the period 1974/1978 they arose to (7 million) ID. The Organization is still receiving support and expanded to many factories all over the country for different production lines.

Geographical Distribution

Fruits and vegetable canning factories are located in the regions of fresh raw materials. Being located in these regions is an important factor in reducing time between harvesting and canning to the minimum to keep color, taste and nutritional value. This also permits canning at a suitable maturation stage.

The State Organization for Canning consists of five factories:

First: Kerbela Canning Factories

Located in Kerbela which is 110 km to the southwest of Baghdad. This location is well known for its fruits and vegetables especially citrus and dates.

The above factories have the following production lines:

1. Tomato Paste
 - from local tomato (actual production capacity) 1200 ton/year
 - from imported concentrates (" ") 6800 ton/year
 - tomato paste (" ") 900 ton/year
2. Date Syrup (actual production capacity) 6000 ton/year
3. Jams/from fresh fruits (production capacity) 3000 ton/year
 - Jams/from fruit pulp (" ") 3000 ton/year
4. Canned Vegetables (actual production capacity) 3000 ton/year
 - Ketchup Sauce (actual production capacity) 3000 ton/year

Second: Bakuba Canning Factories

These factories are located in Kyalah State Province which is located 60 km north of Baghdad, known by its variety of fruits and vegetables. They were inaugurated in July 1972; they consist of the following production lines:

1. Tomato Pur'ee Paste
 - from local tomato (actual production capacity) 2400 ton/year
 - from imported concentrate (" ") 12000 ton/year
2. Canned Vegetables (actual production capacity) 3750 ton/year
3. Dried Onions (actual production capacity) 1000 ton/year
4. Canned Tomato (actual production capacity) 1350 ton/year

Third: Numaniyah Canning Factories

Numaniyah is located 140 km to the southeast of Baghdad, the factories which were inaugurated in July 1971 consist of the following production lines:

1. Tomato Pur'ee Paste
from local product (actual production capacity) 2400 ton/year
imported concentrate (production capacity) 12000 ton/year
2. Tomato Juices (actual production capacity) 8000 ton/year
3. Vinegar (planned capacity) 5000 ton/year

Fourth: Balad Canning Factories

Balad is 90 km to the north of Baghdad, in a region known by its fruits and vegetables, it is surrounded by orchards of various fruits. This city is close to agricultural projects of the co-operative state farms which provide the factories with raw material of tomato.

The factories which were inaugurated in July 1977 have the following production lines:

1. Tomato Paste
from local product (actual production capacity) 2400 ton/year
imported concentrate (production capacity) 5000 ton/year

Fifth: Duhok Canning Factories

Duhok is 500 km to the north of Baghdad, known by its various fruits as well as tomato which is produced in high quantities.

The factories were inaugurated in July 1977 and contain the following production lines:

1. Tomato Paste	
local product (actual production capacity)	4000 ton/year
imported concentrate (production capacity)	5000 ton/year
2. Jam Production Line (production capacity)	300 ton/year
3. Canned Fruits (actual production capacity)	1000 ton/year
4. Fruit Juice (actual production capacity)	1200 ton/year
5. Dried Fruits (actual production capacity)	1000 ton/year

Factories Under Construction

First: Harir Canning Factories

Harir is 87 km to the northeast of Arbil Province, which is 400 km north of the capital city of Baghdad. It is well known for its fruits especially its grapes which are cultivated in the private sector farms. These factories have the following production lines:

1. Wine Production Line (planned capacity)	1000 ton/year
2. Jam Production Line (planned capacity)	1000 ton/year
3. Concentrate Fruit Juice (planned capacity)	1500 ton/year
4. Canned Fruits (planned capacity)	1500 ton/year
5. Concentrate Grape Juice (planned capacity)	1500 ton/year

Second: Starch and Dextrin Factory

The factory is located in Hashimiyah city in Babylon governorate about 170 km to the south of Baghdad. The factory is composed of two production lines:

1. To produce starch from corn with planned capacity of 7500 ton/year.
2. To produce gum with planned capacity of 1000 ton/year.

Production Lines Under Construction

1. Production line for jam in Kerbela - planned capacity 3600 ton/year.
2. Production line for canned vegetables in Kerbela factories, planned capacity 2350 ton/year.
3. Production line for pickles in Numaniyah factories, planned capacity 14500 ton/year.
4. Production line for baby food in Balad factories, planned capacity 5000 ton/year.

The total annual production capacity available for all factories of the State Organization for canning can be listed as follows:

1. Tomato Paste	
local tomato	13300 ton
imported concentrate	<u>40800 ton</u>
	Total
	54100 ton
2. Date Syrup	6000 ton
3. Jams	10900 ton
4. Canned Vegetables	9100 ton
5. Ketchup + Sauce	3000 ton
6. Dried Onions	1000 ton
7. Canned Tomato	1350 ton
8. Tomato Juice	8000 ton
9. Vinegar	5000 ton
10. Pickles	14500 ton
11. Baby Food	5000 ton
12. Canned Fruit	2500 ton
13. Fruit Juice	2700 ton
14. Wine	1000 ton
15. Starch and Dextrin	8500 ton

Agricultural Raw Materials

IRAQ owns good potentials for producing most fruits, vegetables and field crops due to its water resources, fertile soil, mountains and plains as well as variety in temperatures in its different regions, but, development of agriculture did not receive proper attention before the 17th July 1968 Revolution.

After the revolution, this sector was supported, allocations for agricultural projects were granted, along with irrigation and reclamation projects, farmers were supported by lending and importing improved seeds, rural areas were developed, projects for fertilizers were established, its products were distributed among farmers at low prices, and roads between villages and cities were built to facilitate transport of agricultural products.

Undoubtedly, food industries depend in the first place, on the abundance of agricultural crops, the development of this sector depends on the development of the agricultural sector. In the field of establishing and developing food industry projects, there are two theories: the first is that these projects are established to absorb the agricultural production surplus which are specified by their low prices mostly, this policy is implemented in the capitalist countries. The second is that food industry projects are established in order to stimulate the agricultural sector to increase production and ensure sales for the farmers. This policy is implemented in our country and in other developing countries. If the first policy is implemented in the developing countries, it would have to wait for a long time to develop the agricultural sector, but our country has succeeded in the second policy, the first tomato paste project was established in 1970 with a capacity of 120 ton/day. The Establishment faced many difficulties in providing this quantity of tomato to run the project which was held back for this reason for several years. Actually, the production capacity for tomato paste projects is about (1000 ton/daily). The factories are supplied

with fresh tomatoes in all seasons. This proves the availability of agricultural potential in the country which was not exploited in the past because of the lack of penetration channels for agricultural products.

Means of Providing Raw Materials

Canning factories are supplied with the raw material in different ways, such as establishing affiliated farms or seasonal contracts or long term contracts with farmers in order to get their needed quantities and qualities in due course. In IRAQ, the State Organization is supplied by means of:

1. Direct buying.

Agricultural products are bought directly from wholesale markets; these provide certain quantities but mostly they are of bad quality especially that IRAQI farmers do not pack their products after classification and grading them to separate ripe from unripe or damaged crops. This is reflected on the quality of the Organization production as well as on production costs.

2. Receiving agricultural products through the collection centers established by the State Organization.

This way stimulated farmers to increase their production, since the Organization collects the products in the collection centers established in the high production regions and transport the products to the factories.

3. Contracting with farmers.

The Organization signs contracts with farmers. The Organization succeeded to a certain extent in applying this system on certain products which are not consumed fresh by the population.

In spite of the above, agricultural products are still inadequate in quantity and quality. The Organization is forced sometimes to use fruits and vegetables which are not suitable for canning. This has its effect on the population's trust in local production. Sometimes it is forced to import half processed raw materials to cover its planned production or to supply the market by its products.

Employment Development

Workers in the Canning State Organization in 1978 were (2257) and largely included technicians and management workers. In 1968, their number was (229), thus, the increase rate during ten years is 985%. This shows the Organization's participation in socio-economic development of the country, taking into account the following matters:

1. Providing employment opportunities to the population of neighbouring areas of the Organization's factories which are rural regions.
2. Increasing the manpower abilities through dealing with modern machines, tools and technologies, thus, increasing the technical level as well as industrial knowledge.
3. Participating in the development of the neighbouring regions socially, economically and agriculturally.
4. Participating in increasing personal income.
5. Providing capable cadres in every level to be able to provide the Arab states in general and the Arab Gulf countries especially, to substitute the foreign manpower employed.

In order to develop manpower capabilities, the Organization has applied many steps such as:

1. Control system on stores and mechanized transportation and storing.
2. Computer usage in cost accounting and store control.
3. Specification and standardization systems in production.
4. Use of a special training center in co-operation with (F.A.O.)

aiming at farmers education, especially fruit and vegetable producers on fruit cutting at the best maturation time, size and color as well as training personal programmes for training specialists, technicians, for men, skilled and semi-skilled manpower to work in factories of the Organization. The center is provided with a workshop, laboratories and an experimental unit.

Development of Production and Sales
In the State Organization for Canning

The production of the State Organization for canning in 1967/1968 was (1428) tons of various foodstuffs; in 1970/1971 it was increased to (3500) tons; in 1978, high production increased was reached to (43570) tons of canned food.

The following table shows the Organization's production for 1968 and 1978. The increase rate during this period is 3051%.

Product	Production Volume		Production Volume	
	67/68	Ton	78	Ton
Tomato Paste	1		36144	
Date Syrup	739		3203	
Jams	614		3006	
Canned Vegetables	74		713	
Ketchup + Sauce	-		406	
Dried Onions	-		-	
Tomato Juice	-		97	
Canned Tomato	-		1	
TOTAL	1428		43570	

The above shows a noticeable change toward the development of production and its quality as well as the efficiency of the technical and management staff of the Organization. It is obvious that the main items produced are tomato paste, date syrup, jams and vegetables.

Tomato paste represents 88% of the total sales in 1978. Its volume reached (45433) tons while total sales of all production is (51704) tons. This shows that IRAQI citizens consume high quantities of tomato paste due to the nutritional system in the country. It is believed that during the next five years tomato consumption will be more stable because of the availability of local products throughout the year and because the expected changes of the population's nutritional system.

Future Prospective for Canning Industry in IRAQ

After considering the development of canning industry in IRAQ, we can confirm that it is possible to widen the profit scope of this industry not only at the IRAQI level but also at the Arabic level, thus, it is possible to create an Arabic industry to substitute imported products.

This industry has its importance in the economic integration of the Arab countries for the following reasons:

1. The resemblance of the climatic conditions in the Arab states which encourage the possibility of profiting from the canned products which are produced in IRAQ, for these products can tolerate the same climate, storing and handling conditions.
2. Many Arab states are connected by transport networks which facilitate the flow of merchandise.
3. Utilization of the agricultural crop surplus produced especially those produced in Syria, Jordan or Lebanon for the canning industry in IRAQ. This will provide national and Arab industry, which can help the saving of foreign currencies in the Arab states.

4. The development of canning industry during the last ten years has prepared national skills in different specializations to be employed in the factories which constitute a national fortune to be used in other Arab countries.
5. Encouraging the production of canning and packing materials needed by this industry in other Arab states, such as glass bottles, paper and plastic packages.....etc.
6. The training center established by the State Organization for canning, and the R + D plans could be used and applied at the Arab intercountry level to create the capable Arab specialized manpower and have joint research projects to develop this industry.
7. Establishment of joint venture projects in this field according to raw materials and manpower availability.
8. The possibility of exporting some canned food outside the Arab states according to the development and extensions of this industry.
9. Absorption of unemployment opportunities in the Arab states.
10. The importance of Arab production of canned food is special in cases of scarcity at the international level or when some countries refuse supplying the Arab states for political reasons.
11. It is also important for the Arab states to develop food security since the Arab nations are faced with dangerous threats which make war possibilities very real. The Arabs therefore, must defend themselves in every possible way.

