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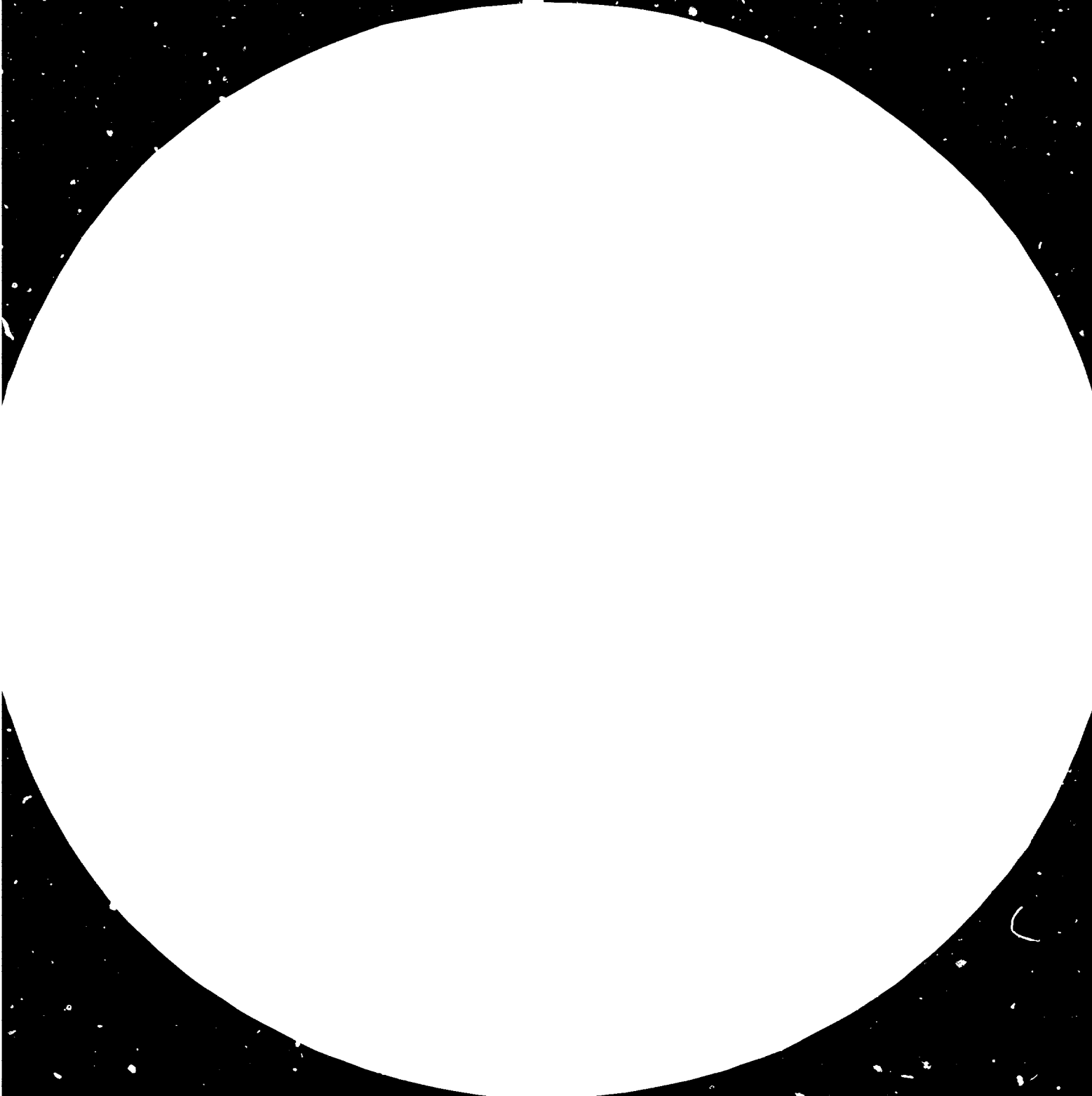
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THE DEVELOPMENT OF FEED INDUSTRY IN IRAQ

presented by the

Government of Iraq

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## PREFACE

This document, the Development of Feed 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 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

## THE DEVELOPMENT OF FEED INDUSTRY IN IRAQ

Animal products play a well recognized role in human nutrition. In the developing countries, the average consumption of animal protein per capita is reported to be lower than it should be. Hence, the international agencies of the United Nations have tried, and are still trying, various ways and means to increase the rate of animal protein intake in these countries.

The nutrient status of the world population during the period 1972-1974, showed an average consumption of animal protein in developed countries of about 70% of the total protein ingested (for instance, in North America). On the other hand, this rate decreased to 12% in India. With regards to Iraq, about 20% of the total protein intake are of animal origin.

During the last decade, Iraq has witnessed a rapid development accompanied by an increased standard of living and an increased monetary liquidity of the people, which resulted in an increased awareness of health and nutrition problems. For these reasons, the demand on meat, eggs, milk and milk products has increased tremendously. Consequently, the Iraqi authorities have paid special attention to meet this demand on animal protein, to increase its availability in the Iraqi markets and to raise the per capita share. For this purpose, large poultry farms and dairy cattle stations were, and still are, being built and sheep and calf raising and fattening were encouraged in the socialist sector together with the support of necessary feed plants. Special governmental companies were established to administer these projects so that they can be fully utilized. At the same time, the necessary support and attention were also paid to the animal projects and farms set up by both the co-operative and the private sectors. Due to this policy, the development and increase

of the productivity of the animal resources have received the attention required within the national plan for agricultural development in order to increase as soon as possible, the consumption of animal protein by the Iraqi citizens.

Among the factors which influence the rearing of an animal, nutrition amounts to 60-70% of the production cost. In feeding the animal it is expected that the rations fulfill the daily nutrient requirements of poultry or bring them up to the levels recommended for ruminants. This, in turn, requires efficient feed mills to produce the necessary feed at the specific quality and quantity levels.

On a large scale, the first feed mill within the socialist sector was planned in 1969 and started production (10 tons/hour) in 1972. The capacity of this mill was later increased to 20 tons/hour. Meanwhile, during the last decade, many other feed mills were established in the various parts of the country. In the socialist sector, there now exists 16 feed plants with a total capacity of 198 tons/hour.

The table below shows the development of the feed industry in the socialist sector during the period 1972-1979.

<u>Year</u>	<u>Total Feed Production (Tons)</u>
1972	15000
1973	34657
1974	48973
1975	85674
1976	139689
1977	184800
1978	286549
1979	650000

The State Company for animal feed plans to establish four more feed mills until the end of 1985 at an estimated total capacity of 80 tons/hour, thereby, raising the production capacity of the socialist sector to 1250.000 tons/year at two working shifts per day. In addition, there is the capacity of the private sector, including the feed mills attached to the private poultry farms, that reaches 370.000 tons/year. The expected total feed production in Iraq in 1985 is, therefore, estimated to reach 1620.000 tons.

In 1990, the requirement of animals raised in Iraq for concentrated feed are expected as follows:

Poultry	917.340 tons
Cows and Buffalos	824.000 tons
Sheep and Goats	616.850 tons
Fish and other animals	30.285 tons

T o t a l      2388.475 tons

With regards to poultry, the above figures are actuals, for ruminants they are only a close estimate as their requirements for concentrated feed depend on their daily shares from green feed, roughage, and other feed like cereals, wheat bran, and cottonseed meals, which are presented to them directly by their owners. Nevertheless, it is expected that the private sector will tend more and more to use concentrated feed. This will cause a 40% increase in the feed required in 1990 compared to present needs.

Therefore, the required feed production will amount to:

Poultry	917.340
Ruminants	584.454
T o t a l	1501.794 tons



It seems, therefore, that the establishment of four additional feed mills to increase the present capacity to the estimated requirements for 1990, is justified.

The raw materials used in feed production are partly available locally and partly imported. The local availability of cereals fluctuates according to rain seasons; other such as protein concentrates and soya beans, corn and other ingredients (vitamins, mineral salt) are imported. It is estimated that about 50-70% of the raw materials required for feed production are imported.

The continuously increasing import of raw material is not economical; it may not be possible to obtain them continuously during the forthcoming ten years. Therefore, it became necessary to prepare a scientific and feasible plan for the production of these raw materials and at the same time to arrange for long-range contracts with friendly and Arab states to protect livestock and poultry projects.

With regards to storing strategy, feed and its components are of equal importance as cereals (such as rice and wheat). Feed constitutes a major component of the world's nutritional requirements and it is, therefore, important to store sufficient quantities of raw materials and fodder in order to insure the continuous feeding of poultry and livestock. The storing capacities of normal stores and those annexed to socialist and private sector factories are estimated at 300 thousand tons of which 268 thousand tons belong to the socialist sector. As mentioned above, the estimated need for concentrated fodder in 1990 will be 2.379.000 tons. Considering the 25% of raw materials stored outside the socialist sector, the annual strategic need for stores amount to 1.2 million tons until 1990 (70% in silos and 30% in normal stores).

The establishment of these projects must be accompanied with sufficient production of green feed and thresh as well as maximum utilization of cereal remains in farms to cover part of the demand on concentrated fodder, with increased production of corn, sorghum, and barley, and with continued laboratory and pilot studies on the production of single cell protein from petrol components. This will lead to the establishment of a national industry on a commercial basis to substitute imported concentrated protein.



