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Agenda item II/19

THE FERTILIZER INDUSTRY OF THE SYRIAN ARAB REPUBLIC[1/]

by

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1. Importance of the utilisation of fertilizers in Syria

Syria is a country in which the agriculture sector plays at present a big role in its economy. The irrigable area is limited, but projects have been carried out in the last few years in order to augment the agricultural area. These projects consist of the construction of small dams everywhere in the country and a big dam on the Euphrates River. This introduction leads to the conclusion that the only means which will augment agricultural production in a country, where productive soil is limited, must depend on the use of fertilizer. Syria is a country which is just beginning the utilization of fertilizers. As it was shown in other reports, Syria's actual consumption per capita is very low, consequently, the greater utilization of fertilizers is open for the development of its agriculture sector. Tests already carried out have demonstrated the economic benefits of the application of fertilizer to our soil. The result can be stated as follows: Every dollar invested in the purchase and the utilisation of fertilizers gives a revenue of two dollars' this fact gives Syria an incentive to import fertilizers, but the needs of our country could never be satisfied by imports since there is always the problem of securing foreign exchange. This problem can never be solved in the future because of the increasing demand for fertilizer.

According to the studies made on the need for fertilizers, Syria can utilize at present one million tons of different kinds of fertilizers. This quantity would increase to 1.3 million tons in 1975 because of the probable completion of projects enlarging the area of arable soil. In fact, Syria consumes, at present, almost 150,000 tons of different kinds of fertilizers, and with this, it is very far from the optimal quantity which it could consume. In order to increase the ability of Syria to consume fertilizers, the country must rely on the industrialisation of its natural resources and this is the only way to reduce the drainage of foreign currencies.

2. The existent fertilizer industries

The matter of industrializing resources in Syria is very clear now to our Government which took decisions for the construction of a plant to produce nitrogen fertilizers. In fact, this plant is now ready for operation. It is situated in Homs which is in the middle of the country. Its capacity is 148,000 tons of calcium ammonium nitrate with 26 per cent nitrogen. It consists of three productive units. One is for the production of ammonia based on the

catalytic reforming of naphtha under moderate pressure according to the ICI process. The capacity of this unit is 150 tons per day. The other is for the production of nitric acid based on Soviet design. The combustion of ammonia in this unit will be done under atmospheric pressure but the absorption takes place at a pressure of 3.5 atm. Its capacity is 87,000 tons per year calculated on the basis of 100 per cent nitric acid. The third unit is for the production of calcium ammonium nitrate. This unit is of Czechoslovakian design with a capacity of 148,000 tons per year of end-product containg 26 per cent nitrogen.

It is to be noted that before the utilization of this plant, Syria did not have any important installation for manufacturing fertilizers. However, there is a small plant producing superphosphate by treating Jordanian or Syrian phosphate rock with sulphuric acid taken as a by-product of the manufacture of detergents. This plant provides the internal market with almost 3,000 tons per year. Its capacity is limited by the availability of sulphuric acid.

3. Prospective plan

In the new Five Year Plan, Syria decided to construct a plant for producing triple superphosphate. This plant will consist of three units. The first is for the production of sulphuric acid with a capacity of 100,000 tons per year calculated as 100 per cent acid. The second unit is for the production of phosphoric acid with a sufficient capacity for feeding the third unit which will produce 100,000 tons of triple superphosphate containing 47 per cent P_2O_5. This plant will use, as raw materials, sulphur produced in Homs refinery and beneficiated phosphate rock produced by the phosphate mines located in the Syrian desert. The concerned authorities are negotiating the contract for this plant.

In order to understand the prospective plan for the production of fertilizers in Syria, it is useful to mention that our country has the favourable elements as to the promotion and development of this industry. It is known that Syria exploits at present its crude oil this crude gives good raw material for the fertilizer industry that can be envisaged in the future. With its high content in sulphur (about 4 per cent), the exploitation of this crude can meet the requirement of our future industry in sulphur as well as in naphtha. The phosphate mines which we discovered in 1960 have just started production. They will give beneficiated phosphate containing 31.6 per cent P_2O_5 well suitable for the fertilizer industry. It is important here to mention that reserves of this

discovered phosphate are quite large and one of these deposits has a reserve of about 450 million tons. These reserves will be used in part for industrialization and the other part will be available for export.

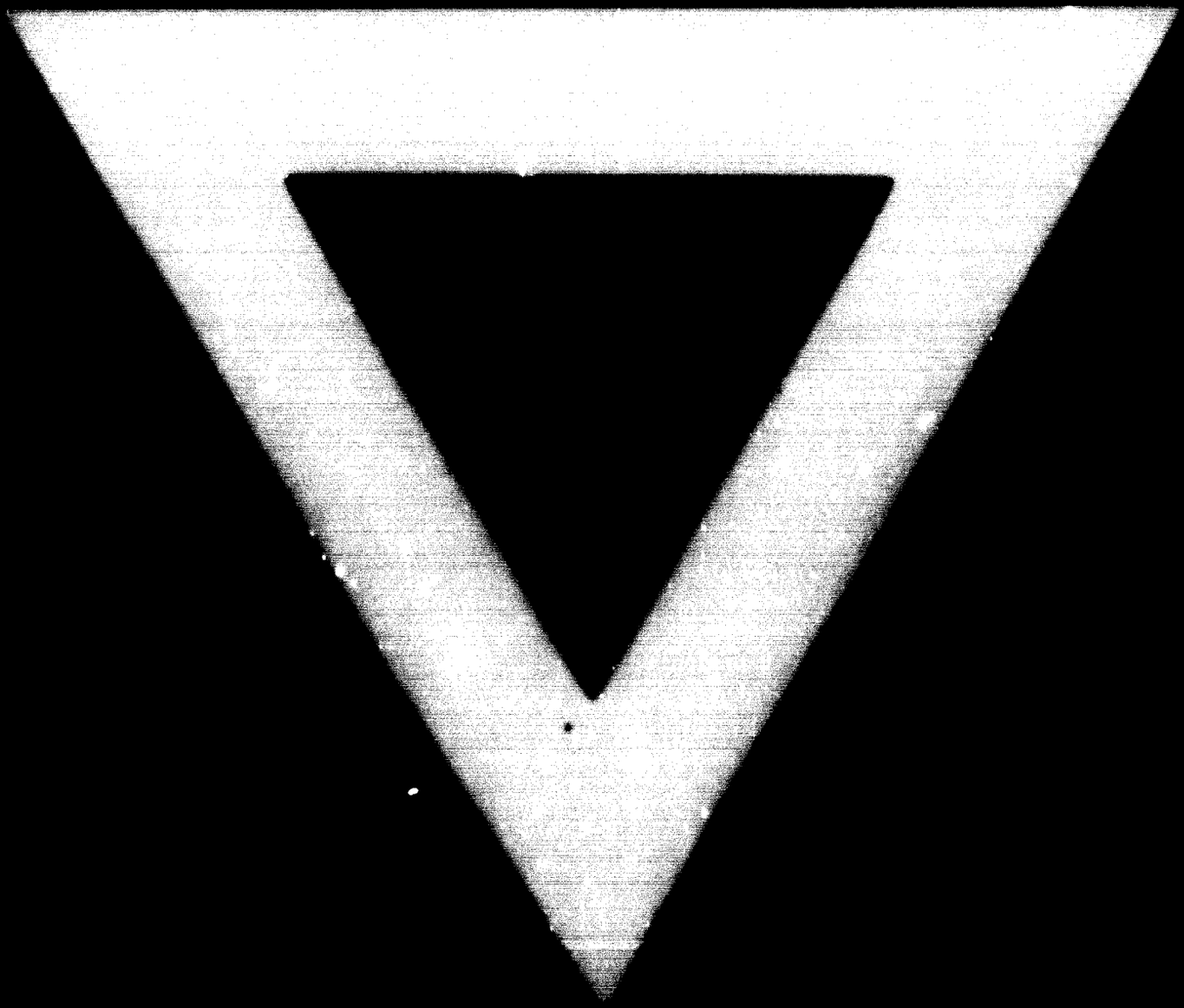
Based on the availability of phosphate, sulphur and hydrocarbons, several patterns of industrialization have been envisaged for developing the fertilizer industry. From these alternatives, one can judge that it will be a big probability for the construction in the near future of plants for the production of urea and diammonium phosphate.

In conclusion, we can say that Syria has favourable conditions for the creation and the development of the fertilizer industry. Our prospective plans are limited by:

- problem of marketing the final products within the first years of production.
- problem of securing capital.
- problem of providing capital with low interest.
- problem of marketing or elimination of by-products such as phosphogypsum.
- problem of water pollution.

We hope, by participation in this Symposium, that our country will benefit from the experience of the other countries participating in this Symposium for resolving some of our problems that hinder the development of our fertilizer industry.

Finally, we take this opportunity to thank UNIDO for the effort it applied in initiating this Symposium which is, according to our opinion, very interesting for the developing countries.



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