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Agenda item II/5

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

by

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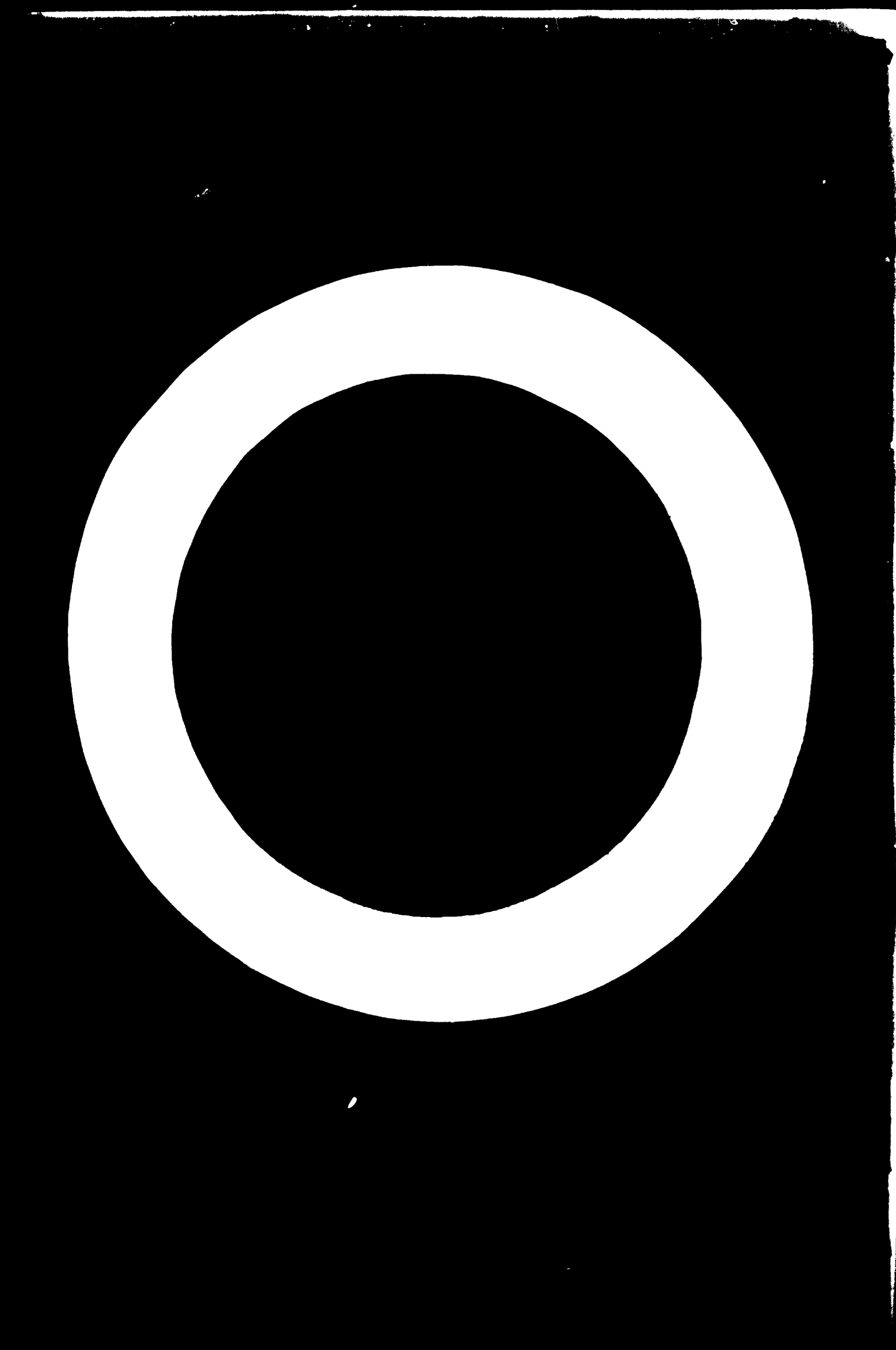


(1) INTRODUCTION

The production of chemical fertilizers in the Arab Republic of Egypt dates back to the year 1937 when the first plant for the production of Superphosphate was erected in Kafr Elzayat. Since that time, other plants were erected, the second was another Superphosphate plant in 1944 at Abou Zaabal. In 1948 the first Nitrogen Fertilizer Plant was contracted for and started production in 1951 at Suez to produce Calcium Nitrate. The fourth unit was completed in 1960 for the production of Ammonium Nitrate in Asswan (KIMA). Between 1960 and 1969 extensions were executed in the two Superphosphate Plants to meet the increasing demand of the Superphosphate as well as a unit at Suez to produce Ammonium Sulphate. In 1969 the third Superphosphate plant was erected at Assyout in Upper Egypt and in 1971 the third Nitrogen Fertilizer Plant was inaugurated at Helwan for the production of Ammonium Nitrate. A fourth Nitrogen Fertilizer Plant is under construction at present at Talkha - Lower Egypt, to produce Ammonium Nitrate. It is expected to start production in 1973.

(2) PROJECTS

At the moment there is one project under consideration and it is expected to finalise its contract early in 1972 to produce 1000 tons Ammonia per day to be processed to Urea. This plant is expected to be erected at Talkha in Lower Egypt as extension to the Ammonium Nitrate plant under erection at present. With the execution of this project the local production of Nitrogen Fertilizer is expected to cover the local consumption evaluated in 1975 with an excess available for exportation. This excess will also serve as a stand by to cover any unexpected increase in the local consumption. Another project under study at present between the government of Egypt and the government of Soviet Union is the production of elemental phosphorus by the electro thermal process. Part of this phosphorus will be processed to triple superphosphate for local consumption and exportation. The main part of the phosphorus will be available for exportation. This project is supported by the existence of the rock phosphate and the hydro electric power of the High Dam at Asswan, very near to each other.

(3) PRODUCTION AND CONSUMPTION OF FERTILIZERS IN EGYPT

The following table shows the production and consumption of Fertilizers in 1971 and the forecast in 1975.

The agronomists of Egypt state that the cultivable soil of Egypt is rich in the potassium content. They deem that only certain few crops can be benefited by additional quantities of potassium fertilizers over what exists in the soil. No potassium fertilizers are being produced in Egypt. The annual importation of potassium fertilizer is about 6000 tons.

PRODUCTION & CONSUMPTION OF FERTILIZERS IN EGYPT

1971 & 1975

PHOSPHORUS FERTILIZERS

TONS - BASIS P_2O_5

PRODUCTION 1971	CONSUMPTION 1971	PRODUCTION 1975	CONSUMPTION 1975	SURPLUS FOR EXPORTATION IN 1975
90,000	80,000-90,000	225,000	180,000	45,000

NITROGEN FERTILIZERS

TONS - BASIS N

PRODUCTION 1971	CONSUMPTION 1971	PRODUCTION 1975	CONSUMPTION 1975	SURPLUS FOR EXPORTATION IN 1975
186,000	310,000	511,500	387,500	124,000

(4) THE STATE OF THE PRESENT PLANTS & THE TECHNOLOGY EMPLOYED

It can be seen from the introduction of this note that the manufacture of Fertilizers in Egypt started before the second world war. Since then it has been gradually increasing. This indicates that the technology and size of the units were inferior to the up-to-date plants. However, the local existence of most of the raw materials, together with the low scale of wages still support the running of such units. The new projects, however, will follow the modern technique with regard to size and technology.

(5) EXPORTATION

From the table of production and consumption given above, it can be seen that a certain quantity of nitrogen fertilizers and phosphorus fertilizers will be available for exportation. Also about 80000 tons of phosphorus will be available for exportation. About 50000 tons to 60000 tons of this surplus phosphorus will be exported to U.S.S.R. From what is known about the projects under execution and projects under consideration in the area of the middle east, the exportation of this surplus quantities of fertilizers will be difficult and might be transported long distances to certain parts of Africa or the far east. Such transportation might be a great difficulty in the way of exporting such surplus at a reasonable price.

(6) DIFFICULTIES OF THE FERTILIZERS INDUSTRY IN EGYPT

(A) Some of the existing units are relatively old with regard to technology and size and will have to be renewed some time in the future for economic and technical purposes.

(B) The capital cost of the modern fertilizers plants is very high, especially in a socialistic country like ours, where the government provides the capital for new plants as well as for replacement purposes. Without reasonable financial facilities from the developed countries, which as a rule, provide such plants, the possibilities of our country are limited.

One can also mention here the high engineering fees and process fees demanded by the developed countries. Any effort for the reduction of engineering and process fees will indeed help countries like ours to increase the rate of renovation of the old plants, and therefore can improve the capacities and quality of the products.

(C) RAW MATERIALS

The lack of sulphur in Egypt makes the cost of production of single superphosphate and ammonium sulphate fluctuates. This affects the market and the stability of such market is very important for the farmers.

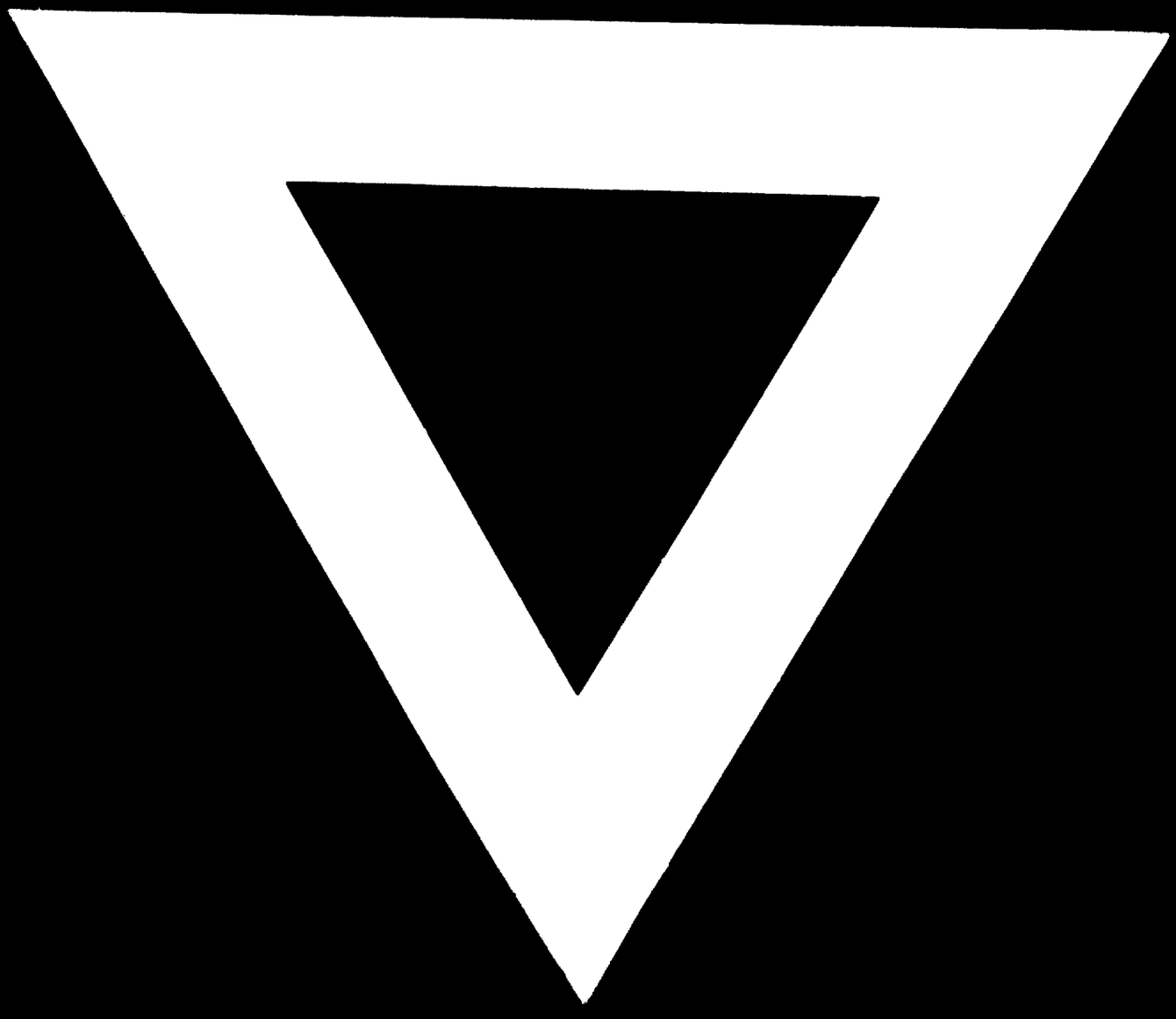
(D) The research carried out so far in Egypt with regard to fertilizers is restricted to the utilisation and in this respect, one can speak highly of the efforts of the Egyptian Ministry of Agriculture. However, the purchasing power of the Egyptian farmer is a limiting factor, although the Credit Agriculture Bank of Egypt is helping very much to minimize this difficulty.

No technical research is being conducted at the moment in Egypt for process improvement or the like.

(7) CONCLUSION

In general the situation of the production and consumption of Fertilizers in Egypt is not very far from what it should be and in a few years time, it is expected to be very near the correct situation. Egypt like most of the developing countries considers the cost of engineering, licenses and equipment offered by the developed countries higher than what it should be.

I would like to mention also that some developing countries cannot easily get the various periodicals related to the processing, trade, utilisation, etc. of Fertilizers and I propose a yearly periodical to be issued by U.N.I.D. O. for the summation of the developments all over the world during the same year which can cover all the aspects mentioned and to be available for the developing countries and purchased by the local currency.



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