

An economic Study for the Settlement of Agricultural Inputs under the Policy of Economic Reform

Plant production requisites form greater relative importance of the entire agricultural production requisites in Egypt, which include chemical and organic fertilizers, seeds, pesticides and the total value used in agriculture. The research aims at studying the main features for marketing the most important inputs of the plant production in Egypt represented in chemical fertilizers, seeds and pesticides, with value of 31.6 respectively of total value of agricultural production inputs, also, the research aims at studying the effect of applying the economic reform policy on marketing these inputs. The research compared the economic effects of the reform programs on inputs sector within two phases. The first phase covers the period 80/1981-86/1987, before the reform. The second phase covers the period 87/1988-98/1999, after the reform. The research used secondary data whether published or un published by the MALR, CAPMAS, PBDAC, researches and thesis dealing with the topics of the research. In addition, the research used primary data collected through a sample conducted in Sharkia governorate. A stratified random sample of 200 farmers were selected from two districts to get feedback from farmers and know their opinion about the agricultural policy reform, especially in input sector. Descriptive and quantitative analysis using different statistical methods were applied to compare the two periods of time under the study. In addition to the introduction, the research was divided into five chapters. The first chapter deals with the referred review of the previous studies related to the study subject to be as a start point for the researcher. This chapter includes also the theoretical frame to recognize the most important economic concepts related to the research subject which includes the stages of carrying out the economic reform programs and the concepts of the agricultural production inputs and liberalization, as well as the price policy of these inputs and the concerned bodies which price and distribute the inputs. The second chapter of the study deals in the three subchapters with producing and marketing chemical fertilizers in Egypt. The first one concerns with the productive and consumptive capacity of the chemical fertilizers in Egypt. It was noted that change rate in the whole nitrogen fertilizers production in the second period of the study (1987/1988-1998/1999) reached about 4.3% annually. This increase due to applying the economic reform policy as it helped in increasing the total production of these fertilizers in general. The production of ammonium nitrate 31% has stopped in the second period. But for the Egyptian production from phosphate fertilizers is limited in the two kinds: super phosphate 15%, super phosphate 37%. It is noted that the total local production of phosphate fertilizers increased to 132.97 thousand ton in the first period. It has been cleared from the distributed study of the three chemical fertilizers: Nitrogen, phosphate and Potassium through two periods were as follows:

- Increasing in the three chemical fertilizers distribution in the first period.
- Increasing in the phosphate and potassium fertilizer distribution in the second. These increases because of the expanding in the new lands which need more and more quantities of the fertilizers in the areas, which are near from the main markets of the vegetables and fruit.

The second subchapter deals with studying marketing and distributing chemical fertilizers in Egypt, besides the system of distributing fertilizers before applying economic reform policy and marketing processes such as importation, transportation, packing, storage and distribution on the farmers, whereas

the Principal Bank for Development and Agricultural Credit and its affiliates in the villages of the Republic were responsible of distributing the main chemical fertilizers in that stage. This bank has benefited from its monopoly of marketing fertilizers by getting on high ratio of marketing margins, also the system of chemical distribution after economic reform policy has been studied, whereas it was allowed to the private, cooperative and investment sectors to access marketing chemical fertilizers, as well as studying marketing route for these fertilizers before and after economic reform policy, whereas the role of the Principal Bank for Development and Agricultural Credit became limited and is responsible of distributing only 8% of these fertilizers. The role of the private sector enlarged as it became responsible of distributing 73% of chemical fertilizers. But the role of the cooperatives is still limited as they distribute about 19% of the whole-distributed chemical fertilizers. This section of the study deals with trade movement of these fertilizers and recognition of the exports, as it was noticed that there is an increase in exports of nitrogen fertilizers. Phosphate fertilizers exports started in 1991/1992, nitrogen fertilizers imports decreased from 500 thousand tons on the average of the first period to 468 thousand tons on the average of the second period. Phosphate fertilizer imports stopped since 1985/1986. This subchapter deals also with studying and analyzing evolution of selling prices for nitrogen fertilizers in the two periods of the study where it is clear that change rate in prices was higher in the second period than the first period. This due to price increase resulting from subsidy abolishment which was directed to the chemical fertilizers by the state. The third chapter includes seeds production and marketing in Egypt, whereas the general time trend for change evolution of consumed quantities from wheat seeds have been studied and analyzed in the two periods of the study, as it is noticed that change rate in the consumed quantity from wheat seeds in the first period, reached 8.24% annually increased more than change rate in the second period which was 2.82% annually. This due to use of improved seeds and reducing the used quantity of seeds per feddan. The general time trend of the used quantities and value of rice seeds has been analyzed, as it was noticed that there was an increase in change rate in the used rice seeds quantities from 0.38% in the first period to 40.92% in the second period. This increase due to expansion of area cultivated with rice. This chapter also deals with seeds review and related marketing processes, such as seeds preparation, packing, storage, transportation and distribution, whereas the available information indicate to the highly effective role of the private sector in distributing seeds without relying on the Principal Bank for Development and Agricultural credit. By studying and analyzing the change of the produced and distributed seed quantities from wheat, Rice and Cotton, It was clear that in the first period of the study, these quantities decreased in the second period. indicating that economic reform policy led to creating equilibrium between the needs of the produced quantities from wheat and rice seeds with demand, to reduce production costs. The impact of economic reform on changes of wheat, rice and cotton seeds prices has been studied, where it was clear that increasing selling price of wheat seeds. This increase in selling prices of the two kinds of seeds due to abolishing subsidy which was given by the government to the farmers in the first period of the study. By studying the change of marketing margins for wheat and rice seeds, it is clear that there is increase from L.E 15.9 to L.E 108.75 per ardab of wheat seeds, meanwhile it increased from L.E 13.38 to L.E 82.45 per ardab of rice for the two periods of the study respectively, that because of the new varieties produced by the Agricultural Research Center. The fourth chapter deals with marketing pesticides as well as economic and statistic analysis for a sample of marketing production inputs. This chapter includes three subchapters, the first includes summarized description and analysis for marketing pesticides in Egypt and recognition of legal frame on pesticides trade and marketing where showed it increasing trend towards the private sector in pesticides marketing and forming agencies dealing with pesticides marketing in the frame of special terms laid by the Ministry of Agriculture. The study showed that the most important marketing processes of pesticides starting with importation and ending with storage until delivery to the farmers. Before applying economic reform policy, the features of pesticides market process were described with less efficiency, compared with the current period, as many bodies involved in pesticides trade and marketing led to improving marketing efficiency. By studying the used quantities from pesticides, it was clear that these elements reduced in the second period of the study than they were in the first period. This means that the agricultural policy in Egypt trends to reduce using

pesticides and relying on the integrated control method. The estimation of the economic importance indicates that the costs of pesticides used in the two crops of the study are high, compared to the changeable costs, because of high prices of pesticides and abolishing subsidy led to reduce the used rates of pesticides. The last chapter deals with the results of the field survey. The survey covered the producers of wheat; rice and cotton. The results of the survey showed that: The farmers get their needs from production inputs through many resources, mainly from cooperative and merchants. The farmers reported that agricultural inputs are available after the elimination of subsidies, but at higher prices. The sample survey shows that the main problems facing the farmers and concerning the farm inputs are the low quality of some distributed seeds and its high price. The main problems facing farmers and concerning fertilizer are its high price and farmers have to pay cash beside they should have holding land. The main problems concerning pesticide are the decrease of its qualities and quantities. In the view of the achieved results, the study recommendations are as the following: Enable the cooperatives to play an effective role in the domain of marketing the agricultural production inputs and laying the right base towards a real cooperation for the small farmers against price changes in the markets, especially after carrying out economic reform policy and it is necessary to support and enhance the cooperatives in distributing and trading the production inputs. It is necessary to prepare a monthly information bulletin includes the prices of all fertilizers, seeds and pesticides in different areas and published in the agricultural directorates and the cooperatives with the importance of fixing prices relatively in the companies according to production. Forming a committee from the private sector, the cooperatives, the Principal Bank for Development and Agricultural Credit, and the productive companies to design a program for providing and distributing fertilizers, seeds and pesticides, for local, imported inputs to cover consumption areas. It is necessary for the merchants dealing in marketing and handling fertilizers, seeds and pesticides to inform the concerned agricultural directorates with the sites of stores to ease control and follow-up. It is necessary to expand agencies and whole traders to avoid monopoly and each of them must be responsible of distribution in a certain area. Control the quality of production inputs and the plans of the companies producing the main inputs (seeds, fertilizers, and pesticides). Preparing the cooperatives, unions and association of the producers and the consumers to access in competing the private sector. This cannot be achieved without training the specialized bodies by the state in the importation or purchase from the local market and distribution with efficiency. The state also must provide the sufficient credit for constructing the suitable deposits, means of transportation and storage. The agricultural extension must play an effective role in promoting the cooperative concepts and spreading the economic and technological awareness of the farmer and developing the agricultural extension to become integrated with the credit market, whereas introducing more effective mechanisms to promote productivity which requires the care of the state and spreading the spirit of initiative and creation.