AN ECONOMIC STUDY TO ESTIMATE THE SUPPLY RESPONSE OF WHEAT CROP IN PORT SAID GOVERNORATE

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ABSTRACT

The wheat crop in Egypt is a major source of food for a large population. There is a deficit in bridging the food gap. Egypt imports wheat with its domestic production. Egypt currently suffers from 50% self-sufficiency in wheat. The Port Said Governorate is considered one of the governorates of Egypt in which the Peace Canal contributes to the increase of land and Egypt from the wheat importing countries, which means that the economics of this crop have not been expanded in Zarattha in such a way that makes a significant contribution to filling the deficit and achieving self-sufficiency rates.

The study aims to study the general time trends of the main changes associated with the estimation of the supply response of the wheat crop, which includes both the cultivated area of the crop, the agricultural price and the net yield of the crop. It also aims to identify the most important changes affecting the cultivated area, In agriculture

The study was based on data from the Department of Agricultural Statistics in the Directorate of Agriculture in Port Said Governorate and the Agricultural Statistics Bulletin issued by the Central Administration of Agricultural Economics and some researches related to the subject of the study.

The study used some descriptive and quantitative statistical methods such as simple regression method and multiple regression method to estimate the supply response functions of wheat yield in Port Said Governorate in the linear image.

The results of the study on estimating general time equations for some of the economic indicators related to estimating the supply response of wheat yield during the period 2000-2016 in the cultivated area, the agricultural price and the net yield of the studied crop showed that there is an increasing general trend in both cultivated area and farm price and net return, 727, 24.82, 288.18 respectively and the significance of the model was established at the level of 0.05.

What is for the results of the restoration of the supply of accounting? The study of the full linear model was overseen by the models for the response of the wheat yield in Port Said Governorate where it is clear from the full linear model that includes all the explanatory variables referred to that the model is significant. It is worth mentioning the significance of all the variables studied, (T-1), T-1 wheat price, T-1 wheat net yield (T-1), T-1 net, yield formula from wheat to clover (T-1), The stability of price policies, and the percentage of wheat / rice yield (T-1) 1% of the changes occurring in the area cultivated with wheat to the previous factors of the Immunization Heif order .

As shown in the previous equation, there is a positive relationship between six factors and area cultivated wheat in the year, meaning that the increase of cultivated area of the year following the cultivation by 50 acres. The increase in the agricultural price was an incentive for farmers to increase the cultivated area of the crop studied in the year. The net yield from wheat may lead to an increase in the cultivated area by 3.54 feddans, and the price ratio
between the wheat crop / barley crop in the previous year was estimated at an area of about 91.56 feddans and the net yield from wheat to barley. Cultivated by 26848 feddans, a factor of inverse relation with the cultivated area of agricultural engineering, this factor may lead to a decrease in the cultivated area of wheat 8282.2 feddans on the cultivated area in the wheat province of Port Said Governorate. The elasticity of the supply response to the variable of crop area (X1) in the previous year, agriculture price (X2) in the previous year, (X4) net weight/ net wheat/barley yield in the previous year and (X6) previous 0.65, 2.8, 1.7, 1.58, respectively.

If there is a change in the capacity of 1% in the area cultivated with wheat there is a change in the area cultivated in the previous year by 0.65%, and there is a change in the previous years farm price increased by 2.8% and wheat net/net barley yield has change by 1.7% and the wheat/ barley price ratio has change by 1.58%, respectively. The results showed that the model for the wheat yield response were the logarithmic model. This is evident from the value of (F) (R²).