

Trading and Distribution of agricultural Requirements

The Egyptian agriculture plays an important role in Egyptian national economy . Therefore, Egypt, in the recent years, has followed the policy of economic reform and economic liberty. In the last period , most of the studies generally focused on agricultural inputs (seeds , fertilizer and pesticides) as a result of their impacts on agricultural production .The first chapter is concerned with the critical background for the items related to research objective.The second one is classified into four sections. Section one dealt with the relative importance of agricultural inputs during the period (2000/2003-2004/2005) . The results showed that chemical fertilizer is the first category for wheat , faba bean, tomato, rice and cotton . Their relative importance reached about 15.4%, 11.4%, 15.9%, 11.1%, 14.3% from total variable costs respectively . On the other hand, seeds is the first category in case of onion and potato, The relative importance of seeds was 17.7%,and 44.6% for onion and potato respectively. Pesticides was the third category. It represented about 2.7%, 5-6%, 7%, 7%, 9.7%, 6.7%, 6.2% from total variable costs for both wheat, faba bean, onion, potato, tomato, rice and cotton respectively.According to the relative importance mentioned above, the study dealt with potato, onion, tomato and cotton. Agricultural cultivated areas planted by these crops were studied during the periods (1985-1994,1995-2004). The results showed that areas planted by potato and cotton decreased in the second period compared to the first one, while it increased for both onion and tomato and significantly existed for potato and tomato. Productivity increased by about 2.5%, 172%, 84.8% in the second period compared to the first one for potato , onion and tomato respectively . In case of cotton , productivity decreased from 5811.4 thousand tons in the first period to 4911.6 thousand tons in the second one which represented about 15.5% .The second section studied production and consumption of chemical fertilizer in Egypt. The results showed that the value of chemical fertilizer production increased from L.E. 784.3 million to L.E. 1966.8 million between the two periods. This is due to the increqe of the local production for nitrogen and phosphate. The localproduction of nitrogen increased significantly by 47.8% in the second period compared to the first one . The local production of phosphate also increased signifantly by 10.1% at the same periods levels.At the local consumption level, the quantity consumed from nitrogen decreased by 6.7% while increased by 18.5% for phosphate between the two periods. The statistical significance existedonly in the increasing level of phosphate. Concerning the potassium consumption, the quantity consumed increased significantly by 32.5 thousand tons which represented about 59.9%.Concerning the area per capita consumption, it decreased by 1.6% for nitrogen while it increased by 6.3% and 40% for both phosphate and potassium respectively.The third section dealt with seed consumption. The results indicated that the quantity consumed of seeds decreased for potato and cotton while it increased for onion . This decrease or increase is mainly dependent on the area planted by these crops.The fourth section dealt with pesticide consumption. The study showed that the value of pesticide, increased by L.E 103.7 million. The local consumption decreased by 6 thousand ton and accordingly the per capita consumption of area planted decreased significantly by 0.8 thou tans between the two periodsThe third chapter focused on questionnaire results. The questionnaire tried to assess the importance of economic reform policy on agricultural inputs at farmers and traders level . The first section of this chapter dealt with the design of questionnaire and sampled stages. The study selected shorqiya and Qalubiya

governorates. Thereafter, it selected two districts in each governorate and two villages from each district. The sample is classified into three holding categories, the first is less than one Feddan, the second is 1-2 Feddan and the third is greater than 2 Feddans. The sample size was 60.50 and 75 farmers for potato, tomato and both onion and cotton, respectively. The reform, the total sample size was 260 farmers. The results of study showed that human labor cost represented 68.2% from total cost of labor at the potato crop level. The total cost per Feddan reached about L.E. 5501 and the second category gave L.E. 976 net profit per Feddan. This net profit was L.E. 768 and 754 per Feddan for both the third and first categories. ii The source of potato chemical fertilizer mainly depended on private sector at the first category while the cooperative is the main source for the second and third categories. Seeds administration is the main source for potato seeds at three categories level which represented 35%, 40% and 45% from total sampled farmers. The cooperative is also the main source for 37%, 48% and 44% of sampled farmers in case of pesticides. The selling price of inputs was higher at the private sector compared to other sources. The main reasons behind the higher input prices are canceled and subsidies and the source of buying. Farmers faced some problems. Farmers demanded a supervision from the government and gave a role for Principle Bank for Development and Agricultural Credit in the input market. Concerning onions the total cost was L.E. 5625 per Feddan and seeds cost represented about 49.6% from total input costs. The third category existed L.E. 880.3 per Feddan as a net profit while the second and third were L.E. 764 and 513 per Feddan respectively. Concerning onion inputs, cooperatives are the important source of chemical fertilizer while traders were the main source of seeds in the first and third categories and represented about 40% from the total quantity of seeds. On the other hand, seed administration was the main for the second category that represented about 45% from total onion sample and the same happened for pesticides. As discussed previously, farmers faced the same problem in potato crop and they reported the same solutions from farmers' opinions. In the case of cotton crop, human labor represented about L.E. 1663 per Feddan which represents 72% from total labor costs. Manure represented 35.7% from total input costs and machinery labor has the biggest percent from total cost. The net revenue per Feddan, were L.E. 6192, 6139 and 6050 per first, third and second categories, respectively. Concerning the tomato crop, the human labor represented about 62.3% from total cost of labor, seeds represented 46.5% from total costs that reached about L.E. 5812.5 per Feddan. The third category costed L.E. 7000 per Feddan while the first and the second satisfied L.E. 6750 and 6000 per Feddan. The main source of buying input and the problem facing farmers are the same in potato and cotton by different percents but the same importance. iii The second section of this chapter studied the statistical estimation of crop protection functions by taking the productivity of crop as a dependent variable and the inputs as independent variables. The results showed that the linear form is adopted for potato crops with variables nitrogen, phosphate and manure fertilizers. The linear form was adopted for onion, tomato and cotton and the F-value indicated the good fit of models for each crop. The study also estimated the semi log model for each crop but the F-value was not significant for all. The total cost of production was estimated for each crop. The cost function of potato crop was the third power form and the optimum rate of production was 10.2 ton / Feddan. The productivity examined with net profit 15 ton/ Feddan. Cost elasticity estimated by 0.55 which referred that production at the economic stage. Onion cost product takes the second power form. The productivity at the minimum average cost level (optimum rate) at 13.6 ton/Feddan and the size of production that maximized the net profit was 20.5 ton/Feddan and cost elasticity estimated by 1.6 which referred that the production at the economic stage. Concerning cotton, the optimum rate of production estimated at 4.6 ken tar/ Feddan and the size of production that maximize profit were 7.2 kantar/ Feddan. The elasticity of production estimated by 0.7 that referred the diseconomic of production stage. In the tomato crop, the optimum rate estimated at 10.5 ton / Feddan and size of production that maximize the net profit estimated at 11.8 ton/ Feddan. The elasticity of cost production estimated by 5.4 which referred to the economic stage. The fourth chapter dealt with international trade for agricultural input in Egypt. Two sections the first focused on exports and second focused on imports. The total quantity of exported chemical fertilizers increased by 159 thousand ton in the second period compared to the first period and its value consequently increased by \$ 12.8 million. Sudan country is the main importer of Egyptian nitrogen and phosphate fertilizers

which represented about 93.8% and 60.5% for both of them respectively in the second period. The total value of the exports recorded about 0.03% from total agricultural exports. The average value of Egyptian pesticides exports increased from \$94.6 thousands in 1994 to \$131 thousands in the year 2005. Libya country was the first country and imported insecticide worth \$24.4 thousand during the period 2003-2005. Oman was the first import for fungi Gide while Saudi Arabia was the first in the case of weeds Gide. The second section dealt with input imports. The total quantity of chemical fertilizer imports decreased from 407.7 thousand tons in the first period to 104.3 thousand tons in the second period which represented about 25.6 % and consequently decreased the value of imports by \$ 30.7 millions. The main source of Egyptian nitrogen fertilizer was Italy while Jordan was the main for phosphate. Concerning the potassium imports, Egypt imported 2900.6 ton from Bolivia which represented about 63.4% from total quantity imported of potassium. The value of pesticide imports reached about 0.42% from the total value of Egyptian agriculture imports. The Egyptian pesticides import quantities were fluctuated during the period 1994-2005 between 2.1 thousand tons as minimum and 8.8 thousand tons as maximum. Tapam is the first source of Egyptian insecticides. The total quantity imported was 1782.8 ton which equal \$ 679.5 thousand, and represented 38% from average value of pesticides imports. France was the main source for fungicide while China was the first for weedcides imports. Concerning the potato seeds, Holland was the first source. The total quantity represented about 41.7% from total potato. Total seed imports and its value equal \$ 22513.4 thousands. This value represented about 62.4% from the total value of Egyptian potato seed imports.