

## **Economic Evaluation of Extension Programs for Some Vegetable crops in A. R. E.**

### **Summary and Recommendations**

Numerous studies have participated in showing and protruding the role-played by extension efforts in positively changing different educational fields. Agricultural extension is not a luxurious consumption but its losence is extended towards changing people educational in favor of people's productive lives. This directed change is not an aim perse but it lies in a series of complicated nets that led to positive change in farmers socio – economic lives. This positive change enconpames also families and dyndents of farmers

Despite the fact that many studies in the developed of countries pointed out contribution aspects of educational studies on socio – economic changes. The majority of the Egyptian studies ignored this concern. Consequently, different quarries are stxill without enough answers Among those quarries quantity of production, agricultural cost, agriculture netincome inpaet of extension on income, different economic indecato, and impact of agricultural extension work.

This study is trying to explore different changes (information and skills) in indifiduals caused by agricultural program training programs carried out by agricultural extension services in relation with some important vegetable crops cultivated in Egypt. In general, this study in an effort to identify the changes occurred from agricultural extension in human being inpluding knowledge and skill perspectives that are reflected in

rural economic progress as a consequence of implementing extension programs in relation with some important vegetable crops cultivated in Egypt.

**- The main objectives of this study were as the following:**

- 1- To determine economic impacts of the agricultural extension program related to renaissance of cucumbers in I smailia Governorate for each of farmers who applied the concerned extension program and those who do not. Those economic impacts encompassed: yield, price, value of total production, cost of seeds, cost of fertilization, cost of pesticides, other costs, cost of labor and hired mechanization, interest rate cost, total variable cost, net income, ratio of return cost.
- 2- To determine economic impact of the extension program related to, renaissance of Tomato crop in Beni - Suaf Governorate for each of the two groups of farmers (those who applied the program and those who do not). The studied economic impacts were. Yield, price, total production value, seeds cost, fertilization cost, pesticide cost, cost of labor and hired mechanization, cost paid for interest rate, total variable cost, net income, and return cost ratio.
- 3- To determine economic impacts of the extension program related to renaissance of strawberry in Kalioubia Governorate for each of the two studied groups (those farmers who applied the extension programs and those who do not). The studied economic impacts included: Yield (Produced quantity); value of total yield, cost of transplants, cost of fertilization, cost of pesticides, cost of hired labor and

mechanization, total variable cost, net income, return cost ratio.

- The study was conducted in Ismailia, Beni-Suef, and Kalioubia governorates. The selection of those governorate came as representation of the whole Egyptian territory including both geographical and weather perspectives where Ismailia Governorate was selected as a representative of East of the Delta and the canal area. Beni suef Governorate was selected as a representative of upper Egypt and Mid Egypt, and Kalioubia Governorate was selected as a representative of the Delta. These selected governorates were among the ones where agricultural extension service was concerned to apply some extension programs in order to raise productivity efficiency in relation with vegetable crop farmers.

5-The study sample encompassed two groups of vegetable farmers. The first group consisted of farmers who applied extension program recommendations (experimental group), and the second group consisted of vegetable farmers who did not apply extension program recommendations (control group).

The Experimental group encompassed: So farmers who cultivate cucumbers and live in five villages (Tusson, and El-Dubbaia Ismailia District, Al-MullaK/ El-TalEl-Kabir Distrit, and Abu- Sultan and El- Saaidia / fayed District);

So Tomato farmers from five villages (El – Maymoun and manshat Abu saeir / Al- wasta District, Kambish / Baba District, Beni – A di and Ashmant / Nasser District); and of so strawberry

farmers from two villages (Kafr – shebin / shebin EL-Kanater District, and El-Daer / Tukh District).

- 6- The control group (respondents with no agricultural extension service) encompassed so, cucumber farmers from five villages (Tusson and El-Dubbaaia / Ismailia District, Al-Mullak / El – Tal El- Kabir Ditriect, and Abu-Sultan and El-Saaidia / Fayed District); so Tomato farmers from five villages of Beni – Suef Gavernorate ( EL-Maymoun, and Manshat Abu saeir / Al- Wasta Oistrict, Kambish / Baba District, Beni – Adi and Ashmant / Nasser District; and so Strawberry farmers from two villages of kalioubia governorate (Nawa / Shebin El- Kanater District, and El – Daar / Tukh District).

The study relied mainly on induction in analyzing the studied variables and economic indicators related to the studied vegetable extension programs. The study also relied lepon the comparative research method between that two studied groups of vegetable farmers (those who exposed to the extension programs and those who did not). The study data were collected during the time period December, 2002 – March 2003.

- 8- The study variables were: yield, price, total yield value, seed cost, fertilization cost, pesticide costs, other expenditure costs, labor and mechamzation cost paid interest rate cost, total variable cost, net income; return cost ratio.
- 9- The study data came from two sources, secandasy sources (official data published by Agricultural Economics research Institute/ Agricultural Research center, the control Authority

- Net income was 3938.4 Egyptian livers/feddan for those farmers with extension services, and reached 3164 Egyptian livers/ feddan for those farmers with agricultural extension services.
- Average of the ratio, (return/ total variable costs) was 71.88% for those farmers with agricultural extension services, and was 54.5% for those farmers without agricultural extension services;
- Differences between averages of the two groups were not significant for each of yield, price, total yield value, seed cost, fertilization cost, pesticide cost, other expenditure cost, total variable cost, and net income.
- Differences between The averages of the two groups were significant in favor of the group of farmers without agricultural extension services regarding each of cost of labor and hired mechanization, and cost of paid interest ratios.
- It was found from the acquired ratio, (difference in average return of the two studied groups/ difference in average of variable costs between the two groups) that seed cost 104.6:1, fertilization 3.2:1 pesticide 8.3:1, other expenditure 117.3:1 labor and hired mechanization 1.675:1, paid interest ratio 774.4:1, and total variable costs 9.375:1.

## **2-For Tomato farmers in Beni-Suef Governorate:**

- Average yield was 16.992 tons / feddan for tomato farmers with extension services, and was 15.776 tons/feddan for those tomatoe farmers without extension services.

- Average price was 194 Egyptian livers /ton for tomato farmers with agricultural extension services, while it was 190 tons for tomato farmers without extension services.
- Average total yield value was 3316 Egyptian livers / feddan for those tomato farmers with extension services while it was 292.6 Egyptian livers or those tomato farmers without agricultural extension services.
- Average seed cost was 201.4 Egyptian livers / feddan for those tomato farmers with agricultural extension services and was 187.2 Egyptian livers for those tomato farmers without agricultural extension services.
- Average fertilization cost was 586.8 Egyptian pounds / feddan for the tomato farmers with agricultural extension services, While it was 608 Egyptian livers / feddan for those tomato farmers without agricultural extension services.
- Average of seed pesticide cost was 159.8 Egyptian pounds / feddan for those tomato farmers with agricultural extension services, while it was 142.2 Egyptian pounds feddan for those tomato farmers without agricultural extension services.
- Average cost of labor and hired mechanization was 954.4 pounds/feddan for those tomato farmers with agricultural extension services, and was 1181.6 pounds for those tomato farmers without agricultural extension services.
- Average paid interest ratio was 37.8 pounds/ feddan for these tomato farmers with agricultural extension services, while it was 136.2 pounds / feddan for those tomato farmers without agricultural extension services. In this sense, total

extension services, while it was 2.266 pounds/ feddan for those strawberry farmers without agricultural extension services.

- Consequently, total variable cost was 10.466 pounds/ feddan for the strawberry farmers with agricultural extension services, and was 5.984 pounds/ feddan for the strawberry farmers without agricultural extension services.
- In this sense, average of net income was 7054 pounds/ feddan for the strawberry farmers with agricultural extension services, and was 966 pounds/ feddan for the strawberry farmers without agricultural extension services.
- Average of the ratio (net return/ total variable cost) was 67.4% for those strawberry farmers with agricultural extension services, while it was 16.4% for the strawberry farmers without agricultural extension services.
- There were no significant differences between the two studied groups in relation with each of yield, seed cost, fertilization cost, pesticide cost, cost of labor and hired mechanization, and total variable cost.
- There were significant differences between the two studied groups in relation with each of total yield value, and net income.
- The differences between the two studied groups in relation with the ratio (return average/average of variable cost) were; transplant cost 6.4: 1, fertilization cost 2.4: 1, pesticide cost 166.8: 1, cost of labor and hired mechanization 5.8:1, and total variable cost 1.4:1.

- From the previously mentioned findings, agricultural extension role in increasing each of net income, ratio of return/ cost with farmers with extension services. In this sense, agricultural extension does not try hard to reduce cost only, but it makes its efforts to improved quality of production and its increase which, at the end, is reflected in increasing farmers' net incomes.



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**BY**

**Talaat Nabih Ragheb**

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**A THESIS**

**Submitted In partial Fulfillment Of The requirements For**

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**(Agricultural Extension)**

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**Faculty OF Agriculture. At Moshtohr**

**Zagazig University, Benha Bransh, 2003**

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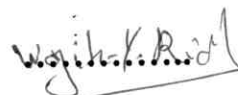
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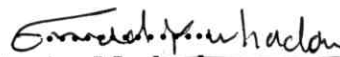
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