



## Analytical Study of Production Costs for Some Crops in Egypt and most important Economic Efficiency Indicators when it cultivated Intercropping

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**Abstract:** Egypt's agricultural and food policies are usually directed towards increasing production of strategic commodities from available domestic sources, unless belonging to a regional group that allows providing the populations' food needs safely.

In the context of the comparative advantages that govern the production policies for these groups, and the limited amounts of agricultural production resources, on top of which comes agricultural land, it is clear that there is a dire need to search for modern methods that help optimize the use of available resources to increase agricultural production and self-sufficiency in strategic crops in order to achieve food security, which can be achieved through intensification.

Therefore, the research aimed to identify variable cost items for single and intercropped strategic crops, including wheat, broad beans, maize, cotton, tomatoes, soybeans, and peanuts grown in five selected Governorates, these are Fayoum, Ismailia, Qalyoubia, Menia, and Menofia.

Main findings regarding the relative importance of variable cost items revealed that labor cost ranked first at the level of the study crops and Governorates. Machinery rent ranked second, chemical fertilizers ranked third, and pesticides ranked last. It was also found that intercropping wheat with cotton resulted in improving farmer's income by raising net revenue per feddan due to realizing a higher investment profit of LE 2.19, in addition to raising wheat production. In contrast, intercropping wheat with tomatoes resulted in lower net revenue per feddan due to lower investment profit that declined from LE 5.49 under single production to as low as 0.3 under intercropping. Findings also revealed that intercropping winter tomatoes with broad beans, and maize with peanuts resulted in improving farmer's income, in addition to raising production of summer vegetables without cutting any part of the area under cereal crops.

**Keywords:** Production Cost, Net return, Intercropping, return of Invested Pound, Total Revenue.