



## AN ECONOMIC AND QUANTITATIVE STUDY FOR THE GEOGRAPHIC AND ALLOCATION IMPACT ON FARMLAND INFRINGEMENT IN EGYPT DURING THE PERIOD 2005-2010

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**Keywords:** Per capita, National income, Payment balance, Statistical model, Dummy variable, Farmland infringement

### ABSTRACT

Farmland infringement for the purpose of construction has become a serious problem in Egypt that negatively affects the average per capita of arable land and soil fertility in Egypt. On the other hand, this situation negatively affects Egypt's self-sufficiency rates of agricultural commodities, agricultural income, and employment in rural areas. However, farmland infringement is completely forbidden by the Egyptian agricultural legislation.

In this regard, the current research aims at evaluating the impact of the Geographic and placement impact on Farmland infringement in Egypt during the period (2005-2010).

This study recommend the importance of reduce farmland infringement in different Geographic places, to increase the Egyptian agricultural production, raise Egypt's self-sufficiency rates of agricultural commodities, and reduce the deficit in agricultural trade balance, and reduce the problem of unemployment in rural areas. Moreover, the current study used descriptive and statistical analysis to achieve its goals.

The main results of this research showed that the total area of agricultural land that had been infringed during the period (2005-2010) reached about 4031 feddans during the period (1993 – 1995),

increased during the period before revolution (1996 -2010) to 28788 feddans and increased more after revolution during the period 2011- 2014 to ( 38046) feddans. By calculated the total yearly average of farmland infringement in Egypt, the result show that it was about 30.8 feddans during the period (1993 –1995), increased during the period before revolution (1996 -2010) to 43.3 feddans and reduced after revolution as a total to 34.8 feddans as a result of reducing the rate of farmland infringement in the civilization governorate by intensive security power. On the other hand the farmland infringement in all other this rate had increased in all geographic placements in Egypt. Where the yearly rate of farmland infringement in Delta of Egypt, Meddle Egypt and upper. Egypt reach about (43.1, 49.5, 41.2) feddans respectively before revolution, increased after revolution to (712.1, 405.8, 354.5) feddans respectively. It is clear that the delta Egypt has the highest yearly rate of farmland infringement, so it is important to control this rate in future.

Besides, the results showed that the most important reasons behind farmland infringement by construction in Egypt are the dummy variable representing the Geographic and placement for the governorates' and time. The economic model shows the increase of yearly average of total farmland infringement by about 74.4 feddans and the result was significant at the level of significance 1%. Moreover the yearly average of farmland infringement for Delta of Egypt, Meddle Egypt and upper Egypt by about (287.9, 101.7, 95.4) respectively.

(Received 26 October, 2015)  
(Revised 15 November, 2015)  
(Accepted 25 November, 2015)

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On the other hand, by using the dummy variable of piecewise to describe the situation after and before revolution in the different geographic and placement of governorates the results show the increase of the farmland infringement after revolution in delta of Egypt from 1136.4 to 2704.3 feddans and the results was accepted significantly at the level of 1%. The results show also the increase of the farmland infringement after revolution in middle of Egypt from 206.7 to 492 feddans and the results was accepted significantly at the level of 1%. Furthermore the results show the increase of the farmland infringement after revolution in Upper Egypt from 254.2 to 605.1 feddans and the results was accepted significantly at the level of 1%.

However, the results showed that the farmland infringement after revolution in Egyptian civilization governorates decreased as a results of strong security from -34.5 to -82 feddans and the results was accepted significantly at the level of 1%.

Finally, the research recommends strengthening the importance of protected the Egyptian agricultural land specially in the highest geographic and placement governorates especially in delta of Egypt, middle and upper of Egypt by achieving the balance of investment between all these geographic and placement governorates and establishment the necessary desert villages to meet the needs of Rural households.