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## **The Impact of Egypt's Joining to the WTO on the Egyptian Agriculture Sector Investments**

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### **ABSTRACT**

Investments one of most tools for implementation the agricultural development in Egypt , and it plays an important role and effective in achieving a high rate of growth in the agricultural sector , especially in light of the foreign trade liberalization policy and Egypt's joining to the WTO, and to strengthen the role of the private sector in the light of economic strategy , and can achieve efficient use of agricultural investments by putting investment programs , aimed at increasing the efficiency of agricultural economic resources available , by increasing agricultural investment projects directed to agricultural expansion horizontal and vertical, The problem of this study and its objective focus on the impact of Egypt's joining to the WTO on the investment at the national and agricultural level and the public and private investment in both side during ( 1985-2012 ).

The research depended on statistical methods, such as, simple regression and multiple, and dummy variable, to know the effect of the impact of Egypt's joining to the WTO on the national investments and agricultural, was used (chow test)

**Keywords:** investment, agricultural development, WTO, horizontal investment, vertical investment

### **1. INTRODUCTION:**

Investments play an important role in the development of various sectors of the Egyptian economy , and help to achieve the targeted growth , and increasing the role of investments in achieving this goal with directing investments to productive sectors with the capacity to achieve high growth rates , reflected in turn improve the economic performance of Egypt , so Egypt attaches great attention to policies to encourage the development of investment , especially in light of the economic changes successive passes by the Egyptian economy , and the trend towards foreign trade liberalization, and to strengthen the role of the private sector to the extent commensurate with the energies of investment. After joining to World

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Trade Organization (WTO) in 1995, Egypt began in the application of foreign trade liberalization policy, and to take serious steps towards encouraging investment , by focusing on the importance of the private sector in creating potential new investment , which has direct effects on agricultural production , and that the importance of the role of investment in the implementation of agricultural development programs, success of which depends largely on the size and efficiency of these investments , economic variables in a row affected the level of economic performance in the areas of production and investment , and therefore , the use and distribution of investments to achieve high rates of development represents a real challenge for further economic and agricultural development.

### **1.2 Explore Importance Of The Problem:**

Agricultural investment incentive the first to achieve the goals of Egypt's agricultural development, where the share of the agriculture sector in the gross of domestic product (GDP), about 15.6% and a share of the proceeds from exports about 24%, and from labor nationalism about 28.5%, from the sectors of labor-intensive, and what it gets sector Agriculture of the total national investments is not commensurate with the role played by, where is about 9.3% of the national investments, and this is a problem in the development of the agricultural sector, where not getting its fair share of national investments, and the consequent decline in the rate of growth in the agricultural sector.

**In light of the research problem, the research aims to:**

- 1 - How to work on increasing the share of the agriculture sector of the total investments
- 2 How to attract investments to the agricultural sector, and the optimum allocation of agricultural investment, between horizontal agricultural development, and vertical agricultural development.
- 3 - Identify the effectiveness of the impact of Egypt's joining to the WTO on both agricultural and total investments, and the impact on the distribution of these agricultural expansion investments between vertical and horizontal agricultural development.
- 4 - To identify some of the problems and constraints of agricultural investments in Egypt.
- 5 - To identify the most important factors affecting investments in the agriculture sector, the public and private.

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## 2. METHODOLOGY:

The research depended on statistical methods , the economic interpretation of the results , where the application functions, simple regression and multiple , and dummy variable, to know the effect of the impact of Egypt's joining to the WTO on the national investments and agricultural , was used (chow test) during the first periods of the study ( 1985-1994 ), a period before joining to the WTO (1985-1994), and the second ( 1995-2012 ), a period after joining to the WTO ( 1995- 2012 ),and Measure the impact of structural changes to global trade agreement by using (Dummy Variables) during the study periods (1985-1994), ( 1995-2012 ) by placing three independent variables equation , represents the first (T) variable time ( time TREND), and the second is a dummy variable (D) , which takes the values (zero) during the first period and the values of (1) during the second period and it is called (ZERO-ONE DUMMY VARIABLES), then the independent variable third (TD) , which is multiplied by a variable time (T) in a dummy variable (D) and so -called variable (CROSS PRODUCT).

## 3. RESULTS AND DISCUSSION

### *3.1 The impact of Egypt's joining to the WTO on the national investments:*

Tended Egyptian government's policy to maximize the role of private sector in investment projects , through policies that create an enabling environment for investment in sectors different commodity ( Agriculture - Industry and Mining - petroleum and its products - electricity - construction ) and services sectors productivity (transport and storage - Communications - Suez Canal - trade, finance and insurance - tourism) and social investments ( housing - public utilities - educational services - other services ) .The next part explains analysis of the impact of Egypt's accession to the WTO on the structure of national investments, distributed on public sector investment and the private sector, and the contribution of each of them in total national investments, was used style variables moot during the two periods , before joining to the WTO (1985-1994) , and the period after joining to the WTO (1995-2012). The most important results that could be obtained , the total investments at current prices has taken a growing trend at an annual rate moral about 24.5 billion pounds(average first periods) increased to 77.3billion pounds (average the second period ) an increase of approximately 215.2 % , compared to the value of investments in the first periods , and using the style dummy variable , it turns out the lack of significant effect of Egypt's accession to the WTO on the total investments ,which describes the regression coefficients estimated that the total investments, took an increasing trend, at an annual rate

significantly statistically, amounted to about 4.77 billion pounds, a growth rate of about 8.78 % (average for the two study period), and returns the continuous increase in the total investments to Egyptian policy to encourage investment and promote development. Investments amounted to the agriculture sector around 1.76 billion pounds, which represents about 6.9% of the total national investments, investments amounted industry, petroleum, electricity, construction, and other services (productive and social) 4.9, 2.63, 2.72, 0.37; 12.13 billion pounds represents about 21.3% 0.11% 0.105%, 1.5%, 48.7%, respectively. Of the total national investments as average for the first periods (1985 – 1994), rose to about 7.1, 9.4, 13.1, 5.1, 1.66, 40.1 billion Pound to sectors: Agriculture, industry, petroleum, electricity, construction, and other services (productive and social) accounted for about 9.8%, 11.7%, 15.5%, 6.7%, 2.1%, 54.2%, respectively, of the total national investments 77.34 billion pounds as average for the second period (1995-2012) an increase of approximately 304.6%, 93.1%, 398.2%, 85.7%, 344.1%, 237.1% and this shows that the agriculture sector received investments of less than industry occupied the fifth place, the fourth in its share of the total investment nationalism during the study periods, respectively. Show a significant effect of Egypt's joining to the WTO on the total national investments to the oil sector, where shows transactions: industry, petroleum, electricity, construction, and other services (productive and social) accounted for about 15.7%, 17.6%, 11.1%, 1.6%, 4.5%, 49.5%, respectively, of GDP, amounting to about 371 billion pounds (average for the second period 1995-2012), an increase of approximately 263.5%, 330.8%, 497.6%, 325.1%, 253.8% 0.301%, this shows that the agriculture sector occupied the first place in his participation in the formation of the gross domestic product, for first periods (1985-1994), while declining to occupy the second place after the manufacturing sector, for the second period 1995-2012, due to increased investments in the manufacturing sector at the expense of other sectors in that period. As it turns out having a significant effect of Egypt's joining to the WTO to gross domestic product sectors: agriculture, petroleum, construction, and other services (productive and social, where describes the regression coefficients estimated that the GDP of the sectors of the former, taking a general trend growing, at an annual rate significant statistically, was about 1.45, 1.73, 1.68, 0.42, 4.97, billion pounds, an increase of about 9.08%, 11.42%, 24.5%, 8.87%, 10.87%, 49.5% (average for the first periods), and taking a general trend growing at an annual rate significantly statistically amounted to about 2.3, 2.77, 2.63, 0.66, 7.89 billion pounds, an increase of about 3.96%, 4.23%, 6.39%, 3.94%, 4.29%, as the

average for the second period(1995-2012), and it turns out the lack of significant effect of Egypt's joining to the WTO to GDP for the electricity sector, which shows the regression coefficients estimated that GDP for the electricity sector to take a general trend growing at an annual rate of around 0.41 billion pounds and a growth rate of about 10.28 % on average for the study period ( 1985-2012 ) , because of the nature of the electricity sector ( capital-intensive ) , which requires a great deal of investment , but it gives the yield during the period of time for the future.

### **3.2 The impact of Egypt's joining to the WTO on Distribution of employment in the national economy sectors:**

the number of workers in the national economy 12.87 million workers on average for the period before the foreign trade liberalization increased to 17.39 million workers on average for the second period 1995-2012, an increase of 35.1 % , compared to the number of employees in the first periods, using the style of dummy variable , showing a significant effect of Egypt's accession to the WTO on the number of workers in the national economy, where he describes the regression coefficients estimated that the number of workers in the national economy , took a general trend growing at an annual rate significant statistically, amounted to about 153. 01 workers, a growth rate of 1.19 % (average for the first periods), and took a general trend growing at an annual rate significantly statistically amounted to 236, 560 workers, and an increase of 1.36 % as average for the second period (1995-2012) due for the continued increase in the number of workers in the national economy to the increase in population and development, especially in the working age. The number of workers in the agriculture sector about 4.43 million workers, representing about 34.6% of the total number of workers in the national economy , and the number of workers in the manufacturing sector: petroleum, electricity, construction, and other services ( productive and social ) about 1.42 , 0.032 , 6.2 , 0.66, 0.0091 billion factor accounted for about 11.1% , 0.3% , 0.7% , 5.1% , 48.2% , respectively, of the total number of workers in the national economy as average for the first period (1985 - 1994 ) rose to about 4.99, 2.13, 0.062, 0.133, 1.28, 8.79 billion factor for the following sectors: agriculture, industry, petroleum , electricity , construction, and other services ( productive and social ) accounted for about 28.8% , 12.2% , 0.3% , 0.8% , 7.3% , 50.6 % , respectively , of the total number of workers in the national economy , and of about 17.39 million workers as average for the second period (1995-2012 ) , an increase of about 12.5 % , 49.4 % . 92.3% , 45.6 % , 92.7 % , 41.5 % , and this explains that agriculture sector occupied the first place in his participation in employment during the study periods . And show a significant effect of Egypt's joining to the WTO on

the number of workers in agriculture , industry , petroleum , electricity , construction, where describes the regression coefficients estimated that the number of workers in the former sectors have taken a general trend growing at an annual rate significantly statistically amounted to about 206 , 24.08, 1.43, 1.33 , 419.67 , thousand workers , and an increase of approximately 0.46%, 1.69%, 4.12%, 1.56%, 8.87%, as average for the first periods, and taking a general trend growing at an annual rate significantly statistically reached : 31.52 , 38.3, 2.1, 2.13, 660.42 thousand workers , and an increase of about 0.63%, 1.8% , 3.38 % , 1.59 % , 3.94 % , average the second period , and it turns out the lack of significant effect of the policy of the foreign trade liberalization on the number of workers in the service sector, other ( productive and social ), which describes the regression coefficients estimated that the number of the employed sector services take the general trend increasingly statistically significant at an annual rate of around 0.22 million workers, a growth rate of 2.89 % on average study period ( 1985-2012).

### **3.2.1 The impact of Egypt's joining to the WTO on the national investments in the public sector :**

The total national investments in the public sector at current prices 15.48 billion pounds as average for the first periods, increased to 39.5 billion pounds as average for the second period, an increase of 155.2%, compared to the value of investments in the period before joining to the to the WTO, and describes non- moral (chow test) for The impact of Egypt's joining to the WTO on national investments in the public sector , has been the use of a function time trend year during the period of time the full study , and describes the regression coefficients estimated that the total national investments in the public sector, has taken a growing trend statistically significant at an annual rate stood at 2.02 billion pounds, a growth rate of 6.95 % on average for the periods of the study, and the reason for the continued increase in the total national investments, as a result of the government's policy to encourage investments in the public sector to drive development.

### **3.2.2 The impact of Egypt's accession to the WTO on the national investments in the private sector :**

The total national investments in the private sector at current prices 9.05 billion pounds as average for the first periods, increased to 37.84 billion pounds as average for the second period, an increase of 318 % , compared to the value of investments in the first period , where describes the regression coefficients estimated that the total national investments in the private sector , has taken a growing trend at an annual rate significantly

statistically , amounted to about 3.56 billion pounds , an increase of 12.5 % on as average for the first period (1985-1994) , and has taken an increasing trend at an annual rate of around 1.83 billion pounds , and an annual increase amounted to 4.84 % of the average national investments in the private sector during the second period ( 1995-2012 ).

### **3.2.3 The contribution of public sector investment to the national investments :**

the contribution of national investments in the public sector of the national total investments in Egypt during the first period ( 1985-1994 ) ,has taken an increasing trend to 2.33%, and the annual rate of decreasing about 3.75 % of the average that contribution during the first period , but during the second period (1995-2012) shows that the contribution of national investments in the public sector to the total investments, has negative impacted as a result of the application of the policy of liberalization of foreign trade, where took a general trend decreasingly reached 4.22%, and an annual increase estimated 7.7 % of the average of that contribution during the second period.

### **3.2.4 The contribution of private sector investment to the national investments :**

the contribution of total investments in the private sector of the national total investments in Egypt during the first period ( 1985-1994 ) , taken in the direction of decreasing amounted to 2.33 % , and the annual rate of decreasing trend about 6.15 % of the Average that contribution during the first period , but during the second period (1995-2012) shows that the contribution of national investments in the private sector to the total investments of nationalism, has positively impacted as a result of the application of the policy of foreign trade liberalization, where I took a general trend increasingly reached 4.22 % , and an annual increase estimated 9.33 % of the average of that contribution during the second period

### **3.2.5 The impact of Egypt's joining to the WTO on agricultural investments in the public sector:**

The total agricultural investments in the public sector at current prices 0.99 billion pounds as average the first period, increased to 3.06 billion pounds as average for the second period , with an increase of 206.1 % , compared to the value of investments in the first period ,the agricultural investments in the public sector in Egypt during the first period , has taken a general trend was statistically significantly increased 0.049 billion pounds and an

annual increase of 5.0% , from an average agricultural investments in the public sector during the first period, and took an increasing trend was statistically significant 0.77 billion pounds, with an annual increased rate amounted to 2.55 % of the average agricultural investments in the public sector during the second period (1995-2012). From these results it is clear that the policy of the foreign trade liberalization have a significant impact on the promotion of the public sector, and the liberalization of the agricultural sector from the constraints that hinder it, to assist in the implementation of projects that are working to achieve the goals of agricultural economic development.

### **3.2.6 The impact of Egypt's joining to the WTO on agricultural investments in the private sector :**

The total agricultural investments in the private sector at current prices 0.76 billion pounds as average of the first period (1985-1994), increased to 4.08 billion pounds as average the second period (1995-2012), with an increase of 434.1 % compared to the value of investments in the first period. The agricultural investments in the private sector not affected statistically policy of the foreign trade liberalization, and in accordance with (chow test), and turns out to be significantly this test, so function was estimated time trend year so variable , during the entire period of the study (1985-2012) , and show moral model statistically and according to the value (F) calculated , where describes the regression coefficients estimated that the total agricultural investments in the private sector , took a general trend growing at an annual rate moral statistically reached 0.26 billion pounds , a growth rate of 9.93 % ( average for the two periods of study ) and the reason for the continued increase in agricultural investments in the private sector to the policy pursued by the government to encourage investment in the private sector , and the expansion of the establishment of small and regrouped in industrial parks , agricultural , and set up industrial areas specialized for processing agricultural products , and encourage the private sector in agriculture , and the liberalization of the agricultural sector from the constraints that hampered to help in the implementation of projects , and working to achieve the goals of agricultural economic development.

### **3.2.7 The contribution of the public agricultural sector investments for agricultural investment:**

the contribution of public sector investment to agricultural activity in Egypt, has taken in the direction of decreasing statistically significant was 2.45%, and decreased by an annual rate of 4.93% of the average of that contribution during the study period.

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**3.2.8The contribution of private agricultural sector investment in total agricultural investments:**

the contribution of private sector investment to agricultural activity in Egypt during the study period, took a general trend decreasingly significant statistically amounted to 2.45%, and the rate of decline in annual rate of about 4.93% of the average of those contributing through the study period.

**3.2.9The contribution of agricultural investments in the total national investments**

the contribution of agricultural investments in the total national investments during the first period (1985-1994), taken in the direction of decreasing statistically significant was 0.012%, and the annual rate of decrease of approximately 0.17% of the average of those contribution during the first period ( 1985-1994 ).

During the second period (1995-2012) shows that the contribution of agricultural investments in the total national investments, positively impacted as a result of Egypt's joining to the WTO, which has taken an increasing trend statistically significant, was 0.01%, and the rate of annual increase of 0.05%, the average of that contribution during the second period

**3.3 The impact of Egypt's joining to the WTO on the structure of the agricultural development investments horizontal and vertical farming:**

the vertical development investments not affected statistically according (chow test) to structural changes, showing lack of moral of this test, and therefore was estimated function of time trend year so variable during the full period of the study (1985-2012), and show moral model statistically and according to the value (F) calculated, on the other hand, said the results contained in the same table that the foreign trade liberalization policy has an impact on investments in the agricultural development of horizontal and its contribution to the total agricultural investments, and also contribute to development investments horizontal and vertical in agricultural investments, and therefore has been to use dummy variables, and the derivation of the first period ( 1985-1994), and the second period (1995-2012), and also shows a statistically significant sample, according to the value of (F) calculated , The most important results which have been obtained.

**3.3.1 The impact of Egypt's joining to the WTO on horizontal agricultural investments:**

the horizontal agricultural investments in Egypt during the studied period, took a general trend increasingly significant statistically amounted to 3.08 million pounds, and an annual increase of 0.75% of the average horizontal agricultural investments, and took a general trend in increasingly moral Statistically amounted 2.46 million pounds, and an annual increase of 0.44% during the period (1995-2012), and this means that the investment projects in the field of horizontal expansion is considered unattractive in itself to invest Arab and foreign, due to requests from the investments are high, is to set up facilities Public and reclamation operations itself, in addition to the length of time to get a return.

**3.3.2 The impact of Egypt's joining to the WTO on vertical agricultural investments:**

the vertical agricultural investments in Egypt, took the general trend in increasingly significant statistically, amounted to 19.48 million pounds, and an annual increase of 4.45% over the full period of the study (1985-2012), generally can say that the increase in investments vertical agricultural expansion, may be due to the increased volume of domestic investment, and directed to complete the implementation and development of natural resources at the level of governorates of the republic, such as the development projects in the provinces of North and South Sinai, and the South Valley, and the intensification of agricultural production province north level.

**3.3.3 The impact of Egypt's joining to the WTO on the contribution of investments in vertical agricultural expansion for agricultural investment:**

the expansion of agricultural investments during the first period (1985-1994), took the overall trend was statistically significant increased 4.58%, and an annual increase of 9.68% of the average of that contribution during the first period , during the second period (1995-2012) associated with Egypt's accession to the WTO, turned out to be negatively affected, as taken in the direction of decreasing statistically significant was 3.07%, and decreased by an annual rate of 6.16%.

**3.3.4 The impact of Egypt's accession to the WTO on the contribution of the horizontal expansion agriculture investments for agricultural investment:**

the expansion of horizontal agricultural investments during the first period (1985-1994) has taken a decreasing trend was statistically significant 4.58%, and decreased by an annual 8.68%, from an average of that

contribution during the period First, during the second period (1995-2012) associated with Egypt's accession to the WTO, was affected positively taken as a general trend was statistically significant increased 3.07% and an annual increase of 6.12% of the average, which may be due to Egypt's interest to work to increase the space reclaimed, and reclamation of new land, and increase the contribution of investment allocated to them,

### **3.4 Factors affecting on the agricultural investment in Egypt:**

Distributed agricultural investments between the private and public sectors , and each different in terms of the adoption of the first , mainly on the profit motive , in addition to the government's inability to influence this type of investment directly , as it is limited to the role of the government to develop policies that aim to influence non- directly on the productive establishments own achieve the development goals , and the way that help to maintain the general level of prices , one of the pillars of the development process is to encourage the private sector , and to provide all the ingredients and potential to play an active role in the completion of programs of economic and social development , and this does not mean forgetting about the role of government administration policy , but means the use of economic and social indicators to guide community resources and energies to the track , while public investment is subject entirely to the control of the government , and this type of investment is used as a supplement to cover the deficit in private sector investment. The next section deals with the study of some of the factors affecting the total agricultural investments during the period (1985-2012) , was the characterization standard model includes a set of variables, are supposed to be having an impact on agricultural investments, are: agricultural income (X1), gross domestic savings (X2), final consumption (X3), interest rate (X4), the value of agricultural exports (million pounds) (X5), the return on investment in the agriculture sector (X6), crop area in thousand feddans (X7), space reclaimed thousand acres (X8), Total public sector investment billion pounds (X9), the proportion of agricultural exports to agricultural imports (X10), GDP (X11), the exchange rate (X12), agricultural income / GDP (X13), and finally the policy of foreign trade liberalization (X14 ).

To extrapolate the model parameters, the study estimates the investment functions , using stepwise regression method Step-Wise Regression, in order to avoid the problem of double linear "Multi co linearity" existing between the independent variables

### **3.4 Estimate of total agriculture sector investment Function:**

Function was estimated the total agriculture sector investment in the image of semi logarithmic and logarithmic , was chosen as the image logarithmic

where it expresses the best of the images used , describes the results of estimating a function of agricultural investments moral model statistically significant at the level of 0.01, and illustrates the coefficient of determination around 97% of changes in agricultural investment due to a change in the factors included in the function , namely:

$$Y_t = 3.65 \ln x_1^{0.04} \ln x_4^{-198.2} \ln x_5^{0.28} \ln x_6^{0.31} \ln x_8^{169.85} \ln x_{13}^{0.25} \ln x_{14}^{86.03}$$

$$(2.34)^* \quad (12.7)^{**} \quad (-8.01)^{**} \quad (3.03)^{**} \quad (2.5)^* \quad (12.75)^{**}$$

$$(2.47)^* \quad (3.99)^{**}$$

$$R^2 = 0.97 \quad F = (137.9)^{**}$$

Where: :

Y = the estimated value of agricultural investment in million pounds seen in t.

X1 = farm income ( million pounds ).

X4 = Interest Rate (% ).

X5 = agricultural exports (million pounds).

X6 = Return the agriculture sector (pounds).

X8 = reclaimed area (thousand feddans).

X13 = the proportion of agricultural income / GDP

X14 = dummy variable ( 1985-1994 ) = 0 ,( 1995-2012 ) = 1.

Where t = 1, 2....., 27.

Figures in brackets ( ) and the bottom of the regression coefficients indicate the value of (t) calculated

( )\* ( )\*\* Refers to the moral at the level of, 0.05, 0.01, respectively .

It emerged from the previous equation that increase farm income by 1% , lead to increased investments in agriculture by 0.04 % , and increased the interest rate by 1% leads to a lack of agricultural investment increased by 198.2 % , and increase agricultural exports by 1% leads to increased investments in agriculture by 0.28 % , also increase the return on investment in the agriculture sector by 1% leads to increase investments in agriculture by 0.31 % , and increase the space reclaimed by 1% leads to increase investments in agriculture increased by 169.85 % , as well as the increase in the proportion of agricultural income of the GDP by 1% leads to increase agricultural investments 0.25% .The results showed the presence

of Egypt's joining to the WTO on the total investments in agriculture, where the application of such a policy has helped to increase investment by about 86.03 million pounds. It turns out that the factors affecting the agricultural investments are arranged according to their importance in increasing investments are: space reclaimed , the policy of foreign trade liberalization, the return on investment in the agriculture sector , agricultural exports , the proportion of the income of agricultural GDP , agricultural income , respectively , show that the rate of interest is responsible for decline in agricultural investments , a result consistent with economic logic , so they have to go up the flexibility of investments for the interest rate , because the big change in the investment generates a change bigger income.

#### **4. CONCLUSION**

Investment is considered one of most tools for implementation the agricultural development in Egypt ,because its play an important role in increasing agricultural economic growth ,especially in the shade of the trade liberalization policy , and encouraged the private investment , for achievement agricultural development , either in the vertical or horizontal expansion programs . The problem of this study and its objective focused on the impact of Egypt's accession to the WTO on the investment at the national and agricultural level and the public and private investment in both sides. The results of the study showed that the impact of Egypt's joining to the WTO has no statistical effect on the national investment in Egypt, and the national investment at the level of public sector while has statistical effect on the national investment at the level of private sector, and the relative contribution of them with respect to the national investment.

The results of the impact of Egypt's joining to the WTO on agricultural investment showed that no statistical effect on the agricultural investment in Egypt, agricultural investment in private sector and the contribution of the public and private sector to agricultural investment, whiles there was a statistical effect on the agricultural investment in public sector and the contribution of agricultural investment to the national investment.

Finally, the impact of Egypt's accession to the WTO has no statistical effect on the vertical investment, whiles was statistical effect on the horizontal investment and the relative contribution of them with respect to the agricultural investment. The study recommended by increasing agricultural investment, in both vertical and horizontal sides, for fulfillments of requirement of agricultural development

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Al-Azhar. J.Agric.Res., Vol.19(june)2014

أثر انضمام مصر لمنظمة التجارة العالمية على استثمارات القطاع الزراعي  
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### الملخص

تعتبر الاستثمارات الزراعية أحد أهم الأدوات اللازمة لتنفيذ التنمية الزراعية في مصر، حيث تلعب دوراً هاماً وفعالاً في تحقيق نسبة مرتفعة من النمو في القطاع الزراعي سواء في برامج التوسع الرأسي أو الأفقي وخاصة في ضوء انضمام مصر إلى منظمة التجارة العالمية، وتهدف الورقة البحثية إلى الإجابة عن مجموعة من التساؤلات أهمها: ما هو أثر انضمام مصر لمنظمة التجارة العالمية على الاستثمارات القومية وكذلك على استثمارات القطاع العام والخاص في القطاع الزراعي؟ وما هي أهم العوامل المؤثرة على الاستثمار الزراعي في مصر بعد انضمامها لمنظمة التجارة العالمية؟ وقد اعتمد البحث على بعض أساليب التحليل الكمي مثل الانحدار الخطي البسيط والانحدار المتعدد بالاستعانة بأسلوب تحليل الانحدار المتعدد المرحلي Step-Wise

Regression لاختيار أفضل المتغيرات التفسيرية وكذلك لتلافي مشكلة الازدواج الخطي، وكذلك المتغيرات الصورية (الثنائية) ، كما تم استخدام اختبار تشاو (Chow test). وقد أوضحت النتائج أن هناك أثر معنوي لانضمام مصر لمنظمة التجارة العالمية على اجمالي الاستثمارات الزراعية ، حيث أدى ذلك الى زيادة الاستثمارات بحوالي ٨٦,٠٣ مليون جنية سنويا . كما أوضحت نتائج البحث أن أهم العوامل المؤثرة على الاستثمارات الزراعية مرتبة وفقا لأهميتها في زيادة تلك الاستثمارات هي: المساحة المستصلحة ، انضمام مصر لمنظمة التجارة العالمية ( متغير صوري) ، عائد الاستثمار في القطاع الزراعي، الصادرات الزراعية ، نسبة الدخل الزراعي للنتائج المحلي الاجمالي ، الدخل الزراعي على الترتيب، وأنه بزيادة كلا من الدخل الزراعي ، الصادرات الزراعية ، عائد الاستثمار في قطاع الزراعة ، المساحة المستصلحة و نسبة الدخل الزراعي للنتائج المحلي الاجمالي بنسبة ١% فإن ذلك يؤدي إلى زيادة الاستثمارات الزراعية بنسبة ٠,٠٤% ، ٠,٢٨% ، ٠,٣١% ، ١٦٩,٨٥% ، ٠,٢٥% على الترتيب ، وبزيادة سعر الفائدة بنسبة ١% فن ذلك يؤدي الى نقص الاستثمارات الزراعية بنسبة ١٩٨,٢%، حيث أن ارتفاع سعر الفائدة يعمل على تراجع حركة الاستثمارات ، بينما انخفاض سعر الفائدة يؤدي الى تنشيط عجلة الاستثمارات ، ولذلك يجب أن ترتفع مرونة الاستثمارات بالنسبة لسعر الفائدة لأن التغير الكبير في الاستثمار يولد تغيرا أكبر في الدخل . ويوصى البحث بضرورة العمل على خفض سعر الفائدة وزيادة حجم الصادرات الزراعية لزيادة العائد على الاستثمار الزراعي لدعم المزارعين، واستخدام التكنولوجيا الحديثة لزيادة إنتاجية الوحدة الزراعية الأرضية حتى يمكن تأكيد الأثر الإيجابي لانضمام مصر لمنظمة التجارة العالمية على زيادة الاستثمار الزراعي .