

## Economic analysis of the most important challenges facing agricultural investment in Egypt

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**Abstract:** There are many challenges facing agricultural work and increasing investment rates in it. The research aimed to study the role of agricultural investment in economic development in Egypt, through studying the development of investment. Domestic and foreign agricultural and the relative importance of each, determining the extent of the importance of agricultural capital formation in economic growth using the Rostow and Harrod-Domar model and the two gaps model, analyzing the impact of agricultural investment on agricultural economic development, and identifying the most important strengths, weaknesses, opportunities and threats facing agricultural investment in Egypt. The most important results of the research are the need to mobilize local savings and direct them to productive investments. It is clear from the results of SWOT Analysis that The most important strengths that must be developed and exploited in the development of agricultural investment: the increase in the value added to the agricultural sector in the private sector, the contribution of the agricultural sector to increasing the employment rate.

Among the most important opportunities for developing agricultural investments are: the global and local trend of increasing interest in developing the agricultural sector and increasing agricultural investment rates, concluding many international agreements between Egypt and many countries of the world, increasing investment spending on infrastructure, and the presence of an institutional structure that achieves interconnection between sectors of the national economy. Global trends in the use of smart agriculture and the digital economy in mechanizing agricultural operations, food and agricultural manufacturing, and making permanent amendments to the laws governing investment with the aim of increasing the attraction of foreign and local private investments.

**Key words:** Agricultural investment, sustainable development, agricultural development, economic growth.

### I.INTRODUCTION

The issue of economic development is an important issue in economic thinking that concerns the evolution and progress of societies, and economic analysis may focus on the exogenous causal relationship between the rate of accumulation of physical capital and the rate of growth of GDP. The dominant strategic variable in achieving the goal of development was massive investment spending, and if developing countries succeeded in providing savings resources and invested them in productive capacities, they would break down the barriers of underdevelopment and move forward. That did not negate the importance of other factors that led to the development of societies. Agricultural investment is the main driver of economic development. Increasing the rate of agricultural investment is one of the most important objectives of the 2030 Sustainable Development Strategy, as well as of Egypt Vision 2030. Most of the world studies are concerned with studying the possibility of increasing agricultural investment rates, particularly in developing countries, since they are the country's most affected by various global crises, such as climate changes, the spread of the Covid 19 virus and the Russian-Ukrainian war. The agriculture sector is one of the leading sectors in the Arab Republic of Egypt, contributing about 11.9% to GDP in 2021, and 19.2% of the total workforce in 2021. The

second half of the past century has witnessed extensive attention to issues of direct foreign investment by economists, businessmen and governments, given the role of direct foreign investment in supporting the growth of developing economies, particularly during the last two decades of the twentieth century, the beginning of the third millennium, where there has been a significant increase in the volume of investment flows to developing countries.

Direct investment has given a significant boost to global integration, as it constitutes an important source of external financing, and can also be seen as an indication of the openness and resilience of the economy to global developments in the shadow of globalization and the multinational control of the company over the movement of goods, services and markets, as well as direct foreign investment as a source of increased efficiency of human capital, technological change in developing economies, and thus becoming a catalyst for economic growth. As a result, governments are competing with each other to attract more direct foreign investment flows. Many decision makers in developing countries are extremely interested in understanding and examining the factors and determinants that make them attractive to direct foreign investment flows. Nevertheless, the agricultural sector did not share in those trends in Egypt, where total direct foreign investment as an inflow into the Arab Republic of Egypt amounted to approximately \$13.9 billion in 2021 and the value of foreign direct agricultural investment was about \$4 million for the same year), which represents about 0.03%, which is not in line with the economic importance of the agricultural sector. Agricultural investment is ranked later among the various investments in other sectors. Identifying the most important strengths, weaknesses, opportunities and threats to agricultural investment is one of the most important things to be taken into account when making investment decisions, both at the individual and State levels, so that they can achieve development goals.

Despite the importance of the agricultural sector in the Egyptian economy, since the development of the agricultural sector leads to the development of other sectors, it is the source of raw materials for many sectors, such as industry, trade, transport and tourism. Nevertheless, the agricultural sector has recently faced many challenges and the decline in growth in the agricultural sector has been a burden on the process of sustainable development.

**The problems of research are:**

- Reduced proportion of agricultural investment, with agricultural investment accounting for about 4.61 per cent of total aggregate investment during the period (2005-2021).
- The volume of foreign investment directed to the agricultural sector has declined, with foreign investment in the agricultural sector accounting for 0.38% of total foreign investment as an average for the period 2005-2021, which is very low.
- The depreciation of the local currency vis-à-vis foreign currencies.

**Research objectives:** The main objective of the research is to assess the role of investment as a major driver in the development of the agricultural sector as one of the main sectors of the economic architecture by:

- Study the evolution of domestic and foreign agricultural investment of their relative importance.
- Analysis of the impact of agricultural investment on agricultural economic development.
- Identify the main strengths, weaknesses, opportunities and threats to agricultural investment in Egypt.

## II. Methodology

The research relied on the use of descriptive and quantitative analysis methods, including general time trend equations and the growth rate of domestic and foreign agricultural investment. The Rostow model and the Harrod-Domar economic growth model were also used to determine the agricultural economic situation, and the Two Lags model (Healey) was used to determine the extent to which The need for local and foreign financing that helps bring about agricultural economic growth. SWOT Analysis was also used to identify the most important

strengths, weaknesses, opportunities and threats facing the development of agricultural investments in Egypt.

### III. Results and Discussions

#### 3.1. The relative importance of total domestic and foreign agricultural investments during the period (2005-2015):

It is clear from Table No. (1) that the average value of total investments amounted to about \$37.76 billion during the period (2005-2021), ranging between a minimum of \$16.69 billion in 2005, and a maximum of about \$57.87 billion in 2019.

The average value of total agricultural investments reached about \$1.7 billion during the period (2005-2021), representing 4.63% of the total value of total investments, and ranging from a minimum of \$0.87 billion in 2012, amounting to about 2.2% of the total investments in that year, and a maximum of About \$3.28 billion in 2021, representing 6.2% of the total investments.

The growth rate in total investments during the study period (2005-2021) was about 4.9%, and about 5.4% in agricultural investments.

It is also clear from Table No. (2) that the average value of total direct foreign investments as an inflow into the Arab Republic of Egypt amounted to about 11.9 billion dollars during the period (2005-2021), ranging between a minimum of about 3.9 billion dollars in 2005 and a maximum of 17.8 billion dollars. billion dollars in 2008, and the average value of foreign investments in the agricultural sector amounted to about 0.044 billion dollars during the period (2005-2021), representing about 0.38% of the total foreign investments, and the minimum amounted to about 0.0007 billion dollars in 2016, representing 0.01%, and the limit reached The maximum amount was about \$0.26 billion in 2010, representing a rate of 2.4% for this year.

The growth rate in total foreign investment was 4.5%, and the growth rate in agricultural foreign investment was 1.4%.

**Table 1: The relative importance of agricultural investments out of total investments during the period (2005-2021), value in billion dollars.**

Years	Total Investments	Agricultural Investments	Relative Importance %
2005	16.69	1.28	7.7
2006	20.16	1.40	6.95
2007	27.54	1.38	5
2008	36.61	1.48	4
2009	35.52	1.24	3.5
2010	40.82	1.19	2.9
2011	38.37	1.14	3
(2011-2005) Average	30.82	1.3	4.72
2012	40.08	0.87	2.2
2013	34.81	1.21	3.5
2014	37.13	1.63	4.4
2015	37.88	1.52	4
2016	44.20	1.84	4.2
Average(2016-2012)	38.8	1.4	3.64
2017	29.38	1.28	4.3
2018	40.84	2.70	6.6
2019	57.87	2.93	5.06
2020	51.14	2.63	5.2

2021	52.91	3.28	6.2
Average(2021-2017)	46.4	2.57	5.48
Average(2021-2005)	37.76	1.7	4.63
Growth Rate	(4.9)**	(5.4)**	

**Source:** Collected and calculated from data from the Ministry of Planning and Economic Development, Economic and Social Performance Monitoring Report, various issues.

**Table 2: The relative importance of agricultural foreign investments out of the total value of foreign direct investments within Egypt during the period (2005-2021) Value in billion dollars**

Years	Total foreign direct investment	Foreign direct agricultural investment	Relative importance%
2005	3.9	0.002	0.051
2006	6.1	0.005	0.082
2007	11.8	0.01	0.085
2008	17.8	0.012	0.067
2009	12.8	0.076	0.594
2010	11	0.26	2.364
2011	9.6	0.03	0.313
Average (2011-2005)	10.43	0.06	0.51
2012	11.8	0.08	0.678
2013	10.3	0.14	1.359
2014	10.89	0.025	0.230
2015	12.55	0.002	0.016
2016	12.53	0.0007	0.01
Average (2016-2012)	11.61	0.05	0.51
2017	13.3	0.021	0.158
2018	13.16	0.015	0.114
2019	16.39	0.045	0.275
2020	15.8	0.016	0.101
2021	13.9	0.004	0.029
Average (2021-2017)	14.51	0.02	0.14
Average (2021-2005)	11.98	0.044	0.38
Growth Rate	** (4.5)	-(1.4-)	-

**Source:** Central Agency for Public Mobilization and Statistics, Egypt Bulletin in Numbers, various issues.

### 3.2. The relationship of agricultural investment to economic growth:

One of the most important growth models that explain the importance of saving and investment and then capital accumulation and its role in influencing growth is Rostow's stages of growth model to determine the stages of development of societies. This model has helped many developing countries in the development process, and also one of the most important and famous of these models is the Harrod model. - Domar, which helps determine investment and savings rates to achieve the targeted economic growth rate that is intended to be achieved to effect the development process.

#### 3.2.1 Rostow's growth stages:

Rostow believes that countries move from a state of backwardness to a state of development and progress in the form of a series of stages of economic development. He divided the stages that each society goes through into five stages.

##### A- Traditional Society stage:

It is a simple, primitive society that relies mainly on the agricultural sector as a source of income. It is a closed society that is characterized by barter and self-sufficiency. It is characterized by a

state of economic stagnation and the rates of increase in production are limited and less than the rates of increase in population.

#### B- Preconditions for Take-Off:

This stage is characterized by economic, political and social changes and is therefore transformed through:

- The emergence of a new political system that seeks to achieve economic progress and achieve national interests.
- The emergence of a business elite that desires to bring about economic progress, by mobilizing savings and innovations, as well as taking risks, all with the motive of making profits.
- Applying modern production techniques in agricultural and industrial activities, as well as paying attention to training and qualifying workers.
- The emergence of a group of financial institutions, such as banks and insurance companies, working to mobilize savings and direct them to invest in all activities, thus contributing to increasing capital accumulation in society.
- Growth of internal and external trade activity.

These changes usually occur slowly and on a limited scale due to traditional means of production and the control of traditional values, so it is a transitional stage from traditional society to the launch stage.

#### C- Take-Off stage:

It is the decisive stage in the process of economic growth and progress where society is able to overcome all obstacles and problems that stand in the way of progress and achieve self-economic growth. This stage is characterized by the occurrence of industrial revolutions that involve radical changes in the means of production, the use of modern technology, and the emergence of large-scale industries that... It enjoys economies of scale and has a positive impact on agricultural activity, in addition to favorable changes in the social, cultural and institutional systems and values that help achieve growth rates. This stage includes the following changes:

The net investment rate increased from less than 5% of national income to 10% of it.

- The emergence of a group of leading industries that are growing at high rates.
- Growth and expansion of the activity of financial institutions that work to mobilize savings and direct them to investment in all activities.
- Progressing the transportation sector, as well as expanding the scope of internal and external markets.
- The emergence of political, social and structural frameworks that are conducive to and conducive to economic growth.

Rostow believes that this stage extends over two or three decades, after which society moves into the growth stage.

#### D- Drive to Maturity stage:

It is the stage in which society can produce anything it desires to produce, and in which society effectively applies constantly evolving technology, and thus represents a period of consolidation for sustained economic growth, and the economy is also able to withstand unexpected shocks and is able to absorb them, and this stage may continue until About four decades ago, Rostow believes that this stage is characterized by the following characteristics:

- Increasing the level of industrialization in society, in addition to the rapid technological progress that is used in all aspects of the economy, in addition to the emergence of many electrical and chemical industries with high added value.
- Increasing society's human capital and raising its level of performance, represented by skilled labor and high administrative and organizational capabilities.
- Society exploits its resources as efficiently as possible and produces many goods and services.
- Increase savings, and then investments, from 10% to 20% of national income.
- An increase in the growth rate of national income at a rate exceeding the rate of population growth, thus increasing the per capita share of national income.
- Increasing the degree of openness to the outside world and achieving a surplus in foreign transactions.

#### E- The stage of high mass of consumption:

This stage represents the highest stage of growth and development, and is characterized by the following characteristics:

- Increasing income levels so much that necessities such as food, housing, and clothing no longer represent the main goals of individuals.

Society is increasingly interested in sectors and activities that produce durable and luxury consumer goods such as cars, refrigerators, and electronics.

- Directing a greater amount of community resources towards supporting social welfare, leading to increased social security for the individual.
- Increasing the proportion of urban population at the expense of declining proportion of rural population.
- Reducing average working hours and expanding the use of leisure time in the fields of entertainment.

We conclude from Rostow's model a number of important points that must be taken into account when planning economic policies to achieve the desired growth rates:

- It is necessary to mobilize domestic savings and direct them into productive investments.
- Focusing on leading sectors and activities. This is due to the circumstances of each country and the country's comparative advantage.
- The need to pay attention to financial institutions in order to mobilize financial resources, whether local or foreign.
- Working to provide social, cultural and political conditions conducive to the process of development and economic progress.

### 3.2.2. Harrod-Domar model:

According to what was stated in the Rostow model, which is the necessity of mobilizing domestic savings and resources, whether local or foreign, the Harrod-Domar model explains the relationship between the rate of economic growth, community savings, and capital accumulation, as the Harrod-Domar model has become a basis on which aid donor countries rely, as well as developing countries. It uses it to determine its capital requirements to achieve the targeted economic growth rate

**Economic growth rate** = saving factor / capital stock factor

**Savings coefficient** = change in saving/change in domestic product

**Capital coefficient** = change in capital / change in domestic product

Change in capital = investment

It is clear from the data in Table No. (3) that the rates of change in the gross domestic product according to the Harrod-Domar model were negative in some years, which indicates that the agricultural sector in those years was in a state of stagnation and the situation needed to amend some economic policies to improve the conditions in it, and it was The rate of change in GDP is positive in some years, which means the situation is improving despite the low value of change, which means slow rates of change for the better. Based on the results of the Harrod-Domar test, the economy needs to increase investment rates so that the country can progress towards achieving development goals. The extent of a country's need for local or foreign funding can be determined using the two gaps model.

**Table 3: Estimation results of the Harrod-Domar model during the period (2005-2021) Values in billion dollars.**

Years	Agricultural domestic product	Agricultural savings	Agricultural investment	Savings factor	Capital coefficient	The rate of change in agricultural domestic product according to the Harrod-Domar model
2005	13.03	0.02	1.28			
2006	14.25	0.02	1.4	0.0019	1.148	0.0016
2007	17.71	0.02	1.38	- 0.0016	0.399	0.0041-
2008	20.75	0.02	1.48	0.0007	0.487	0.0014
2009	24.41	0.01	1.24	- 0.0024	0.339	0.0069-
2010	28.35	0.08	1.19	0.0169	0.302	0.0560
2011	31.86	0.03	1.14	- 0.0124	0.325	0.0382-

2012	30.75	0.04	0.87	- 0.0103	0.784-	0.0132
2013	30.22	0.07	1.21	- 0.0401	2.283-	0.0176
2014	33.82	0.08	1.63	0.0053	0.453	0.0117
2015	31.61	0.07	1.52	0.0071	0.688-	0.0104-
2016	35.95	0.07	1.84	0.0012	0.424	0.0027
2017	22.09	0.05	1.28	0.0020	0.092-	0.0211-
2018	27.83	0.03	2.7	- 0.0028	0.470	0.0060-
2019	35.1	0.02	2.93	- 0.0009	0.403	0.0021-
2020	43.06	0.02	2.63	0.0001	0.330	0.0003
2021	47.66	0.01	3.28	- 0.0041	0.713	0.0057-

**Source:** Hard-Domar model estimation results, collected and calculated from data from the Central Agency for Public Mobilization and Statistics.

### 3.2.3. Determining the extent of the country's need for local and foreign financing:

As a result of the decline in the value of domestic and foreign agricultural investment, and based on the results of the Rostow and Harrod-Domar model, the current agricultural economy needs to increase investment rates. Therefore, the Two gaps model was determined, as this model has been commonly used within economic growth models in recent years in order to determine the resource gap and which of these gaps is dominant, the domestic resources gap or the foreign trade gap, and this determination helps in making the right decision regarding which policies should be followed. To move towards economic progress, Healy's analysis was conducted to identify the country's need for foreign investments and the rate of capital, whether foreign or local, which helps in financing the process of economic development. Healy presented an treatment of the two-gap model, which is distinguished by showing the relationship between the size of the two gaps and the development of the national economy, and distinguishes Healy between the size of the two gaps viewed in an ex-post period, and the size of these two gaps viewed in an ex-ante future period.

A- The size of the two gaps viewed in an ex-post period:

Inflow of foreign capital = domestic resources gap (investment - saving) = foreign trade gap (imports - exports).

It is clear from the data in Table No. (4) that the domestic resources gap (investment - saving) is less than the foreign trade gap (imports - exports), during the period (2005-2021), and thus matching the two gaps requires increasing the value of agricultural exports, and it is also necessary to increase agricultural investments, that is, investment spending in the country to achieve the targeted economic growth rate, which means increasing the flow of domestic and foreign capital.

B- The size of the two gaps viewed in an ex-ante future period:

The model assumes that in the past period, congruence between the two gaps was not achieved. The reason for this lack of congruence is that decisions related to saving, investment, and imports are not made by the same individuals or bodies and are not subject to economic logic in their planning. This also indicates a lack of coordination among the agencies and individuals responsible for This is especially true in a society that does not adopt a comprehensive planning system, as is the case in most developing countries. Therefore, it is difficult to ensure that the two gaps are equal in the future period. The matching is due to the forces of supply and demand. Here the gaps are divided into two types:

- The dominant local resource gap:

In the event that the domestic resources gap is greater than the foreign trade gap, it is found that the domestic resources gap is dominant, and this means that there is a defect in following economic policies that encourage domestic investment. It is also due to the state's inability to import goods and services that contribute to increasing spending. Investment, and the correct decision here is for the state to follow directive policies to increase local investments and not attract foreign investment.

The foreign trade gap is dominant:

Most economists believe that the foreign trade restriction is the main restriction on the targeted growth rate for many developing countries due to the weakness of the domestic resources in those countries. If the foreign trade gap exceeds the domestic resources gap, it is the dominant gap, and there are two types of measures that we can take in this regard. To work to achieve the targeted growth rates, which are:

- Self-treatment:

To address this situation, local exports are increased or imports are reduced and imports are replaced with local production to reduce the foreign trade gap. This solution faces many difficulties related to external demand and local supply, such as studying foreign markets, the competitiveness of local products and other factors that help in increasing exports. . There are also many difficulties facing the import substitution process, the most important of which is the increase in the production cost of some products necessary for local investments, such as equipment and machinery, and also the lack of expertise and technical progress necessary to overcome the substitution stage.

- Foreign loans (foreign direct flow):

As a result of the difficulty of self-treatment, some developing countries resort to the second procedure, which is obtaining the necessary foreign financing to bridge the foreign trade gap through official and private foreign sources. Foreign financing must be appropriate to finance bridging the larger gap.

It is clear from Table No. (4) that the foreign trade gap is larger than the domestic resources gap, meaning that the foreign trade gap is dominant, and planners must coordinate between the last two options, which are self-treatment by increasing agricultural exports or reducing imports and replacing imports with local production.

It is clear from the results of the model that savings rates are low, so resorting to foreign financing and attracting foreign investments will lead to an increase in agricultural investment rates.

**Table 4: Annual development of both the domestic resources gap and foreign trade during the period (2005-2021), value in billion US dollars.**

Years	Agricultural investment	Agricultural savings	Local resource gap	Agricultural exports	Agricultural imports	Foreign trade gap
2005	1.28	0.02	1.26	10.66	19.84	9.19-
2006	1.4	0.02	1.38	13.75	20.63	6.88-
2007	1.38	0.02	1.36	16.19	27.06	10.87-
2008	1.48	0.02	1.46	26.24	52.79	26.55-
2009	1.24	0.01	1.23	24.31	45.05	20.74-
2010	1.19	0.08	1.11	27.25	52.89	25.62-
2011	1.14	0.03	1.11	31.56	62.21	30.65-
2012	0.87	0.04	0.83	30.42	71.97	41.56-
2013	1.21	0.07	1.14	28.80	65.71	36.90-
2014	1.63	0.08	1.55	27.35	73.31	45.95-
2015	1.52	0.07	1.45	19.08	64.57	45.51-
2016	1.84	0.07	1.77	22.50	71.40	48.90-
2017	1.28	0.05	1.23	26.30	66.60	40.30-
2018	2.7	0.03	2.67	29.30	81.90	52.60-
2019	2.93	0.02	2.91	30.50	76.40	45.90-
2020	2.63	0.02	2.61	29.30	70.40	41.10-
2021	3.28	0.01	3.27	43.60	89.20	45.60-

**Source:** Healey test results for economic growth, collected and calculated from data from the Central Agency for Public Mobilization and Statistics.



### 3.3. Agricultural investment and sustainable development:

Agricultural investment must be compatible with the methodological frameworks contained in: the strategic goals for sustainable development 2030 (global or international goals), and the goals of the national agenda for sustainable development (Egypt Vision 2030). The importance of linking agricultural investment to the goals of those strategies is due to the fact that it is one of the tools for increasing the growth rate. Economic, as evidenced by the TWO GAPS MODLE, which recommends the necessity of mobilizing domestic savings resources and directing them towards investing in the agricultural sector and developing Egyptian exports.

#### 3.3.1. The extent to which agricultural investment contributes to achieving the goals of the United Nations Strategy for Sustainable Development 2030:

The Sustainable Development Goals are a global call to action in a spirit of partnership to eradicate poverty, protect planet Earth, and ensure that all people enjoy peace and prosperity. These goals were launched by the United Nations in the work of the seventieth session of the General Assembly in September 2015, and they consist of 17 goals that countries are committed to achieving by the year 2030. Achieving these goals enables us to improve life in a sustainable way for future generations. Implementation is carried out according to the priorities of each country, taking into account of the environmental challenges facing the entire world, and agricultural investment is one of the most important means of achieving those goals, as it contributes to achieving some goals directly or Indirectly, as described below:

A- Objectives that agricultural investment contributes to achieving directly:

- **Poverty eradication:** Increasing investments implemented in the agricultural sector contributes to increasing employment rates and thus reducing poverty rates, especially since they are concentrated in higher proportions in the Egyptian countryside, where the percentage of the population suffering from poverty in the Egyptian countryside in Upper Egypt represents about 30% of the total population, where the poverty rate reached about 28.5% in 2021 in Egypt.
- **Eliminate hunger:** The basic work of agricultural investment is to provide food, as the agricultural sector is the only source of food provision and increasing sponsorship investments is one of its most important aspirations to achieve food security, especially in light of the many threats facing the world recently, as about 12.2% of the population of the Near East and North Africa region suffers from Food shortages, and about 34.7% of the region's population suffers from food insecurity.
- **Decent work and economic growth:** The agriculture sector contributes about 12.47% of the total value of the domestic product, and agricultural exports represent about 20.37% of the total value of total exports in 2021, so the agriculture sector and agricultural investments are characterized by efficiency, which makes it an important member in achieving development goals.
- **Climate action:** Vegetation cover is one of the most important ways to reduce climate change and increase agricultural investment, which works to reduce desertification, especially in African countries that suffer from drought and extremely high temperatures, which threatens all aspects of natural life.
- **Life under water (fish economy):** Developing underwater life and improving fish production is an integral part of agricultural investment, and increasing fish wealth helps achieve food security, and provides fish in terms of quantities and prices, which allows providing the necessary elements for individuals' food.
- **Life on land:** A broad goal that explains many of the previous goals. It was found that increasing agricultural investment rates in an efficient manner will improve many of the living requirements of the largest possible number of people, as 55.5% of the population lives in the countryside in Egypt, and about 19.2% of the total number of workers work in the agricultural sector in 2021.
- **Establishing partnerships to achieve goals:** Given the spread of agricultural institutions throughout the Republic, as the agriculture sector is the main support for all sectors as it is involved in many manufacturing industries and is an essential component of foreign trade, and in light of the world's interest in protecting human rights in all aspects, especially ensuring food security and eliminating hunger, all... This makes agricultural investment one of the activities that can connect many parties to establish partnerships, whether at the local, regional or international levels.

#### 3.3.2. Objectives that agricultural investment contributes to achieving indirectly:

- **Good health and well-being:** Public health is linked to good nutrition and ensuring the provision of sufficient daily quantities of food to an individual. Also, many of the agricultural outputs are the active ingredient in the pharmaceutical industry, so there is a strong relationship,

even if not direct, between investment in the agricultural sector and achieving the goal of good health.

- **Reducing inequalities:** Improving the livelihoods of farmers and the Egyptian countryside inevitably leads to an increase in the convergence in wage rates and an attempt to reduce inequality between segments of society, especially since it is a goal that threatens the national security of any country. Egypt has witnessed its exposure to a number of popular revolutions throughout its history, the most recent of which was the January 2011 revolution, which It called for equality and social justice among all segments of society, so improving the status of agricultural investments works indirectly towards achieving that goal.

- **Sustainable cities and communities:** Agricultural investment in all its various fields, whether land reclamation, plant or animal production, or fish farming. All types of agricultural investments help maintain the sustainability of the resources used and sometimes even improve the quality of those resources.

- **Peace, justice and strong institutions:** The improvement of the conditions and incomes of individuals in all segments of society, especially since the conditions of rural people are the worst in African countries, and the development of the agricultural sector, which is considered the first sector in it, increasing the rate of agricultural investment will lead to the improvement and development of the majority of the population, and the income differences between individuals will decrease and move towards balance and equality, all of this. It would bring peace and justice to the region, reduce political tension in those countries, and increase the strength of institutions, whether governmental or civil.

**3.3.3. The extent to which agricultural investment contributes to achieving the goals of the National Agenda for Sustainable Development (Egypt Vision 2030):** Egypt Vision 2030 is the first step Egypt Vision 2030 is considered the first step to achieving comprehensive development in Egypt, as it links the present with the future, and draws clear development plans to achieve economic and social development and justice. The National Sustainable Development Agenda follows a comprehensive approach that relies on main and subsidiary goals that are fixed in the long term, but with variable inputs. It also works to develop partnerships between the government, civil society organizations, and the private sector, and aims to maximize investment. Benefiting from competitive factors and advantages, agricultural investment contributes to achieving some of these goals directly or indirectly, as follows:

**3.3.3.1 Objectives that agricultural investment contributes to achieving directly:**

- Improving the quality of life of the Egyptian citizen and improving his standard of living:

We are able to achieve this goal by linking it to achieving the UN sustainable development goals (eradicating poverty and eliminating hunger), both of which are directly related to agricultural investment, as improving and increasing agricultural investment rates ultimately works towards achieving that national goal.

- Justice, social inclusion and participation:

This goal is linked to achieving the two goals of the UN strategy (reducing inequalities and establishing partnerships to achieve the goals).

- Competitive and diversified economy:

This goal falls under the heading of decent work and economic growth, and investment in the agricultural sector is one of the most important sectors that increases Egypt's competitiveness, as agricultural exports represent about a quarter of Egypt's exports.

- An integrated and sustainable ecosystem:

It expresses each of the goals (life under water, life on land, sustainable cities and communities)

**3.3.3.3.2 Objectives that agricultural investment contributes to achieving indirectly:**

- Egyptian peace and security: From the results of PESTEL analysis, it was found that there are many political and social factors that affect agricultural investment. It was also found that achieving some political goals, the most important of which are safety and national security, may be mainly due to economic reasons. Improving the standard of living of individuals and achieving social justice will preserve the security and safety of the nation.

- Strengthening Egyptian leadership: Egypt has a special importance among the countries of the Arab world and the African world and at the international level because of its strategic location and historical reference. The expansion of agricultural investment and Egypt's progress in agriculture would restore Egypt's position after the periods of political and economic decline it went through. The development of the agricultural sector leads to To increase transactions and develop foreign trade, and thus Egypt returns to what it was as a strong commercial center, which is reflected in its political and strategic strength among the countries of the world.

### 3.4. SWOT Analysis (analysis of the strengths, weaknesses, opportunities, and threats) facing agricultural investment:

The most important strengths, weaknesses, opportunities and threats identified for agricultural investment were identified according to the SWOT Analysis.

SWOT analysis is an analytical method for strengths, weaknesses, opportunities, and threats that is used to analyze the general strategy, by analyzing the external and internal factors that may affect the sector or the system followed and restricting those factors to four factors:

- Strengths: They represent the strengths emerging internally from the system itself and the positives that characterize it.

Weaknesses: Weaknesses represent any internal deficiencies that already exist and limit the investment of opportunities.

- Opportunities: Opportunities are the external factors that arise from outside the sector and are represented by the external positives that encourage investment in the field.

Threats: These are external negatives that may lead to reluctance to invest in the field to be studied

**Table 7: SWOT Analysis results for agricultural investment**

strengths	Weaknesses
<ul style="list-style-type: none"> <li>- Availability of all basic production factors, including land resources, water resources, human resources, and technical expertise.</li> <li>- Increased value added to the agricultural sector in the private sector Most criteria for the efficiency of agricultural investment indicate that the agricultural sector is highly efficient in capital formation, as indicated by the results of the study.</li> <li>- High risk and uncertainty around production in the agricultural sector.</li> <li>- The high rate of trade deficit in the agricultural sector, which increases the burdens placed on that sector.</li> <li>- Weak financing directed to developing private investments in the agricultural sector.</li> <li>- Weak effectiveness of the performance of extension and planning institutions in that sector, and the disappearance of guidance messages related to agriculture.</li> <li>- Increasing the percentage of public sector participation in production despite the weak value added by the public sector when compared to the value added by the private sector.</li> <li>- Low degree of interconnection and coordination between agricultural institutions and each other, and between agricultural and non-agricultural institutions.</li> <li>- Distortions in agricultural markets and prices and failure to formulate fair price policies for agricultural products.</li> <li>- Lack of information about available investment opportunities, and lack of studies presented to define the feasibility of agricultural projects.</li> <li>- High rate of loss of agricultural resources and products.</li> </ul>	<ul style="list-style-type: none"> <li>- Availability of all basic production factors, including land resources, water resources, human resources, and technical expertise.</li> <li>- Increased value added to the agricultural sector in the private sector Most criteria for the efficiency of agricultural investment indicate that the agricultural sector is highly efficient in capital formation, as indicated by the results of the study.</li> <li>- The agricultural sector's contribution to increasing the employment rate.</li> <li>- The presence of a large organizational structure for the Ministry of Agriculture spread throughout the Republic.</li> <li>- Increasing the number of researchers and applied agricultural studies, in which the most important recommendations must be taken into account in a way that is compatible with the Egyptian conditions and capabilities to benefit from the results of scientific research.</li> <li>- The spread of agricultural colleges in regional universities in all governorates.</li> <li>- The existence of interconnected relationships between the agricultural sector and the non-agricultural sectors on a scale that covers most governorates.</li> </ul>

**Follow Table 7: Results of the SWOT Analysis for agricultural investment**

Threats	Opportunities
<ul style="list-style-type: none"> <li>- The impact of climate change has increased recently, which may lead to exposure to many problems, especially in the agricultural sector, such as desertification, and the difference in planting dates, and thus the difference in dates for all important agricultural operations such as irrigation, fertilization, and pest control.</li> <li>- The Covid-19 virus crisis, which affected the decline in investments in all productive sectors, including investment in the agricultural sector, which requires more effort to recover and improve conditions.</li> <li>- The Russian/Ukrainian war, which directly affected Egypt, as they are among the most important countries from which we import wheat and maize, and they are among the strategic crops that Egypt needs to import, as the self-sufficiency rate in wheat reaches 46.6% in 2021, and the self-sufficiency rate in maize is 46.6%. About 46% for the same year. There is a large food gap facing Egypt to meet the community's needs for the most important main crops.</li> </ul> <p>Liberalizing the foreign exchange rate, increasing the inflation rate, and raising interest rates are among the most important obstacles to investment in the agricultural sector.</p> <ul style="list-style-type: none"> <li>- Land fragmentation, encroachment on agricultural lands.</li> <li>- The spread of traditional methods of production.</li> <li>- The agricultural sector is far from digitization and the use of modern technology to improve the conditions and performance of that sector.</li> </ul>	<ul style="list-style-type: none"> <li>- The global and local trend of governments to increase interest in developing the agricultural sector and increasing agricultural investment rates, as it is the main support for all sectors. It is also the main source of human food and has the ability to achieve food security, especially in our current time when global crises are worsening, which threatens the world with major problems facing it. Human survival.</li> </ul> <p>There are many international agreements signed between Egypt and many countries of the world, which provide an opportunity for the possibility of cooperation between these countries by attracting investments towards the agricultural sector in Egypt. It is also a great opportunity to increase the rates of agricultural exports if the necessary elements are available to exploit these advantages.</p> <ul style="list-style-type: none"> <li>- Increasing investment spending on infrastructure, which will improve the environment and investment climate.</li> <li>- The presence of a large and well-established institutional structure in all sectors of society, spread throughout the Republic.</li> <li>- Global trends in the use of smart agriculture, the digital economy in the mechanization of agricultural operations, and food and agricultural manufacturing.</li> <li>- Making permanent amendments to the laws governing investment with the aim of increasing the attraction of foreign and local private investments</li> </ul>

Therefore, the research recommends the necessity of giving priority to the agricultural sector in the process of structural and economic reform, and paying attention to directing investments towards investing in projects that work to provide important agricultural production requirements, such as fertilizers, pesticides, machinery and equipment, and thus reducing the foreign trade gap, providing actual studies of global markets to benefit from the current situation. To liberalize the exchange rate and competitive and comparative advantage for Egyptian agricultural production and increase agricultural exports, strive to achieve partnerships between official agricultural institutions and the private sector, follow a financing system in partnership with international and Arab institutions, and guide investors on how to obtain such loans.

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