



## THE REALITY OF SUSTAINABLE DEVELOPMENT IN DEVELOPING COUNTRIES AND THE PROSPECTS FOR ACHIEVING IT IN 2030

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### ABSTRACT

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The research aims to conduct a standard economic analysis of the most important economic indicators related to sustainable development affecting the GDP of the sample countries (Iraq, Egypt, Jordan). Based on the premise that despite the vigorous pursuit of sustainable development, developing countries remain below the required level through the reduction of many indicators of sustainable development and the challenges facing sample States, The research relied on the descriptive and analytical approach using the Eviews10 programmer using time chains and two periods before forecast (2015-2022) and for forecasting (2023-2030). The data were divided into quarterly views to increase the number of views and to see the impact of some economic indicators of sustainable development on the adopted variable of sample States' GDP. The researcher concluded that sustainable development is not the level required and desired from it between (2015-2022) and that the variables got worse during the prediction that the sample states did not pay this great attention. The researcher recommended paying attention to the economic aspect, which is central to the dimensions and indicators of sustainable development, focusing on the environmental, technological, and social aspects as well, focusing on the establishment of financial funds to support sustainable development programs, and supporting research, media and cultural projects towards the establishment of environmentally friendly and beneficial projects for poor classes.

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## INTRODUCTION

Sustainable development is an important theme and concern for all those interested in the environment and economic and technological development, The Sustainable Development Agenda (2030) and its (17) objectives, which received a global consensus in (2015) September, lays out a road map with a strategic vision for States and actors to dedicate efforts to creating an equitable and sustainable world for all While preserving our planet's resources from inefficient and unfair depletion for future generations, sustainable development goals include (17) internationally agreed goals, Which all countries, including sample States, are committed to fulfilling and among the goals of sustainable development is the second goal that envisages a world without hunger and food security, Calls on UN Member States to "eradicate hunger, achieve food security, improve nutrition and promote sustainable agriculture"

(Dhehibi *et al.*, 2018), Sustainable development means the preservation of the environment with all its resources and potential for the future. This does not prevent the exploitation of these resources, but rationally and not excessively, from talking about the concept of sustainable development from the beginning of (1990) to the present, but the reality indicates that developing countries continue to pursue sustainable development (Mohammad, 2018). The problem with research is whether the sustainable development strategy in the research sample countries meets the needs and requirements of sustainable development (2030), especially as the challenges to development grow, thereby foreshadowing a lack of attainment of the goals set. The research aims to study the reality of sustainable development in the countries of the research sample and to conduct a standard economic analysis of the most important economic and social indicators related to sustainable development affecting the GDP of the countries of the sample. The importance of research comes from the importance of the concept of development in general and sustainable development in particular, which requires the integration of the objectives of sustainable economic, social, and environmental development. The research methodology relied on the theoretical framework and academic studies dealing with this important and vital topic, and adopted the methodology of quantitative and metrological analysis to assess some variables and their impact on the most important development indicators, namely GDP.

### **The Concept of Sustainable Development**

The concept of sustainable development first emerged in (1987), following the publication of the United Nations report on Brundtland, which, among other issues, deplored the environmental impacts of the intensive use of natural resources in productive activities (Garcia *et al.*, 2022), United Nations World Commission on the Environment defined sustainable development as development that meets today's needs without compromising the ability of future generations to meet their needs. Sustainable development achieves economic well-being, social justice, environmental protection, and sustainable growth that safeguards the rights of all generations, that is the purpose of the human being as the focus of development and its foundations, its execution, and its impact positively and negatively, as well as all resources with the need to preserve and rationalize its exploitation (Abdul Rahman, 2019). As human activities have become the leading force within the Earth's system, so we have entered a new geological era accompanied by ecological and environmental problems that threaten human survival and sustainable development found to address the most pressing problems facing humanity such as climate change, loss of biodiversity, land degradation, poverty and inequality (Wu *et al.*, 2023), It is an integrated life approach aimed at achieving growth at home for present generations while taking into account the preservation of the rights of future generations (Majeed, 2020). In (2015) the Sustainable Development Plan and Goals for (2030) which aims at achieving sustainable development within a balanced integrated and comprehensive approach, endorsed the Sustainable Development Agenda for (2030) Goals (17) and (169) as indicators. Sustainable development cannot be achieved without the eradication of global poverty, and special attention should be paid to States with low incomes (pyakurel and Marasini, 2021). Developing countries are defined as low-income and middle-income economies (Stojanov *et al.*, 2019).

Agricultural production, like other economic activities, is positively and negatively affected by a range of economic policies related to production and marketing, which are among the most important tools for achieving sustainable development in the agricultural sector (Alzubaidi and Almullah, 2023). One of the objectives of the sustainable development of food is to achieve economic sustainability aimed at raising agricultural productivity in order to achieve local food security, and achieve social sustainability is aimed at improving productivity, raising small farmers' profits, and ensuring home food security. The first goal is to eradicate poverty, and the second is to eradicate hunger, achieve food security, improve nutrition, and promote sustainable agriculture. The food and agriculture sector can be asserted as a central sector in eradicating poverty and hunger, thus providing key solutions for sustainable development. The essence of sustainable development lies in providing members of society with the support they need in order to eradicate or reduce all manifestations of poverty through a coherent strategy, including strengthening social protection systems, providing affordable employment, and building the resilience of the poor. By demonstrating an individual's basic need for healthy and sustainable food for all, hunger cannot be addressed by increasing food production alone but by making markets work well and increasing the incomes of farmers and smallholders. Access to technology, land and additional investments all have a role to play in creating an active agricultural sector and a product that ensures food security. Previous studies in this area include Maher (2017) research on sustainable agricultural development in Iraq, aimed at identifying some indicators of sustainable agricultural development in Iraq and identifying the most important challenges it faces. The researcher found that Iraq's sustainable development faces a number of challenges, including the decrease in the efficiency of irrigation water use, the weakness of the technical aspect used in agricultural production processes, and the widespread reduction in investment allocations for agricultural land reclamation projects. Al-Yozbaki and Abdullah (2017) worked out their research on sustainable development and its achievement in selected Arab countries for the period (1990-2008), Which aimed at measuring and calculating economic indicators for sustainable development in selected countries, the researchers concluded that the sample countries had achieved varying achievements in sustainable development, first ranked Jordan and then Syria, Morocco and Egypt (42.7%, 39.4%, 38.6%, 33.5%) The researchers recommended increased attention to sustainable development as a whole, as it is a driver of sustainable development, such as future requirements. Al-Shami and Nouri (2019) in their research on the realities of sustainable development in Iraq, aim to identify the main problems and constraints facing Iraq's sustainable development. The two researchers found an imbalance in the structure of the Iraqi economy as it depends on the oil sector for GDP composition, weak investments in the agricultural and industrial sector, low per capita national income, and a decline in economic growth rates, recommending that the two researchers support productive sectors such as agriculture, industry, and trade and seek to diversify Iraq's economy to secure monetary resources to finance development. Al-Mahdi *et al.* (2021) in their research on the challenges of food security in Egypt under the Agricultural Development Strategy (2030) reached Low potential for implementing and achieving sustainable agricultural development (2030) for water scarcity, low quality of agricultural land,

and climate change the researchers recommended a vigorous pursuit of administrative and policy reforms, provision of financial funds, rationalization of water resources and increase of agricultural area. Mazrou (2022) published his research on monitoring the development of food security in Egypt in light of the objectives of the (2030) Plan for Sustainable Development that the inflation index is in a negative direction, while the real per capita income index was in a positive direction during the study period, The researcher recommended reviewing agricultural expenditure to suit its contribution to GDP and continuing to activate fiscal and monetary policies and effective market control to rein in inflation rates while raising real per capita income. Qin *et al.* (2022) published research challenges to agricultural sustainability in Central Asia, the researchers' goal was to assess the agricultural trend of sustainability in Central Asia (2002-2017) Researchers have found that water and soil problems are among the most important problems hindering sustainable development and that capital investment is insufficient to address environmental problems. Researchers recommended improving water productivity, advanced technology, improving agricultural cooperatives, and promoting sustainability through digital land management as the best option to promote environmental sustainability and agricultural productivity. Hurduzeu *et al.* (2022) concluded in their research on the development of sustainable agriculture in European Union countries, that the research's objective is to assess the current status and achievement of the sustainable development goal of eradicating hunger in (2030) Researchers have found many discrepancies among Member States in terms of the current state of sustainable development and the achievement of the target, with government support for agricultural research and development for balanced sustainable agriculture development Researchers recommended adopting a mix of appropriate policies and technologies such as emission taxation, providing incentives to sustainable commodity suppliers and improving private sector participation in sustainable agriculture. Published Sharfawi in (2023) an analytical study of indicators of the sustainability of the Algerian economy study was aimed at analyzing indicators of the sustainability of Algeria's economy by adopting the most important indicators of sustainable development. The study found that Algeria's economy recorded low levels of economic sustainability. The researcher recommended the effective application of policies developed by the State to improve sustainability indicators to become acceptable compared to the leading countries in this area. Abdullah and Latif (2023) published in their research an econometric analysis of the factors affecting sustainable agricultural development in Iraq for the period (1990-2020). Results showed weak levels of sustainable agricultural development in Iraq during the study period, owing to the failure of most of the development indicators under consideration, namely the accumulation of agricultural capital and the rate of trade Average per capita agricultural output in line with the increase in population as well as the precarious political and security conditions experienced by Iraq during this period. The researchers recommend encouraging agricultural investments and overcoming obstacles to targeted investments to encourage the agricultural sector, especially investment in the rehabilitation of agricultural land, and providing job opportunities for agricultural workers, to maintain their work.

## **Dimensions of Sustainable Development**

### **Economic dimension**

Regarding meeting people's material needs through production and consumption, some economists consider that sustainable development requires rapid economic growth to eradicate poverty and generate resources for development, as the economy is the engine of development but cannot be built without natural and human resources. Integrate them to optimize the use of resources through financial allocation of investment projects that maximize the utilization and conservation of natural resources in a manner that eradicates poverty and preserves the environment (Majeed, 2020), Which meets the principles of full compliance with economic activity, legal and economic standards, resources and the environmental state of the natural and economic system (Podkovyrova and Kuchеров, 2021).

### **Environmental dimension**

The environment is a prerequisite for the existence of human activity and the preservation and proper transmission of the natural and vital environment for future generations, there is a strong relationship between development and the environment. The process of development requires interaction between natural resources and human and financial resources to bring about a sustained increase in national income and sustainable growth (Al-Rasoul *et al.*, 2017). Preserve natural resources in a diverse and productive manner and use rational without draining or wasting so that they can still provide inputs for the development processes of raw materials and supplies and reverse emissions and residues. (Kishar, 2021), sustainability generally refers to the continued healthy functioning of the planet's climate, ecosystems and oceans (Auriacombe and Shikha, 2019).

### **Social dimension**

The social dimension of sustainable development is determined by equity among individuals, nations, and generations, and the balance between economic growth and demographic growth in the sense of achieving significant progress towards stabilizing population growth because rapid growth has severe pressures on natural resources and on Governments' ability to provide services Full use of human resources, in the sense of redirecting or reallocating resources to ensure that basic human needs such as education, health care, and water are met... etc. Social sustainability can be studied in terms of the nature and extent of access to services and facilities in a neighborhood, city or region, and social sustainability indicators include (social security, social interaction, social justice, social participation, social sense, belonging and social identity) (Nasehi *et al.*, 2023).

### **Technology dimension**

Technology has promoted sustainable development through enhanced research and development activities to improve the performance of private enterprises and develop new institutional patterns that include technology cities and incubators and stimulate economic growth Development of plans and programmers aimed at transforming society into an information society and intensive use of technology in the agricultural sector, which helped to improve agricultural productivity and food security (Maher, 2017). Sustainable development requires integration between the goals of the social, economic, environmental, and technological system, and the

economic dimension of sustainable development includes the axes of economic development, energy, innovation, and scientific research, The social dimension covers aspects of social justice, education and training, and the environmental dimension includes environmental aspects such as agricultural practices that pollute the environment (Al-Rasoul *et al.*, 2017). States should adopt a long-term sustainable agricultural development strategy covering all agricultural sectors aimed at increasing production and productivity and addressing the problems of the agricultural sector and the development of rural society (Al-Naimi and Al-Jubouri, 2017).

### Strategic Objectives for Arab Sustainable Agricultural Development (2020-2030)

The Strategy for Sustainable Arab Agricultural Development (2020-2030) contributes to transforming the Arab agricultural sector into a competitive and globally and regionally important sector prepared to achieve the goals of sustainable development (SDGs), The Arab Sustainable Agricultural Development Strategy (2020-2030) aims to provide a framework for managing and addressing the challenges related to the agricultural sector in the Arab States by achieving the strategic objectives:

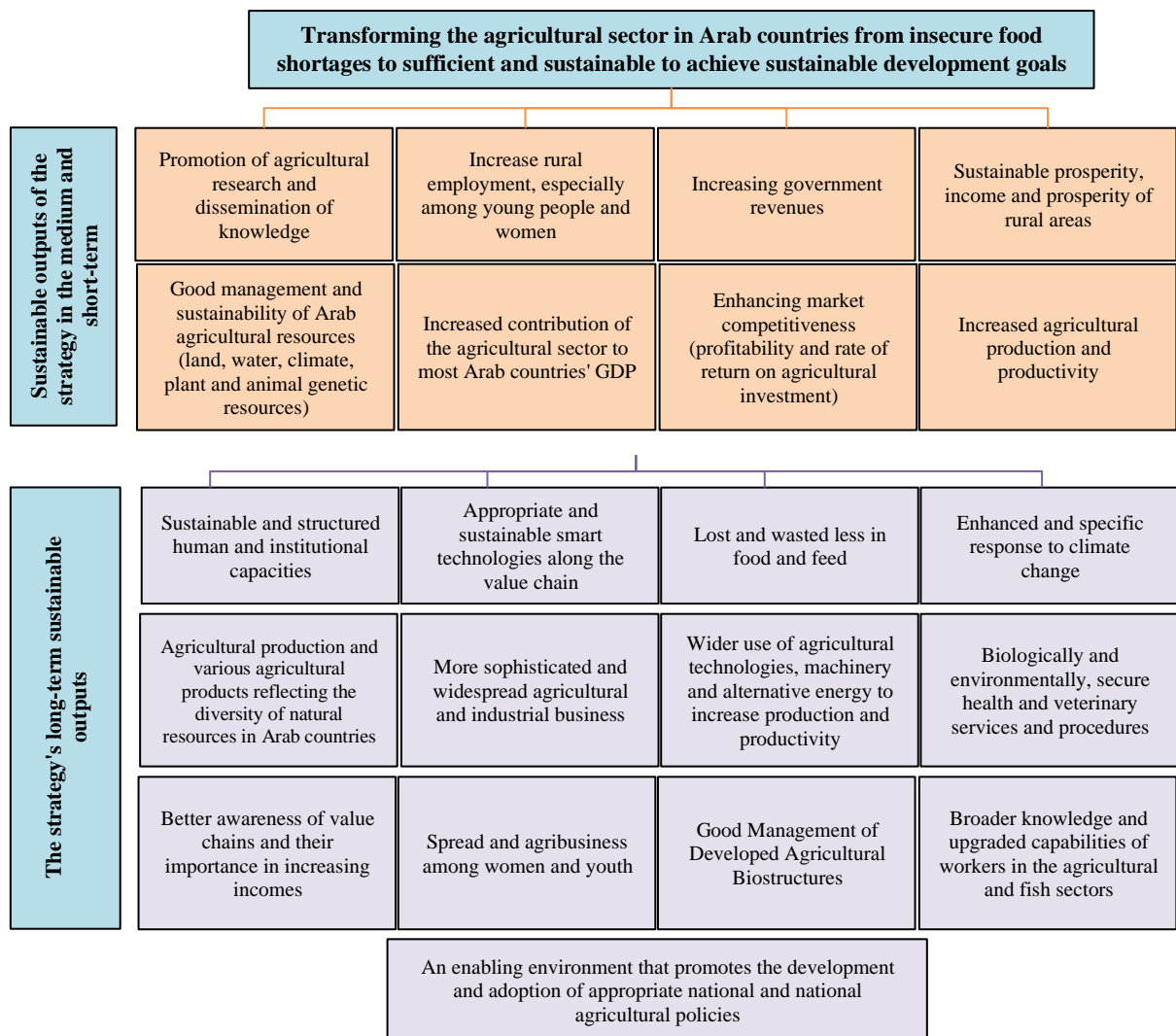


Figure (1): of the Sustainable Arab Agricultural Development Strategy 2020-2023

- The first goal: Support transformation and adaptation in agricultural and food systems to eradicate hunger and reduce poverty.
- The second goal: Maintaining the proper management and sustainability of agricultural resources and ecosystems.
- The third goal: Promote Arab agricultural integration and frame mechanisms, procedures, trade policies, and systems for agricultural investment.
- The Fourth goal: Develop and prosper the Arab countryside and rehabilitate and support resilience to environmental, economic and societal changes related to the agricultural sector.
- The Fifth goal: good management, participation and availability of technical and institutional agricultural knowledge to support decision makers. (Al-Dukhairi, 2022).

These objectives are achieved through the implementation of the strategy outlined in the Figure (1).

## **MATERIALS AND METHODS**

### **Description of the model used**

The model characterization phase is one of the most important stages used in the estimation in the econometric analysis. The time chains are divided into quarterly data for (2015-2022) and a forecast time series for (2023-2030) to increase the number of views there were (32) views, this does not affect the economic and standard results of the sample countries, distributed slower models (ARDL) were selected because some data stabilized at their original level and at the first difference, and models of error correction methodology (ECM). The research model consists of the following main model:

Table (1): shows the approved variable and the independent variables used in the model description

| The Variable                             | The description                                   |
|--|---|
| The dependent Variable Y                 | (GDP growth rate) in sample countries Billion \$. |
| The first independent variable is $X_1$  | Value of agricultural output Million \$.          |
| The second independent variable is $X_2$ | Accumulation of agricultural capital %.           |
| The third independent variable is $X_3$  | Population A thousand people.                     |
| The fourth independent variable is $X_4$ | Agricultural trade exchange rate %.               |
| The fifth independent variable is $X_5$  | Inflation rate %.                                 |

### **The reality of some of Iraq's sustainable development indicators for the period (2015-2022)**

Economic indicators reflect the country's ability to build a strong base for sustainable development, and the topic of economic growth and development is attracting the attention of economic policymakers. Most of the world's countries are increasing gross domestic product (GDP) to raise the living standard of the population (Alzubaidi and Sultan, 2023), gross domestic product (GDP) is one of the indicators for measuring economic growth and is defined as the total value of the production of fully manufactured goods and services in the country within a period of one year (Al-Badawi and Al-Wasiti, 2023), Economic growth and the resulting economic development are the result of economic and non-economic factors, an increase in the

economic well-being of the population (Ghaidan and Hamid, 2023). Table (2) shows the reality of certain indicators of sustainable development in sample States for the period before forecast.

Table (2): Some indicators for Iraq sustainable development for the period before forecast (2015-2022)

| Years         | gross domestic product Billion dollars (current prices) (1) | Agricultural output growth rate (%) (2) | agricultural workforce (one thousand person) (3) | Number of workers in the agricultural sector (one thousand person) (4) | Number of unemployed people in the agricultural sector (one thousand person) (5) | Unemployment rate (%) (6) |
|---------------|---|---|--|--|--|---------------------------|
| 2015          | 166.770   | -37.839                                 | 5570   | 4491.65  | 1078.35  | 19.36                     |
| 2016          | 166.600   | -4.028                                  | 5721   | 4660.90  | 1060.10  | 18.53                     |
| 2017          | 187.220   | -15.751                                 | 5875   | 4783.43  | 1091.58  | 19.58                     |
| 2018          | 227.370   | 14.759                                  | 6027   | 4919.24  | 1107.76  | 18.38                     |
| 2019          | 235.110   | 37.490                                  | 6180   | 5061.42  | 1118.58  | 18.10                     |
| 2020          | 166.760   | 12.532                                  | 6332   | 5202.69  | 1129.31  | 17.83                     |
| 2021          | 194.607   | 9.135                                   | 6485   | 5342.48  | 1142.52  | 17.61                     |
| 2022          | 193.322   | 9.769                                   | 6638   | 5482.27  | 1155.73  | 17.41                     |
| lowest value  | 166.600   | -37.839                                 | 5570   | 4491.65  | 1060.10  | 17.41                     |
| highest value | 235.110   | 37.490                                  | 6638   | 5482.27  | 1155.73  | 19.36                     |
| Average       | 192.220   | 3.258                                   | 6103   | 4993.01  | 1110.49  | 18.22                     |

Source: Column 1, 2, 3, 4: Ministry of Planning - Iraq/ Central Bureau of Statistics and Information Technology/ Statistical Collection for the Years 2015-2022.

-Column (5 and 6) of search calculation, column (5) = column (3) - column (4), column (6) = column (5)/ column (3) \* 100.

Table (2) shows changes in Iraq's economic and Social indicators of sustainable development, with the average value of GDP for the period (2015-2022) toward (192.220) billion \$, It is volatile because of the country's conditions, dependence on import and the inability of domestic farmers to compete with imported agricultural goods, The growth rate of agricultural output was fluctuating and averaged for the period before forecast (3.258%), despite the importance of the agricultural sector in the Iraqi economy in terms of both the volume of economic resources used and its mutual effects with other economic sectors However, its contribution to GDP is low because of GDP's dependence on oil revenues, making the contribution of the sector small, and the average agricultural workforce was ( 6103) thousand person, as shown by the general trend of women workers, depending on the increase in the rural population, The unemployment rate was fluctuating and averaged (18.22%).

Table (3) shows the reality of some economic and social indicators for sustainable development in Iraq during the forecast period (2022-2030), as the average value of the gross domestic product reached (187.540) billion \$. As for the growth rate of agricultural output, it was characterized by fluctuation and the average reached (12.622%), The average agricultural labor force amounted to (7324) thousand person and the unemployment rate was fluctuating and averaged (16.58%).



Table (3): Realities of certain indicators for Iraq's sustainable development during the forecast period (2023-2030)

| Years         | gross domestic product<br>Billion dollars<br>(current prices) | Agricultural output growth rate (%) | agricultural workforce (one thousand person) | Number of workers in the agricultural sector (one thousand person) | Number of unemployed people in the agricultural sector (one thousand person) | Unemployment rate (%) |
|---------------|---|-------------------------------------|--|--|--|-----------------------|
| 2023          | 192.037   | 10.403                              | 6790   | 5622.06  | 1167.94  | 17.20                 |
| 2024          | 190.752   | 11.037                              | 6943   | 5761.84  | 1181.16  | 17.01                 |
| 2025          | 189.467   | 11.671                              | 7096   | 5901.63  | 1194.37  | 16.83                 |
| 2026          | 188.182   | 12.305                              | 7248   | 6041.42  | 1206.58  | 16.64                 |
| 2027          | 186.897   | 12.939                              | 7401   | 6181.21  | 1219.79  | 16.48                 |
| 2028          | 185.612   | 13.573                              | 7553   | 6321.00  | 1232.00  | 16.31                 |
| 2029          | 184.327   | 14.207                              | 7706   | 6460.79  | 1245.21  | 16.15                 |
| 2030          | 183.042   | 14.841                              | 7859   | 6600.57  | 1258.43  | 16.01                 |
| lowest value  | 183.042   | 10.403                              | 6790   | 5622.06  | 1167.94  | 16.01                 |
| highest value | 192.037   | 14.841                              | 7859   | 6600.57  | 1258.43  | 17.20                 |
| Average       | 187.540   | 12.622                              | 7324   | 6111.32  | 1213.18  | 16.58                 |

Source: Approved by the researcher's Statistical Programmer spss27, table data (3).

## RESULTS AND DISCUSSION

### Stability Test Results for Study Variables Unit Root Test for Stabilizing Sample Countries Time Series

#### The Period before forecast (2015-2022)

The analysis of the results of stability is the first stage of the results of quantitative analysis, and to know the stillness and stability of the results (the root of the unit). The alternative hypothesis indicates that the variables are stable. The nihilistic hypothesis indicates the instability and durability of the variables, show in Table (4) that the variables did not stabilize at the original level of data, while all variables in each of the sample countries settled at the first difference of data as shown in the table below.

Table (4): Unit root test using the Phillips Perron test (Iraq, Egypt, Jorden) before forecasting (2015-2022)

| Rank | The Republic of Iraq                      |        |                                   |        |             |        |   |        |                                   |        |             |        | Variants       |
|------|---|--------|-----------------------------------|--------|-------------|--------|---|--------|-----------------------------------|--------|-------------|--------|----------------|
|      | The First Difference                      |        |                                   |        |             |        | The Level                                 |        |                                   |        |             |        |                |
|      | Without categorical and general direction |        | Categorical and general direction |        | Categorical |        | Without categorical and general direction |        | Categorical and general direction |        | Categorical |        |                |
| (1)1 |   | Prob.  |                                   | Prob.  |             | Prob.  |   | Prob.  |                                   | Prob.  |             | Prob.  | Yi             |
| (1)1 | ***                                       | 0.0000 | ***                               | 0.0001 | ***         | 0.0000 | N0  | 0.1961 | N0                                | 0.4954 | N0          | 0.4208 | Y <sub>1</sub> |
| (1)1 | ***                                       | 0.0000 | ***                               | 0.0001 | ***         | 0.0000 | N0  | 0.2527 | N0                                | 0.4378 | **          | 0.0370 | X <sub>1</sub> |
| (1)1 | ***                                       | 0.0000 | ***                               | 0.0001 | ***         | 0.0000 | **  | 0.0375 | N0                                | 0.1327 | N0          | 0.2201 | X <sub>2</sub> |
| (1)1 | ***                                       | 0.0000 | ***                               | 0.0000 | ***         | 0.0000 | N0  | 0.9531 | **                                | 0.0185 | N0          | 1.0000 | X <sub>3</sub> |
| (1)1 | ***                                       | 0.0000 | ***                               | 0.0000 | ***         | 0.0000 | N0  | 0.3576 | N0                                | 0.6398 | *           | 0.0912 | X <sub>4</sub> |
| (1)1 | ***                                       | 0.0000 | ***                               | 0.0000 | ***         | 0.0000 | N0  | 0.8597 | N0                                | 0.6281 | N0          | 0.2307 | X <sub>5</sub> |
|      | The Republic of Egypt                     |        |                                   |        |             |        |   |        |                                   |        |             |        |                |

|      | The First Difference                      |        |                                   |        |             |        | The Level                                 |        |                                   |        |             |        |                |
|------|---|--------|-----------------------------------|--------|-------------|--------|---|--------|-----------------------------------|--------|-------------|--------|----------------|
|      | Without categorical and general direction |        | Categorical and general direction |        | Categorical |        | Without categorical and general direction |        | Categorical and general direction |        | Categorical |        |                |
| (1)1 |   | Prob.  |                                   | Prob.  |             | Prob.  |   | Prob.  |                                   | Prob.  |             | Prob.  | Y <sub>i</sub> |
| (1)1 | ***                                       | 0.0000 | ***                               | 0.0001 | ***         | 0.0000 | N0  | 0.3098 | N0                                | 0.5758 | N0          | 0.7000 | Y <sub>1</sub> |
| (1)1 | ***                                       | 0.0000 | ***                               | 0.0000 | ***         | 0.0000 | **  | 0.0123 | N0                                | 0.2716 | ***         | 0.0066 | X <sub>1</sub> |
| (1)1 | ***                                       | 0.0000 | ***                               | 0.0001 | ***         | 0.0000 | N0  | 0.1049 | N0                                | 0.2777 | N0          | 0.6646 | X <sub>2</sub> |
| (1)1 | ***                                       | 0.0000 | ***                               | 0.0000 | ***         | 0.0000 | N0  | 0.9204 | ***                               | 0.000  | N0          | 1.0000 | X <sub>3</sub> |
| (1)1 | ***                                       | 0.0000 | ***                               | 0.0001 | ***         | 0.0000 | N0  | 0.3705 | N0                                | 0.6361 | N0          | 0.1058 | X <sub>4</sub> |
| (1)1 | ***                                       | 0.0000 | ***                               | 0.0000 | ***         | 0.0000 | N0  | 0.8303 | N0                                | 0.4703 | N0          | 0.9494 | X <sub>5</sub> |
|      | The Republic of Jordan                    |        |                                   |        |             |        |   |        |                                   |        |             |        |                |
|      | The First Difference                      |        |                                   |        |             |        | The Level                                 |        |                                   |        |             |        |                |
|      | Without categorical and general direction |        | Categorical and general direction |        | Categorical |        | Without categorical and general direction |        | Categorical and general direction |        | Categorical |        |                |
|      |   | Prob.  |                                   | Prob.  |             | Prob.  |   | Prob.  |                                   | Prob.  |             | Prob.  | Y <sub>i</sub> |
| (1)1 | ***                                       | 0.0000 | ***                               | 0.0000 | ***         | 0.0000 | N0  | 0.4380 | N0                                | 0.4717 | ***         | 0.0049 | Y <sub>1</sub> |
| (1)1 | ***                                       | 0.0000 | ***                               | 0.0000 | ***         | 0.0000 | N0  | 0.3165 | N0                                | 0.5474 | ***         | 0.0000 | X <sub>1</sub> |
| (1)1 | ***                                       | 0.0000 | ***                               | 0.0001 | ***         | 0.0000 | *   | 0.0946 | N0                                | 0.2470 | *           | 0.0789 | X <sub>2</sub> |
| (1)1 | ***                                       | 0.0000 | ***                               | 0.0000 | ***         | 0.0000 | N0  | 0.8843 | *                                 | 0.0589 | N0          | 1.0000 | X <sub>3</sub> |
| (1)1 | ***                                       | 0.0000 | ***                               | 0.0001 | ***         | 0.0000 | N0  | 0.2176 | N0                                | 0.3337 | N0          | 0.4920 | X <sub>4</sub> |
| (1)1 | ***                                       | 0.0000 | ***                               | 0.0001 | ***         | 0.0000 | N0  | 0.1688 | N0                                | 0.1655 | *           | 0.0519 | X <sub>5</sub> |

Note:(\*) Significant at the (10%) (\*\*) Significant at the (5%) (\*\*\*) Significant at the (1%).

Source: Prepared by the researcher based on the outputs of the Eviews10 program.

The best slowing period for variables before predicting for both (Iraq, Egypt, Jordan) by test (VAR) is the third slowing period by standard (AIC) and at the first difference of data, and the best model selected for Iraq is ARDL (1, 1, 1, 1, 0, 0), for Egypt (1, 0, 3, 1, 0, 1), for Jordan (1, 1, 1, 0, 3,0).

Table (5) shows the variables passed all the statistical and standard economic tests of the problem of variability imbalance and subjectivity in the sample countries. Table (5): Diagnostic tests of the model in sample countries before the forecast for the period (2015-2022)

| Iraq                 |                           |           |             | Egypt                |                           |           |             | Jordan               |                           |           |             |
|----------------------|---------------------------|-----------|-------------|----------------------|---------------------------|-----------|-------------|----------------------|---------------------------|-----------|-------------|
| standard problem     | the test                  | the value | Possibility | standard problem     | the test                  | the value | Possibility | standard problem     | the test                  | the value | Possibility |
| self-association     | Breusch - Godfrey LM Test | 0.247896  | 0.7821      | self-association     | Breusch - Godfrey LM Test | 1.519915  | 0.2399      | self-association     | Breusch - Godfrey LM Test | 0.62313   | 0.5302      |
| Diagnostic accuracy  | Ramsey Reset Test         | 0.160581  | 0.6916      | Diagnostic accuracy  | Ramsey Reset Test         | 34.82161  | 0.00033     | Diagnostic accuracy  | Ramsey Reset Test         | 6.202668  | 0.0201      |
| Contrast instability | ARCH Test                 | 0.073319  | 0.7881      | Contrast instability | ARCH Test                 | 5.387071  | 0.1264      | Contrast instability | ARCH Test                 | 0.051503  | 0.8218      |

Source: Prepared by the researcher based on the outputs of the Eviews10 program, based on the data of the study.

### Quantitative analysis of some of the sample States' sustainable development indicators for the period (2015-2022)

Through the results of the analysis of stability and slowing periods and the absence of standard problems, models of the error correction methodology (ECM) were tested because the data stabilized at the original level and the first difference of data in the sample countries. This methodology had the basic conditions, as the constant variable is negative and moral indicating the validity of the selection of this model as shown in Table (6).

Table (6): Results of the estimation of the error correction model for some of the sample States' sustainable development indicators for the period (2015-2022)

| Cointegration Form (Iraq)   |             |            |             |        |
|-----------------------------|-------------|------------|-------------|--------|
| Variable                    | Coefficient | Std. Error | t-Statistic | Prob.  |
| D(X <sub>1</sub> )          | 1.663626    | 0.303469   | 5.482027    | 0.0000 |
| D(X <sub>2</sub> )          | 0.061111    | 0.018309   | 3.337656    | 0.0031 |
| D(X <sub>3</sub> )          | -15.455881  | 5.850083   | -2.641993   | 0.0152 |
| D(X <sub>4</sub> )          | 0.308205    | 0.137355   | 2.243854    | 0.0358 |
| D(X <sub>5</sub> )          | -11.121018  | 4.041153   | -2.751941   | 0.0119 |
| CointEq(-1)*                | -0.381168   | 0.132014   | -2.887342   | 0.0088 |
| Cointegration Form (Egypt)  |             |            |             |        |
| Variable                    | Coefficient | Std. Error | t-Statistic | Prob.  |
| D(X <sub>1</sub> )          | -0.027180   | 0.324457   | -0.083770   | 0.9339 |
| D(X <sub>2</sub> )          | -1.374679   | 0.706493   | -1.945777   | 0.0630 |
| D(X <sub>2</sub> (-1))      | -0.000000   | 0.751812   | -0.000000   | 1.0000 |
| D(X <sub>2</sub> (-2))      | 1.419716    | 0.660085   | 2.150808    | 0.0414 |
| D(X <sub>3</sub> )          | 0.000016    | 0.000003   | 6.287731    | 0.0000 |
| D(X <sub>4</sub> )          | 0.124540    | 0.056282   | 2.212774    | 0.0363 |
| D(X <sub>5</sub> )          | -8.397403   | 0.860468   | -9.759110   | 0.0000 |
| CointEq(-1)*                | -0.514945   | 0.134252   | -3.835660   | 0.0008 |
| Cointegration Form (Jordan) |             |            |             |        |
| Variable                    | Coefficient | Std. Error | t-Statistic | Prob.  |
| D(X <sub>1</sub> )          | 0.090909    | 0.005920   | 15.356443   | 0.0000 |
| D(X <sub>2</sub> )          | 0.000232    | 0.000048   | 4.798351    | 0.0001 |
| D(X <sub>3</sub> )          | 0.000000    | 0.000000   | 0.429249    | 0.6714 |
| D(X <sub>4</sub> )          | 0.000682    | 0.000129   | 5.283881    | 0.0000 |
| D(X <sub>4</sub> (-1))      | -0.000000   | 0.000088   | -0.000000   | 1.0000 |
| D(X <sub>4</sub> (-2))      | 0.000114    | 0.000078   | 1.454091    | 0.1584 |
| D(X <sub>5</sub> )          | 0.000152    | 0.000472   | 0.321475    | 0.7505 |
| CointEq(-1)*                | -0.340771   | 0.133141   | -2.559476   | 0.0169 |

Source: prepared by the researcher based on the data of the study and using the Eviews10 program

After conducting all economic, statistical, and standard tests, the variables can be explained and their relationship with the variable approved in the sample countries, The result of the test ( $R^2$ ) in Iraq was (82.7%) of the independent variables affecting

the approved variable and the remainder within the random variable, and the result of the test (F) is (17.04) indicates the morale of the function, The test ( $R^2$ ) in Egypt was (94.67%) of the independent variables affecting the approved variable and the rest falls within the random variable, and the test (F) is (59.12) indicates the morale of the function, The result of the test ( $R^2$ ) in Jordan was (97.35%) of the independent variables affecting the approved variable and the remainder within the random variable, and the result of the test (F) is (503.74) indicates the morale of the function. Table (6) shows that the independent variable ( $X_1$ ) indicates (Value of agricultural output growth) in both Iraq and Jordan has a positive relationship with the approved variable (Y) gross domestic product (GDP). This is consistent with economic theory the higher the agricultural production, the greater the proportion of its contribution to (GDP, However, Egypt disagreed because the rate of agricultural output was not at the required level, which showed a negative sign, as well as because of a significant increase in the population in that period, which far exceeded expectations and agricultural growth rates. The variable ( $X_2$ ) referring to (agricultural capital accumulation) showed a weak positive relationship in Iraq relative to the political and security conditions and instability experienced by the country In Jordan, the variable ( $X_2$ ) showed a positive relationship with the approved variable (Y). This is consistent with economic theory, The greater the investment, the greater the accumulation of agricultural capital and thus the greater the proportion of its contribution to (GDP), In Egypt the results differed from those in the sample countries, and the negative relationship showed that the agricultural sector depends on labor and skilled labor rather than capital accumulation and Lower labor wages compared to the rest of the sample countries that rely on capital accumulation. The ( $X_3$ ) variant (population) showed a negative relationship with the variable adopted in Iraq, despite the increase in the population. However, the active workforce was not at the required level, resulting in an increase (GDP), disguised unemployment and low labor productivity, On the contrary, the relationship of this variable in both Egypt and Jordan has been positive with the rate (GDP) and is consistent with economic theory. The larger the population reflects its impact on diversity in industries, thereby increasing economic growth rates. The variable ( $X_4$ ) refers to (agricultural trade rate). The results of the quantitative analysis showed a positive relationship of all sample countries. This is consistent with the concept of economic theory that trade policies are in favor of the product and that trade openness has had a positive impact on growth (GDP). The results showed the moral relationship between the ( $X_5$ ) (inflation rate) and the approved variable and the separation relationship in Jordan, which is contrary to economic theory, but many previous studies have shown that the high inflation rate is lower than (20%) Stimulates savings and increases investments and thus increases growth rates in gross domestic product (GDP), while the relationship has been inverse in both Iraq and Egypt, and inflation rates are increasing the rate (GDP), which is consistent with economic theory.

#### **Forecast period (2023-2030)**

Table (7) shows that all variables stabilized at the original level of data while all data in each sample country stabilized at the first difference of data resulting in the selection of the ARDL model as shown in the table below.

Table (7): Unit root test using the Phillips Perron test (Iraq, Egypt, Jorden) during the forecast period (2023-2030)

| Rank | The Republic of Iraq                      |        |                                   |        |             |        |   |        |                                   |        |             |        | Variants       |
|------|---|--------|-----------------------------------|--------|-------------|--------|---|--------|-----------------------------------|--------|-------------|--------|----------------|
|      | The First Difference                      |        |                                   |        |             |        | The Level                                 |        |                                   |        |             |        |                |
|      | Without categorical and general direction |        | categorical and general direction |        | Categorical |        | Without categorical and general direction |        | categorical and general direction |        | Categorical |        |                |
| (1)1 |   | Prob.  |                                   | Prob.  |             | Prob.  |   | Prob.  |                                   | Prob.  |             | Prob.  | Yi             |
| (1)1 | ***                                       | 0.0002 | ***                               | 0.0011 | ***         | 0.0000 | *   | 0.0789 | No                                | 0.2649 | No          | 0.5887 | Y <sub>1</sub> |
| (1)1 | ***                                       | 0.0002 | ***                               | 0.0008 | ***         | 0.0000 | No  | 0.2154 | No                                | 0.5570 | No          | 0.6153 | X <sub>1</sub> |
| (1)1 | ***                                       | 0.0001 | ***                               | 0.0008 | ***         | 0.0000 | No  | 0.1850 | No                                | 0.4673 | No          | 0.1202 | X <sub>2</sub> |
| (1)1 | ***                                       | 0.0001 | ***                               | 0.0009 | ***         | 0.0000 | No  | 0.2263 | No                                | 0.4516 | No          | 0.7427 | X <sub>3</sub> |
| (1)1 | ***                                       | 0.0001 | ***                               | 0.0008 | ***         | 0.0000 | No  | 0.6712 | No                                | 0.2982 | No          | 0.2019 | X <sub>4</sub> |
| (1)1 | ***                                       | 0.0001 | ***                               | 0.0008 | ***         | 0.0000 | No  | 0.1449 | No                                | 0.3194 | No          | 0.6514 | X <sub>5</sub> |
|      | The Republic of Egypt                     |        |                                   |        |             |        |   |        |                                   |        |             |        |                |
|      | The First Difference                      |        |                                   |        |             |        | The Level                                 |        |                                   |        |             |        |                |
|      | Without categorical and general direction |        | categorical and general direction |        | Categorical |        | Without categorical and general direction |        | categorical and general direction |        | Categorical |        |                |
| (1)1 |   | Prob.  |                                   | Prob.  |             | Prob.  |   | Prob.  |                                   | Prob.  |             | Prob.  | Yi             |
| (1)1 | ***                                       | 0.0002 | ***                               | 0.0009 | ***         | 0.0000 | No  | 0.2875 | No                                | 0.5405 | No          | 0.6891 | Y <sub>1</sub> |
| (1)1 | ***                                       | 0.0001 | ***                               | 0.0005 | ***         | 0.0000 | No  | 0.8292 | No                                | 0.4729 | No          | 0.9338 | X <sub>1</sub> |
| (1)1 | ***                                       | 0.0002 | ***                               | 0.0011 | ***         | 0.0000 | No  | 0.1309 | No                                | 0.3601 | No          | 0.5985 | X <sub>2</sub> |
| (1)1 | ***                                       | 0.0000 | ***                               | 0.0000 | ***         | 0.0000 | No  | 0.8114 | No                                | 0.2915 | No          | 0.9997 | X <sub>3</sub> |
| (1)1 | ***                                       | 0.0000 | ***                               | 0.0000 | ***         | 0.0000 | No  | 0.7580 | No                                | 0.1023 | ***         | 0.0006 | X <sub>4</sub> |
| (1)1 | ***                                       | 0.0000 | ***                               | 0.0000 | ***         | 0.0000 | No  | 0.9835 | ***                               | 0.0000 | No          | 1.0000 | X <sub>5</sub> |
|      | The Republic of Jorden                    |        |                                   |        |             |        |   |        |                                   |        |             |        |                |
|      | The First Difference                      |        |                                   |        |             |        | The Level                                 |        |                                   |        |             |        |                |
|      | Without categorical and general direction |        | categorical and general direction |        | Categorical |        | Without categorical and general direction |        | categorical and general direction |        | Categorical |        |                |
|      |   | Prob.  |                                   | Prob.  |             | Prob.  |   | Prob.  |                                   | Prob.  |             | Prob.  | Yi             |
| (1)1 | ***                                       | 0.0001 | ***                               | 0.0003 | ***         | 0.0000 | No  | 0.4778 | No                                | 0.4035 | No          | 0.6521 | Y <sub>1</sub> |
| (1)1 | ***                                       | 0.0000 | ***                               | 0.0003 | ***         | 0.0000 | No  | 0.7220 | No                                | 0.2112 | No          | 0.8684 | X <sub>1</sub> |
| (1)1 | ***                                       | 0.0002 | ***                               | 0.0010 | ***         | 0.0000 | No  | 0.2934 | No                                | 0.6164 | No          | 0.6198 | X <sub>2</sub> |
| (1)1 | ***                                       | 0.0000 | ***                               | 0.0002 | ***         | 0.0000 | No  | 0.8431 | No                                | 0.4706 | No          | 0.9937 | X <sub>3</sub> |
| (1)1 | ***                                       | 0.0001 | ***                               | 0.0010 | ***         | 0.0000 | No  | 0.2948 | No                                | 0.1442 | No          | 0.4983 | X <sub>4</sub> |
| (1)1 | ***                                       | 0.0001 | ***                               | 0.0002 | ***         | 0.0000 | No  | 0.9510 | No                                | 0.8333 | No          | 0.9655 | X <sub>5</sub> |

Note:(\*) Significant at the (10%) (\*\*) Significant at the (5%) (\*\*\*) Significant at the (1%).

Source: Prepared by the researcher based on the outputs of the Eviews10 program.

The best slowing period for variables after prediction for each of the (Iraq, Egypt, and Jordan) By (VAR) test is the first slowing period by standard (AIC) at the first difference of data, the best model chosen for Iraq is ARDL (1, 1, 1, 1, 1, 1), in Egypt ARDL (1, 3, 3, 0, 0, 1), and in Jordan the best model is ARDL (1, 0, 0, 0, 1, 1). As shown in Table (8) through tests conducted on the model showed that the model's diagnostic quality test has been passed and there is no problem of standard

problems such as the problem of variability instability and self-association in the sample countries.

Table (8): Diagnostic tests of the model in sample countries during the forecast period (2023-2030)

| Iraq                 |                           |           |             | Egypt                |                           |           |             | Jordan               |                           |           |             |
|----------------------|---------------------------|-----------|-------------|----------------------|---------------------------|-----------|-------------|----------------------|---------------------------|-----------|-------------|
| standard problem     | the test                  | the value | Possibility | standard problem     | the test                  | the value | Possibility | standard problem     | the test                  | the value | Possibility |
| self-association     | Breusch - Godfrey LM Test | 2.237484  | 0.1372      | self-association     | Breusch - Godfrey LM Test | 4.779766  | 0.1278      | self-association     | Breusch - Godfrey LM Test | 1.817583  | 0.1882      |
| Diagnostic accuracy  | Ramsey Reset Test         | 0.621182  | 0.4409      | Diagnostic accuracy  | Ramsey Reset Test         | 7.729354  | 0.0147      | Diagnostic accuracy  | Ramsey Reset Test         | 6.979170  | 0.0152      |
| Contrast instability | ARCH Test                 | 0.972710  | 0.3325      | Contrast instability | ARCH Test                 | 1.646172  | 0.2108      | Contrast instability | ARCH Test                 | 0.064844  | 0.8009      |

Source: Prepared by the researcher based on the outputs of the Eviews10 program.

The tests conducted on the model show that the model's diagnostic quality test has been passed and there are no standard problems, namely the problem of self-association and unstable variability in the sample countries as shown in the table above.

### **Quantitative analysis of certain indicators for the sustainable development of sample States during the forecast period (2023-2030)**

Through the results of the analysis of stability and slowing periods and the absence of standard problems, models of error correction methodology (ECM) were tested because the data stabilized at the original level and the first difference of data in the sample countries. The requirements of this methodology were provided that the constant variable is moral and negative as shown in Table (9).

After all economic, statistical, and standard tests are conducted, independent variables and their relationship with the variable approved in the sample countries can be explained during the forecast period, Iraq's test result ( $R^2$ ) of (97.7%) of the independent variables affected the approved variable and the remainder of the random variable, and the test result (F) of (134.27) indicates the morale of the function, The result of the ( $R^2$ ) test in Egypt (96.65%) of the independent variables affects the approved variable and the remainder within the random variable, and the F test (63.31%) indicates the morale of the function, The result of the test ( $R^2$ ) in Jordan was (90.85%) of the independent variables affecting the approved variable and the remainder within the random variable. The result of the test (F) is (38.23) indicates the morale of the function, Table (9) shows that the independent variable ( $X_1$ ) (Value of agricultural output growth) has shown its positive relationship in Jordan with the approved variable (Y) (gross domestic product), It is natural and consistent with economic theory, because the higher the rates of agricultural output the greater the proportion of its contribution to (GDP), the negative relationship with the variable adopted in both Iraq and Egypt indicates a decline in pre-forecast agricultural output growth rates reflected in this period (forecast), which will contribute to a decline in the agricultural sector's contribution to (GDP). The variable ( $X_2$ ) (the rate of accumulation of agricultural capital), showed that Egypt and Jordan indicated a positive relationship with the approved variable.

Table (9): Results of estimating the error correction model for some of the sample States sustainable development indicators during the forecast (2023-2030)

| Cointegration Form (Iraq)   |             |            |             |        |
|-----------------------------|-------------|------------|-------------|--------|
| Variable                    | Coefficient | Std. Error | t-Statistic | Prob.  |
| D(X <sub>1</sub> )          | -14.295109  | 1.208246   | -11.831290  | 0.0000 |
| D(X <sub>2</sub> )          | -0.436527   | 0.051804   | -8.426555   | 0.0000 |
| D(X <sub>3</sub> )          | -10.276665  | 1.442582   | -7.123802   | 0.0000 |
| D(X <sub>4</sub> )          | -0.764645   | 0.058407   | -13.091758  | 0.0000 |
| D(X <sub>5</sub> )          | 11.648338   | 1.749793   | 6.656982    | 0.0000 |
| CointEq(-1)*                | -0.135771   | 0.113603   | -1.195133   | 0.2467 |
| Cointegration Form (Egypt)  |             |            |             |        |
| Variable                    | Coefficient | Std. Error | t-Statistic | Prob.  |
| D(X <sub>1</sub> )          | -37.457806  | 3.964557   | -9.448170   | 0.0000 |
| D(X <sub>1</sub> (-1))      | 0.000000    | 2.812050   | 0.000000    | 1.0000 |
| D(X <sub>1</sub> (-2))      | -3.395768   | 2.667897   | -1.272826   | 0.2225 |
| D(X <sub>2</sub> )          | 11.175163   | 1.269178   | 8.805039    | 0.0000 |
| D(X <sub>2</sub> (-1))      | -0.000000   | 1.082086   | -0.000000   | 1.0000 |
| D(X <sub>2</sub> (-2))      | -1.610442   | 0.998717   | -1.612511   | 0.1277 |
| D(X <sub>3</sub> )          | 0.000001    | 0.000001   | 1.232951    | 0.2366 |
| D(X <sub>4</sub> )          | 0.090899    | 0.199232   | 0.456249    | 0.6547 |
| D(X <sub>5</sub> )          | 3.434337    | 0.863097   | 3.979084    | 0.0012 |
| CointEq(-1)*                | -0.511884   | 0.163763   | -3.125767   | 0.0069 |
| Cointegration Form (Jordan) |             |            |             |        |
| Variable                    | Coefficient | Std. Error | t-Statistic | Prob.  |
| D(X <sub>1</sub> )          | 0.019246    | 0.011213   | 1.716401    | 0.0295 |
| D(X <sub>2</sub> )          | 0.021338    | 0.011367   | 1.877352    | 0.3383 |
| D(X <sub>3</sub> )          | 0.000000    | 0.000000   | 0.756609    | 0.4573 |
| D(X <sub>4</sub> )          | 0.000082    | 0.000330   | 0.247172    | 0.8071 |
| D(X <sub>5</sub> )          | -0.032242   | 0.010515   | -3.066201   | 0.0057 |
| CointEq(-1)*                | -0.249115   | 0.104578   | -2.382909   | 0.0179 |

Source: prepared by the researcher based on the data of the study and using the Eviews10 program

This is consistent with economic theory and the economic data of these two countries. The more investment in the agricultural sector this increases the contribution of the agricultural sector to (GDP). While in Iraq the relationship is inverse which means that colonization and capital accumulation in Iraq's agricultural sector deteriorate for the predicted phase it is natural that the accumulation of agricultural capital in Iraq is in a state of great decline, contributing to both a reduction in agricultural output and a decline in gross domestic product (GDP). As for (X<sub>3</sub>) which is (the population) his predictive milestone has been positive with the variable adopted in Egypt. This is consistent with the concept of economic theory. Increasing the labor force increases the rate of agricultural output and thus increases the rate of agricultural output. (GDP) In Iraq, this predicted milestone was consistent with the forecast and due to the reason mentioned above, while the morale of this variable did not appear in Jordan. The (X<sub>4</sub>) variant (Agricultural Trade Rate) showed its negative milestone in Iraq, showing that trade openness was not in the interest of

producers and that the dumping policies that have taken place have reduced production in most sectors, including agriculture. In Jordan the morale of this variable was not shown, whereas, in Egypt, the morale of this variable was shown as positive with the adopted variable because commercial openness had a positive effect and was in the interest of producers. As for the ( $X_5$ ) variable (inflation rate) the results showed a negative relationship with the rate (GDP) in Jordan in the forecast period, which is consistent with the concept of economic theory whereas in Iraq and Egypt, this variable showed a positive relationship with the adopted variable and contravened economic theory during the forecast period, indicating that inflation may contribute to a decline in agricultural domestic product growth and therefore a decline (GDP).

### CONCLUSIONS

Many economic indicators in the sample countries fall below their global counterpart, especially the indicators of agricultural output growth rate and accumulation of agricultural capital before and during the forecast, as they were not within the required level, contributing to the decline in GDP. The research hypothesis demonstrated by the study is that sustainable development in the sample States during the course of the study is not at the required level and, in all economic indicators, The trade rate was not in the interest of producers before the forecast period, which also reversed its impact on the forecast period, owing to the considerable openness, particularly in Iraq in the post-2003 phase. This led to increased dumping policies, declining farmers' output and hence GDP index. As well as the high unemployment rates in Iraq, especially after the majority of the skilled agricultural workforce enrolled in government jobs.

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### CONFLICT OF INTEREST

The authors declare no conflicts of interest regarding the publishing of this article.

### واقع التنمية المستدامة في البلدان النامية وفاق تحقيقها عام 2030

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قسم الاقتصاد الزراعي / كلية الزراعة والغابات / جامعة الموصل / الموصل / العراق

### الخلاصة

يهدف البحث الى اجراء تحليل اقتصادي قياسي لاهم المؤشرات الاقتصادية ذات العلاقة بالتنمية المستدامة والمؤثرة على الناتج المحلي الاجمالي لدول العينة (العراق، مصر، الاردن)، اذ اعتمد البحث على فرضية مفادها انه بالرغم من السعي الحثيث لتحقيق التنمية المستدامة الا ان البلدان النامية مازالت دون المستوى



المطلوب وذلك من خلال انخفاض العديد من المؤشرات الخاصة بالتنمية المستدامة والتحديات التي تواجه دول العينة، اعتمد البحث على المنهج الوصفي والتحليلي باستخدام برنامج (Eviews10) والسلاسل الزمنية ولفترتين قبل التنبؤ (2015-2022) وللتنبؤ (2023-2030) إذ تم تقسيم البيانات الى ربع سنوية لزيادة عدد المشاهدات ولمعرفة تأثير بعض المؤشرات الاقتصادية للتنمية المستدامة على المتغير المعتمد وهو الناتج المحلي الاجمالي لدول العينة، توصل الباحث الى ان التنمية المستدامة ليس بالمستوى المطلوب والمرجوة منه في الفترة ما بين (2015-2022) وان المتغيرات ازدادت سوء اثناء التنبؤ لكون دول العينة لم تولي هذا الموضوع الاهتمام الكبير، اوصى الباحث الاهتمام بالجانب الاقتصادي الذي هو محور ابعاد ومؤشرات التنمية المستدامة والتركيز على الجانب البيئي والتكنولوجي والاجتماعي ايضا، والتركيز على انشاء صناديق مالية لدعم برامج التنمية المستدامة، ودعم المشاريع البحثية والاعلامية والثقافية وصولا الى اقامة مشاريع صديقة للبيئة ومفيدة للطبقات الفقيرة.

الكلمات المفتاحية: مؤشرات التنمية المستدامة، الابعاد الاقتصادية، الناتج المحلي الاجمالي.

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