



IRAQI  
Academic Scientific Journals



العراقية  
المجلات الأكاديمية العلمية

**TJAS**  
Tikrit Journal for  
Agricultural  
Sciences

ISSN:1813-1646 (Print); 2664-0597 (Online)

**Tikrit Journal for Agricultural Sciences**

Journal Homepage: <http://tujas.tu.edu.iq>

E-mail: [tjas@tu.edu.iq](mailto:tjas@tu.edu.iq)

**Sabah F .  
Mahmoud \*  
Heba Adel Z. Al-  
Sabbagh**

*Administration and  
Economics, Tikrit  
University, Iraq*

**KEY WORDS:**

Economic  
diversification,  
agricultural sector  
contribution,  
diversification of  
sources of income.

**ARTICLE HISTORY:**

**Received:** 01/03/2022

**Accepted:** 04/04/2022

**Available online:**  
30/6/2022

Tikrit Journal for Agricultural Sciences (TJAS)

**The contribution of the agricultural sector to the strengthening  
of Iraq's economic diversification strategy for the period  
(2004-2019)**

**ABSTRACT**

The aim of the research is to identify the importance of policies to diversify the sources of national income in the Iraqi economy and to develop the productive base of the economic sector without relying on the oil sector, as well as to determine the role of agricultural production and its contribution to the process of diversifying sources of income. The Iraqi economy is heavily dependent on oil revenues, making it vulnerable to the volatility surrounding this sector and the fluctuating revenues from it, so it is necessary to adopt strategies and policies to economically diversify the sources of national income in the Iraqi economy, develop the economic base without relying on the oil sector, generating revenues and diversifying sources of national income.

The agriculture sector is one of the leading sectors with its relative abundance of agricultural resources, allowing economic policy to successfully implement a policy of developing and achieving diversified revenues outside oil revenues, as the agricultural sector can play a key and effective role in achieving diversification of sources of income through the necessary food products provided by this vital sector to meet the needs of domestic demand, as well as its contribution to foreign trade through the export of surplus agricultural production and its contribution to output. Gross domestic. The research concluded that the structure of Iraqi exports did not diversify, as Iraq was primarily based on crude oil exports in the composition of its exports by more than 99 percent, making the Iraqi economy more vulnerable to global crises that could occur and which would have an impact on oil price changes.

© 2022 TJAS. College of Agriculture, Tikrit University

**INTRODUCTION**

The agricultural sector is an important sector in the composition of GDP, as well as its importance in providing food security and raw materials for industry, as the dependence of the Iraqi economy on oil revenues has become necessary to build policies to diversify the sources of national income in the Iraqi economy and develop the economic base and raise productive capacities in the various sectors, especially the most capable of increasing, the most important of which is the agricultural sector due to the relative abundance of agricultural resources in Iraq, allowing economic policy to be successfully implemented in Developing and increasing the efficiency of the Iraqi economy, and creating a balanced economy that depends on more than one sector in achieving revenues for the state and diversifying the sources of national income, and its importance lies in its important and distinct role in the mechanism of economic diversification, The cornerstone of economic growth, development and poverty eradication in developing countries, agriculture is also the main driver of economic prosperity resulting from increased agricultural, plant and animal production, and increased agricultural production supports economic independence and achieves food security for any country, because one of the most important problems facing developing countries at present is their weak agricultural production, affecting economic and political stability

\* Corresponding author: E-mail: [Sabah.fehan@tu.edu.iq](mailto:Sabah.fehan@tu.edu.iq)

and weakening national will as long as they rely on imported agricultural products in To meet their food needs, the agricultural sector is achieving the basic food requirements of present and future generations through the development of this sector in countries where natural resources are available for agriculture.

### **Research problem**

Iraq is one of the economies where the oil sector dominates its GDP despite having many natural potential, human resources and various economic components, as dependence on the oil sector must be reduced and therefore the research deals with:

- The concept of economic diversification.
- The reality of economic diversification policies.
- The role of the agricultural sector in the process of diversifying sources of income.

### **Research hypothesis**

The existence of a strategy and policies for economic diversification in Iraq will support and enhance the chances of success of the policy of economic diversification, in particular the strengthening of the agricultural sector as it has important potential in production and employment, otherwise there are no real achievements related to the diversification of Iraq's sources of national income.

### **Research aims**

The research aims to achieve the following objectives:

1. Identifying the problems and constraints of the agricultural sector in Iraq.
2. To recognize the importance of policies to diversify the sources of national income in the Iraqi economy and develop the productive base of the economic sector without relying on the oil sector.
3. Determining the role of agricultural production and its contribution to the process of economic diversification of national income sources in Iraq.

### **Research importance**

It is now very necessary in Iraq to find and provide other alternative sources of national income, economic diversification and the development of the productive economic base, which is a condition for building a modern, stable economy based on a diverse base of economic resources and characterized by a high degree of internal integration embodied in the interdependence of different sectors of the economy.

### **Research method**

The method of combining the two methodological methods of inference was adopted by presenting various concepts related to economic diversification, the agricultural sector and the descriptive inductive approach by studying the reality in the research sample (Iraq) through Arab and Iraqi sources.

### **The spatio-temporal limits of the research**

1. Spatial boundaries: (Iraq).
2. Temporal boundaries: Represented in the years (2004-2007) which include statistical data on agricultural activity.

### **Research Structure**

The research was divided into four axes, with the first examining the conceptual framework for economic diversification and economic diversification policies, while the second dealt with the contribution of the agricultural sector to GDP, the third concerned the contribution of the agricultural sector to food security, and the fourth on the contribution of the agricultural sector to foreign trade (exports and imports).

### **The first search**

#### **Conceptual framework for economic diversification and economic diversification policies**

##### **First: The concept of economic diversification (Hussain, 2017: 42)**

Economic diversification is defined by many economists as diversifying sources of income by adopting a balanced method of economic development based on the studied integration between diverse sectors and activities, and there are other concepts, the most important of which are:

- A. A cumulative process in order to increase the contribution of the main economic sectors such as the agricultural sector and the industrial sector in the formation of the gross domestic product.
- B. Economic diversification is also defined as diversifying the production structures of the various economic sectors with the need to create new income-generating sectors, which leads to reducing dependence on the oil sector.
- C. The concept of economic diversification goes to securing the largest number of basic income resources by increasing production capabilities as diversifying the sources of gross output, diversifying markets, or diversifying exports.

**Second: The objectives of economic diversification** (Ghilan, 2007: 34)

1. Develop the agricultural sector because this sector represents the mother of the economic sectors that contribute to the formation of the national income due to its potential represented by land, water and human resources (which is what our research focuses on).
2. Develop the manufacturing sector and fill its needs of raw materials provided by the agricultural sector and other sectors within the country.
3. Developing the public services sector.
4. Strengthening the links between economic sectors and thus economic stability.
5. Creating a base and basis for building a balanced and diversified economy in the presence of a large volume of natural resources that enable economic policy to develop and increase the efficiency of the Iraqi economy and create a balanced economy that depends on more than one sector to generate revenues for the state instead of relying on one sector.
6. Reducing and privatizing government support policies and the general government sector in some textile industries, except for the oil industries (Ali and Kazem, 2016: 40).

**Third: The importance of economic diversification**

Economic diversification aims to create new productive sectors or develop weak sectors in a way that contributes to reducing the excessive dependence on one sector in the formation of the GDP. The importance of economic diversification is reflected in the following: (ESCWA, 2001: 17)

- Provide protection for the economy in emergency conditions.
- Development and development of the various economic sectors.
- Increasing the national income by enhancing the role of foreign investment in economic activity.
- Increasing economic activity by strengthening the role of the private sector.

**Fourth: Criteria for economic diversification**

In order to evaluate the extent of the success of the policy of economic diversification in any of the countries, it is necessary to study some quantitative indicators and criteria through which you can measure the degree of diversification in the economic sectors, so we will try to identify some of these criteria through the following: (Awwad and Assaf, 2014: 2)

- A. Increasing the effectiveness of the private sector in the formation of GDP.
- B. The development of the percentage of export diversification.
- C. The rate and degree of structural change.
- D. Evolution of total employment by sector.
- E. The evolution of oil revenues.
- F. The degree of stability of GDP and its relationship to the stability of single rose prices.

**Fifth: economic diversification policies**

Diversification policies are among the important policies adopted by many countries in order to diversify the sources of domestic income in order to avoid fluctuations in the prices of the main commodities intended for export. These policies include:

1- Investment Policy (Ministry of Finance, Economic Department, 2009: 28)

Investment policies are considered one of the macroeconomic policies (general economic policy) aimed at diversifying the sources of the economy and the production base, as it aims to encourage private sector investments and enhance its development initiatives in order to increase economic growth rates and increase the volume of foreign direct investment by providing investment facilities, incentives and exemptions to investors. Another aspect of these investment policies is to stimulate the role of the private sector to enter and invest in the tourism sector, due to its effects and

repercussions that appear in all aspects of the economy and the country, the most important of which are: Expanding and diversifying the tax base in the state treasury, developing small and handicraft industries, activating and expanding building and construction services, stimulating internal and external trade to meet the demand for tourists. The expansion of the previous activities, which is reflected in the investigation of the severity of unemployment. Therefore, the state's investment policy aims to activate the role of the private sector and market mechanisms, maximize the profit margin, preserve local capital, and pay attention to the local product in terms of quality and price (they are the basis of the free market) (Amira, 2002: 13), Investment policies should include developing economic feasibility studies for opportunities for investment and demonstrating how to participate and invest in existing or new projects to achieve diversification of sources of income and thus economic diversification.

## 2- price policies

These policies aim to support the prices of agricultural crops, especially crops for export, as well as the crops needed by the industry in Iraq to provide raw materials such as the textile industries, the sugar industry and the vegetable oil industry through the cultivation of crops (sunflower, sesame and soybeans) and others that lead to strengthening sectoral interconnection between the sectors of industry and agriculture. As for supporting crops intended for export, or what is called (cash crops), it aims to provide the country with hard currency through its export (Al-Najafi, 1999: 165).

## 3- Water Policies

This requires the development of a strategy to manage this resource and not waste it, whose efficient use leads to increased production and increased productivity of agricultural crops (Al-Najafi and Hammadi, 1989: 265).

## 4- Financing Policies

This policy aims at lending by specialized agricultural banks and providing them with the necessary loans to set up various agricultural projects.

## 5- Agricultural Research and Extension Policies

This policy aims to train farmers and persuade them to adopt modern agricultural techniques and implement agricultural research aimed at reducing agricultural costs, increasing productivity and improving quality. A degree of self-sufficiency (Khalaf, 2015:3).

## **Sixth: Actions to make economic diversification policies a success**

Economic diversification is an important policy adopted by many countries to diversify sources of national income in order to avoid crises that occur from fluctuations in the prices of major export commodities, so we will address some important measures through which the policy of economic diversification can be implemented (Awad and Assaf, 2014: 11):

### 1. Adjustment of the production structure (Abdul Jabbar and Ramzi, 2020:14)

The Iraqi economy is suffering as it is known to be underdeveloped by key sectors such as agriculture and industrial sectors, as well as the backwardness of the various sectors of the economy that make up GDP, so in order to achieve economic diversification and development, adjustments must be made to the productive structure of the major economic sectors in order to form a broad economic base that contributes to the structure of the economy and, to achieve this, must: (Al-Taie, 2021: 61)

- **Agricultural sector:** Through the following: the development of a five-year agricultural plan for each province that takes into account the characteristics of the demographic province, the crops suitable for its climate, the agricultural projects in it and the availability of water from its scarcity. We propose that the colleges of agriculture, management and economy (economy department) and private sector representatives be involved in this plan and implemented. \*establishing agricultural companies involved with the foreign private sector known for its agricultural interests for the purpose of deploying large agricultural projects specialized in certain types of crops, because large projects reduce the cost of production and raise more labor than contribute to reducing the problem of unemployment in Iraqi society. \*Legislation by Parliament prohibits the dumping of goods, which has had a significant impact on agricultural products and crops and has caused farmers to abandon their farms because of losses because of the excessive import of products and crops of

Iraq's suppliers. \*Activating the National Product Protection Act No. (1 of 2010) and monitoring it by integrity committees. \*As well as activating the tariff law no. (2 for 2008), which makes it raise the prices of foreign products against the prices of similar Iraqi products. It also provides the Iraqi Treasury with significant financial resources. \*Focus on the adoption of agricultural technology in the agricultural sector, both plant and animal, in order to improve the quality of the product and increase agricultural productivity. \*Providing fertilizers, pesticides and agricultural blankets at subsidized prices and working to pay farmers' dues for wheat delivered to government cellulose and not to be slowed down. Construction of new dams with high-tech systems for providing water for agriculture purposes permanently.

- **Oil sector:** The formation of the National Oil Company to manage oil from upstream to downstream. As in most OPEC countries, the review of licensing round contracts that have led to many losses for Iraq, for example in the 2018 budget, there is a 13 trillion dinars, most of which is spent to cover the benefits of oil companies under the umbrella of licensing rounds. Investing gtl and converting natural gas into environmentally friendly hydrocarbon liquids while taking advantage of the country experience. It is of great importance that it has achieved great successes for research and development issues in oil institutions and working to benefit from them globally, university owners and research teams, and the signing of memorandums of understanding between national oil companies in the major oil producing provinces and government universities.

## Second search

### The contribution of the agricultural sector to the gross domestic product

The agricultural sector is one of the important sectors in the formation of the domestic product, and there are many countries that have worked to develop their industry through direct and indirect support for workers in this sector in order to provide food and export the surplus, which has a comparative advantage, resulting from different natural conditions, and different soils and technological progress. The indicators of the agricultural sector in Iraq indicate the facts that it was affected by the political, economic and legislative changes that Iraq witnessed after the events of (2003), and thus this impact was reflected on the effectiveness of the contribution of this sector to important variables in the Iraqi economy that can be highlighted in the following table:

**Table (1): Growth rate and contribution rate to GDP for the period (2004-2019) (million dinars)**

the years	Gross domestic product	growth rate%	total agricultural output	growth rate%	Contribution of agriculture to GDP%
2004	101.845.262.4	53	5546198.2	29	5.40
2005	103.551.403.4	92	7286558.3	31	7.00
2006	109.389.941.3	6	7597524.8	4	7
2007	111.455.813.4	9	5494212.4	(27)	5
2008	120.626.517.1	8	4730388.9	(13)	4
2009	124.702.847.9	3	4898773.2	4	4
2010	132.687.028.6	6	5560828.4	14	4.19
average growth rate		11.5		1.1	
2011	142.700.217.0	8	6465656.3	16	5
2012	162.587.533.1	14	6019561.4	(7)	4
2013	174.990.175.0	8	7459173.9	24	4.26
2014	178.951.406.9	2.2	7309016.0	(2)	4.00
2015	183.676.252.1	3	4613210.7	(36)	3
2016	208.932.709.7	12	4598970.6	9	2.20
2017	205.130.066.9	(9)	3863223.0	(15)	2
2018	202.776.268.9	(1.14)	4358551.1	13	2.14
2019	211.789.774.1	0.62	4273581.5	2.3	2.11



**Source: Columns (3,1) Ministry of Planning, Central Statistical Organization, Directorate of National Accounts, for the period (2019-2004). Columns (5,4,2) are from the researcher's work. \*The growth rate was extracted by the law  $r = \frac{p1-p0}{p0} \times 100$**

We note that after (2003) the conditions of the agricultural sector did not improve, as it continued to suffer from neglect, which negatively affected the percentage of agriculture's contribution to agricultural output, and it remained low until 2010. This decline was due to an increase in the general level of prices and with the large increase in salaries. employees, reducing government spending and controlling the financial deficit, and all of these combined things led to neglect of agriculture and mismanagement, whether at the level of cultivation of the land or at the government level, as the door to import for agricultural products was opened wide without providing a kind of protection for local crops, and it is worth mentioning In (2008) Iraq imported foodstuffs worth (5.5) billion dollars from Turkey, and (3.5) billion dollars From Iran and (3) billion dollars from Syria, these huge imports, totaling (12) billion dollars in one year, do not include the huge rice and wheat deals with Canada, Australia and Russia to meet Iraq's growing need for grain. We note that the average growth rate of the total agricultural product has reached (1.1%) and the average growth rate of the gross domestic product has reached (11.5%) for the period (2004-2010).

The total agricultural output began to increase in the years (2011-2013), as the government supported the agricultural sector and launched the agricultural initiative. The total agricultural output in (2013) amounted to about (7459173.9) million dinars, compared to previous years, with a growth rate of 24 percent. The total agricultural output witnessed the largest decline in (2015) with a negative growth rate of (36), and the percentage of agriculture's contribution to the GDP decreased to (3%) as a result of the terrorist ISIS war on Iraq in (2015). Which led to the sabotage of agricultural lands, the emigration of farmers from their lands, the diversion of government support to relief for the displaced, and arming the army, and the agricultural output continued to decline until (2018), and the percentage of agriculture's contribution to the GDP has also witnessed a significant decrease since (2011). ) Until (2018), the year (2018) reached about (2.14%) as a result of the lack of interest in agriculture by the government and the failure of farmers to return to their homes until the present time due to displacement. The average growth rate was about (0.25%) for the total agricultural product from the year (2011-2018), and the average growth rate was about (4.6%) for the GDP, and the total growth rate for the GDP during the study period was about (8.8%) and for the agricultural product about (1.5%).

It was found through the study of the agricultural reality that the agricultural output during the study period was almost low in comparison with the size of this sector, and its role in raising the revenues of the GDP. However, we note that the nineties of the twentieth century were the best period, in terms of agricultural production and its contribution to the GDP the total, despite the economic blockade, the agricultural sector was at the fore in its contribution to the formation of the GDP.

**Table (2): Evolution of the Gross Domestic Product and its per capita share in Iraq for the period (2004-2019)**

the years	GDP at constant prices (Million dinars) (1)	Population (people) (2)	Per capita output (million dinars) (3)
2004	101.845.262	26.313.838	3.9
2005	103.511.403	26.922.284	3.8
2006	109.389.941	27.448.124	3.9
2007	111.455.813	27.911.248	3.9
2008	120.626.517	28.385.746	4.1
2009	124.702.848	28.973.162	4.2
2010	132.687.029	29.741.976	4.3
2011	142.700.217	30.725.300	4.5
2012	162.587.533	31.890.011	5
2013	174.900.175	33.157.050	5.2
2014	178.951.407	34.411.951	5.1
2015	183.616.252	35.572.261	5.1
2016	208.932.110	36.610.632	5.6
2017	201.059.363	37.552.781	5.2
2018	202.776.268	38.433.600	5.2
2019	211.789.774	39.309.783	5.4

**Source: (1) the data of the Iraqi Central Statistics Organization and the Central Bank of Iraq for the period (2004-2019), (2) the data of the World Bank published on the website for the period (2004-2019), (3) the researcher's work by dividing (1) by (2).**

Table (2) shows us the continuous increase in the gross domestic product since the beginning of the period, as it reached (102) trillion dinars until the year (2016), when it reached (209) trillion dinars, then it began to decline in the year (2017) to (201 trillion dinars). The reason for this is due to the drop in the price of a barrel of oil, and because the Iraqi economy is based on what it exports of crude oil in the formation of the gross domestic product, and in a very large percentage, because the Iraqi economy is a rentier economy, then the gross domestic product returned to rise in the years (2018) and the year (2019). ) until it reached at the end of the period (212 trillion dinars). This value is the largest value recorded for GDP during the study period. Where the population was high throughout the study period at a rate of (about 3%), as it was at the beginning of the period (26.3) million people, and then at the end of the period it became (39.3) million people.

In the same direction taken by the development of the reality of the GDP at current prices, the development witnessed by the per capita share of it was that it continued to rise, since the beginning of the period it amounted to (3.9) million dinars until it reached in the year (2013) (5.2) million dinars, then it became after This was in the year (2014) (5.1) million dinars, as it remained the same in the year (2015). The regions are separated from the central authority and the government is preoccupied with military operations for the purpose of liberating them(2019) GDP per capita recorded the largest value over the study period, at (5.6) million dinars. However, it declined again in the two years (2017) and (2018), respectively, as it reached (5.2) million dinars, and then rose again to reach at the end of the period, reaching (5.4) million dinars.

### **The third search**

#### **The contribution of the agricultural sector to food security**

Providing food to the population on a permanent basis in the appropriate quantity and quality and achieving high levels of agricultural production is one of the important conditions in achieving food security for the country, and the issue of food security is of great importance, as the fruit of a valuable process and development of agricultural production (Matouk, 2015: 241), and the concept of food security is known According to the definition of the Organization (FAO), "the provision of food to all members of society in the quantity and quality necessary to meet their needs on an ongoing basis for a healthy and active life." Increasing agricultural crops to meet the needs of local consumption of food commodities is one of the main determinants of food security, and a

number of factors and determinants control the quantities of agricultural production and the size of the food gap in the Arab countries represented in the lack of cultivated area, scarcity of water resources, low irrigation efficiency and lack of land area Meroitic (Fund, Arab Monetary, 2009: 171).

Cereal crops, especially (wheat, barley, rice, maize) are among the most important food crops that people depend on. In the nineties to confront the state of the economic siege imposed on the country, and the following is a presentation of the reality of production of grain crops in Iraq, contributing to meeting the food needs of the population, as it represents the basis on which food security is based in the country (Al-Dubaisi, 2009: 152).

### **First: the wheat crop**

Wheat cultivation is one of the most important grain crops in most countries of the world because the area allocated to wheat cultivation exceeds all other types of crops as it can be grown every season in one place in all temperate regions on the surface of the globe, and it is one of the crops that the state attaches great importance to its nutritional importance, as It is grown in large areas of Iraq, especially in the fertile soils of the northern regions (Hamid, 2020: 47).

**Table (3): Area, production and productivity of wheat crop in Iraq for the period (2004-2019)**

the years	space (1000acres)	output (1000tons)	Productivity (kg/acre)
2004	6159	1832	298
2005	6411	2228	348
2006	6054	2286	378
2007	6280	2203	351
2008	5741	1255	219
2009	5050	1700	337
2010	5544	2749	496
2011	6543	2809	429
2012	6914	3062	443
2013	7376	4178	566
2014	8528	5055	593
2015	4147	2645	638
2016	3697	3053	826
2017	4216	2974	705
2018	3154	2178	690
2019	6331	4343	686

**Source: Republic of Iraq, Ministry of Planning, Central Statistical Organization, Directorate of Agricultural Statistics for the period (2004-2019).**

### **Secondly, the barley crop**

It is one of the winter crops and occupies the second place and is considered the main source of animal feed formation, as the barley crop is characterized by its ability to withstand drought and salinity compared to other major crops. Insects (Khazal, 2014: 56).

The (barley crop) is one of the important strategic crops, as the amount of import from it was less than the (wheat) crop, being the focus of its use as a feed material for animals, and its import during the nineties is due to its use alongside (the wheat crop) as a food material during the period of the economic siege (Al-ajeeli , 2020: 67)



**Table (4): Area, production and productivity of barley crop in Iraq for the period (2004-2019)**

the years	space (1000acres)	output (1000tons)	Productivity (kg/acre)
2004	3829	805	210
2005	4252	754	177
2006	4103	919	224
2007	4374	748	171
2008	5394	404	75
2009	2814	501	178
2010	4027	1137	282
2011	3651	820	522
2012	2850	832	292
2013	3364	1003	298
2014	4632	1278	276
2015	1003	330	329
2016	1062	499	470
2017	820	303	369
2018	601	191	317
2019	3721	1518	408

**Source: Republic of Iraq, Ministry of Planning, Central Statistical Organization, Directorate of Agricultural Statistics for the period (2004-2019).**

### **Third: the rice crop**

It is one of the most important food crops in all countries because it contains (%40) of calories, and has a presence in the food basket. The importance of (rice) food, especially in Iraq, is grown in the governorates (Al-Qadisiyah, Najaf, Dhi Qar) where part of the food is used. Of water to produce the rice crop (Ali, 2010: 14), as the rice crop is considered a food crop that belongs to the (cereals) family. Therefore, its cultivation is limited to areas where irrigation water is available, where the available water share affects large enough quantities to affect the production of the rice crop (Directorate of Agricultural Statistics, 2019: 2).

**Table (5): Area, production and productivity of the rice crop in Iraq for the period (2004-2019)**

the years	space (1000acres)	output (1000tons)	Productivity (kg/acre)
2004	352	250	711
2005	428	309	721
2006	503	363	723
2007	497	399	790
2008	339	248	732
2009	220	174	788
2010	191	156	812
2011	426	235	891
2012	931	361	1133
2013	938	245	1177
2014	317	403	1270
2015	110	109	989
2016	154	181	1175
2017	222	626	1197
2018	22	18	838
2019	511	575	1124

**Source: Republic of Iraq, Ministry of Planning, Central Statistical Organization, Directorate of Agricultural Statistics for the period (2004-2019).**

#### **Fourth search**

##### **Contribution of the agricultural sector to foreign trade (exports and imports)**

The importance of agriculture is highlighted by the percentage of its participation in foreign trade. Data in this regard indicates a decline in the participation rate of agriculture in foreign trade on the one hand, and the exacerbation of the seriousness of the deficit in the trade balance of agricultural products on the other hand. If the importance of Arab foreign trade in relation to the gross domestic product increased significantly, as it exceeded (43%) during the seventies (Al-Rawi, 1991: 11). International trade often played an important role in the process of economic development during history in third world countries, where the export of primary products from Africa, Asia and the Middle East constitutes A large proportion of the gross national product of third world countries, and this situation comes through the export of agricultural products (such as coffee, tea, cotton, cocoa and sugar) to developed countries. As for the developing countries that export crude and manufactured petroleum, these countries obtain, through petroleum and its derivatives, to other countries about (90%) or more of their national income (Al-Najafi and Al-Quraishi, 1988: 159). Foreign trade is defined as “the process of trade exchange that takes place between a country and other countries of the world, as this process includes the exchange of material and immaterial goods.” It is also known as a group of goods and services produced by a country that allows a comparative advantage in its production, as part of it is exported abroad. importing goods and services From other countries, as a result of this process, what is known as the “trade balance” of the state appears, whether it suffers from a surplus or a deficit (Ali, 2021: 21). As foreign trade is one of the main components of the country's economic relations, it is the oldest and most developed traditional form of these relations, and foreign trade is an essential tool for achieving (comprehensive development), as it contributes to raising economic growth rates by diversifying the country's industrial activities and creating new added values, which It is usually expressed (in terms of exports of goods and services) as well as attracting foreign investments that also contribute to development through the various production factors it follows (Lusif, 2014: 2).

##### **Contribution of food and agricultural commodities to foreign trade (exports and imports) of agricultural production requirements**

###### **First: exports**

Exports are one of the important indicators for measuring the volume and level of foreign trade. The higher it rises, the positively it will have a positive impact on the trade balance. Exports represent a flow of income, adding new purchasing power to the overall monetary spending stream, and they represent a part of the gross domestic product that does not It is consumed or used locally, because it is in excess of the local market need or because it is in the form of raw materials that cannot be manufactured in the local market due to the lack of advanced technology and production resources (labor force, capital and investments), and exports are a reflection of the available local production capacities, as well as they An indicator of the expansion of the local production base and a factor in revealing the possibility of diversifying it, and it plays an important role in covering the Imports and achieving the burden of (external debt) through the manifested foreign currencies, as well as achieving a balance between aggregate supply and aggregate demand, stimulating investment to obtain the largest possible use of local resources, as well as attracting (foreign capital) to work in the field of producing export goods, and expanding Marketing ability by opening new foreign markets to national products through competition in cost and quality (Al-Koutji, 2011: 55).

**Table (6): the structure of Iraqi exports according to the International Trade Classification (S.I.T.C) for the period (2004-2019) (billion dinars)**

the years	Food and live animals	Beverages and Tobacco	Non-food raw materials other than fuel	Mineral fuels and related lubricants	Animal and vegetable oils and fats	Chemicals	manufactured goods	Transport machinery and	Miscellaneous products	Goods not classified	Total
2004	52	0	77	25740	0	0	26	0	0	0	25895
2005	88	0	65	34730	0	0	22	0	0	0	34905
2006	127	0	68	44750	0	3	24	106	0	13	45091
2007	151	0	100	49716	0	0	51	100	0	0	50118
2008	230	0	154	76238	0	0	77	153	0	0	76852
2009	130	0	70	46296	0	5	24	112	0	0	46637
2010	172	0	93	60983	0	6	31	147	0	12	61444
2011	267	0	144	94821	0	10	48	229	0	19	95538
2012	326	0	174	115383	0	11	58	279	0	23	116254
2013	309	0	166	109854	0	11	55	265	0	22	110682
2014	286	0	153	101522	0	10	51	246	0	21	102289
2015	170	0	91	60215	0	6	31	145	0	12	60670
2016	135	0	72	47815	0	5	25	116	0	10	48178
2017	35	0	16	72206	0	0	1	35	0	0	72293
2018	7	0	19	104028	0	0	89	6	0	0	104149
2019	19	0	35	97776	0	0	154	0	0	0	97984

Source: Central Bank of Iraq data, separate individual publications for several years.

1. Values (CIF), which is an abbreviation of the terms (Cost-Insurance-Fright), which means that the one who will ship the goods and goods is the one who will bear all costs of the goods and goods as well as insurance on them and also the shipping costs until these goods are ready for delivery at the port of the importer.
2. The published data and information for most years are in units of (million dollars) converted into (billion dinars) after being equalized at nominal exchange rates.

Through table (6), which shows the structure of exports in Iraq classified according to the international classification of trade, where we note the fourth classification, which represents (mineral fuels and lubricants related to them) is dominant over the structure of exports in Iraq, at a rate of more than (99%) and for all years, The reason for this is that the Iraqi economy is a rentier economy that is based on the export of crude products without manufacturing them, and Iraq is based on the export of crude oil in the first and basic degree, which falls within this classification. As for the rest of the classifications, the participation rate of any classification did not exceed (1%) and for all years, this was limited to this our analysis is on the fourth classification only. It can be noted that Iraqi exports, according to the classification of (mineral fuels and related lubricants), amounted to (2004) 25,740 billion dinars, and then continued to increase until it reached in(2008) (76238) billion dinars, and in the year (2009) it decreased to (46296) billion dinars. The reason for this decline is due to the mortgage crisis, and the consequences of this crisis and a drop in oil prices, and in the year (2010) the rise returned In the value of exports, it reached in the year (2013) (109854) billion dinars, which is the highest value during the study period, then decreased in the year (2014) to (101522) billion dinars, to continue declining until it reached in the year (2017) (72206) billion dinars. And the reason for this decline in the value of Iraqi exports for the period (2014-2017) is what happened from the control of armed groups called (ISIS) over large areas of Iraq, and the Al-Samoud refinery (Baiji) in Salah al-Din governorate stopped working, as well as the Qayyarah refinery in Nineveh governorate. The reason for this is that the two provinces are out of control The central government, in addition to this, the stopping of pumping crude oil through the strategic lines that pass through these two governorates in addition to the lines that pass through

Anbar Governorate, which were also out of control, in addition to the closure of many international trade routes and the government's preoccupation with fighting these groups, And in the year (2018), when Iraqi exports recorded a qualitative leap, reaching (104149) billion dinars after the return of all the lands that were outside the control of the state and the restoration of trade routes to their previous era, but in the same year it recorded a noticeable decline due to the decline in oil prices in global markets, especially After the increase in global reserves, as well as the American stockpile of it in particular. And products whose value is zero means that there is nothing to be exported from them. We can conclude from the foregoing that the failure to diversify the structure of Iraqi exports and its reliance solely on the export of crude oil in the formation of the volume of its exports by more than (99%) has made it vulnerable to global crises that may occur and that have their effects on changes in oil prices.

### Second: Imports (Hussain, 2017: 67)

Imports play an important and fundamental role in the Iraqi economy, as their mission is manifested through achieving a balance between supply and demand. After the occupation of Iraq in (2003) the policy of economic openness led to an increase in imports, especially agricultural and industrial, to meet the local demand for basic goods and services as a result of the inability of the economic sectors To cover the demand in the Iraqi market, which prompted the Iraqi government to rely heavily on imports in order to meet the needs of the local demand of various commodities. The value of the two years (2011 and 2013) amounted to approximately (47.8, 58.8) billion dollars for the two years in a row (noting that the private sector contributes the largest proportion of these imports by about (73% and 63%) during the same period) and the state is still as a result of weak production in Its main commodity sectors import more than (95%) of its industrial goods and (85%) of its food needs, while it exports only one commodity (oil). The indicator (the degree of importance of imports) expresses the relative importance of imports from the output the gross domestic product, through which it is possible to know the dependence of the Iraqi economy on the outside.

**Table (7): the structure of Iraqi imports according to the International Trade Classification (S.I.T.C) for the period (2004-2019) (billion dinars)**

the years	Food and live animals	Beverages and Tobacco	Non-food raw materials other than fuel	Mineral fuels and related lubricants	Animal and vegetable oils and fats	Chemicals	manufactured goods	Transport machinery and equipment	Miscellaneous products	Goods not classified	Total
2004	1061	406	544	3053	1980	2084	2588	13470	4903	884	30973
2005	1189	454	610	3417	2215	2330	2897	15075	5487	988	34662
2006	1105	422	585	3186	2081	2179	2731	14141	5136	942	32508
2007	1337	322	446	2427	1585	1658	2822	9532	3912	718	24759
2008	2281	549	760	4138	2703	2829	4813	16257	6672	1224	42226
2009	2652	639	884	4812	3143	3290	5598	18907	7759	1424	49108
2010	2814	678	938	5109	3337	3492	5942	20069	8237	1512	52128
2011	3095	746	1031	5617	3668	3840	6535	22066	9056	1662	57316
2012	3932	946	1311	7136	4660	4879	8301	28033	11505	2111	72814
2013	3952	952	1317	7171	4683	4909	8342	28173	11562	2122	73183
2014	3498	842	1166	6348	4145	4340	7384	24936	10234	1878	64771
2015	3064	737	1021	5561	3632	3802	6469	21848	8967	1645	56746
2016	2188	527	729	3970	2593	2715	4619	15600	6402	1175	40518
2017	2569	618	1233	4661	3043	3186	5422	18310	7515	1379	47936
2018	2979	718	993	5405	3530	3695	6288	21236	8715	1599	55158
2019	3770	908	1256	6843	4469	4678	7960	26882	11032	2025	69823

Source: Central Bank of Iraq data, separate individual publications for several years.

**\*The published data and information for most years are in units of (million dollars) converted into (billion dinars) after equalizing them at nominal exchange rates.**

Through table (7), which shows the structure of Iraqi imports, we note a higher participation rate for each type than it was in the export structure, and this eighth classification (location and transportation equipment) is the most involved, meaning that the majority of Iraqi imports are mainly machinery and equipment Transportation, and the reason for this is the inability of Iraq to own factories and large companies that manufacture these machines and machines, as well as equipment, in addition to the lack of factories for cars and their spare parts. That the highest value of imports was in (2013) at (73178) billion dinars.

#### **Prospects for diversification in the Iraqi economy**

The formation of a higher national council of economic policies linked to the Council of Ministers and the abolition of the Ministerial Energy Committee and includes this in its following membership. They have well-known descriptive studies inside and outside Iraq:

1. A group of competent and locally known economists in macroeconomics and development who work as permanent consultants or use Iraqi universities, particularly the faculties of management and economics.
2. Representatives of experienced and competent private sector (business) experts. Their mission is to create a broad economic base that will ensure diversification of sources of income and finance, and restore Iraq's economic balance in two directions, the first of which is to reduce the rent of the economy by diversifying non-oil sources of income and reducing dependence on the oil sector. The second is the pursuit of the development of the private, cooperative, and mixed sectors through a set of laws and procedures that are clearly activated and supportive of it under objective and practical policies to take its part and take the lead. At the same time, the government sector is gradually rationalizing, supporting the agricultural sector and enabling it to establish large, high-productivity farms, particularly in food security crops, with an encouraging and supportive pricing policy towards cost reduction, as well as economic policies that protect Iraq's agricultural food products from competition from imported food products.

### **CONCLUSIONS AND RECOMMENDATIONS**

#### **First: the conclusions**

1. The research hypothesis proved correct because Iraq did not take adequate diversification policies, particularly the lack of interest in the agricultural sector.
2. A decline in the contribution rates of the agricultural sector to the GDP over the study period, which indicates the existence of a number of problems and challenges that this sector suffers from, in addition to the dominance of the oil sector in the total calculation of GDP and public revenues.
3. The decline in per capita agricultural output during the study period (2004-2019).
4. Weak sectoral interconnection, especially between the agricultural and industrial sectors, which is a matter that must prevent a priority in strategic planning because it has a role in drawing a road map for the quality of agricultural products and considering them as inputs to the industrial sector and giving them priority in the field of protection from foreign competition and government support.
5. The structure of exports in Iraq according to the international classification of trade shows that the classification of mineral fuels and lubricants is dominant over the export structure in Iraq, at a rate of (95%) and for all years of the study period, and the reason for this is that the Iraqi economy is a demi-economic based on the export of raw products without manufactured.
6. The general structure of Iraqi imports during the study period was most of the Iraqi imports were machines and transportation (38%) and consumer foodstuffs, and this is what makes the Iraqi economy affected by the global financial crises, a severe impact that reflects negatively on the hard currency reserve in the country and on all variables and indicators other economic.
7. We conclude from the foregoing during the study period in the lack of diversity in the structure of Iraqi exports. Iraq relies primarily on the export of crude oil in the composition of its exports



by more than (99%), which made the Iraqi economy more vulnerable to being affected by global crises that could occur and which have their effects on Oil price changes.

8. The economic openness after the year (2003) and the decrease in tax and customs prices contributed to encouraging and increasing the entry of imported agricultural products and dumping them into Iraqi markets, which ultimately contributed to the deterioration of the volume of local production.

## **SECOND: RECOMMENDATIONS**

1. Putting the customs tariff law into practice, as it has a positive effect on reducing unequal competition between local goods and their imported counterparts, and this law will increase the volume of public revenues.
2. Conducting a comprehensive and new review of the concluded trade agreements, including the agricultural agreement of the World Trade Organization (WTO), taking into account the fragility of the agricultural sector at the current stage and the negative effects of signing such agreements.
3. Develop a well-defined and well-studied strategy to advance the reality of the agricultural sector by diagnosing its problems that we have referred to in this research, which are the problems of economic openness, water resources, desertification, financial and technological weakness, and external competition, in addition to setting a time limit to address these problems.
4. Adoption and actual application of economic diversification policies (investment, financing and price policies, research and agricultural extension) in a way that contributes and helps in encouraging and regulating local agriculture and price stability to protect local products through activating these policies.
5. Increasing the agricultural sector's share of investment allocations, as it is an important component of GDP and public revenues.
6. Using agricultural policies that aim to increase the volume of production and raise production efficiency in order to achieve food security and increase the agricultural sector's contribution to the process of diversifying the sources of national income in Iraq.

## **REFERENCES**

- Abdeljabar, Ben Toumi, Ramzi, Abdou, (2020) The Role of the Agricultural Sector in Economic Diversification Policies, M.A. Letter from Bashir Brahimi University (Bouarrig Tower), Algeria.
- Al-Ajeeli, Ahmad Muhammad Ahmad, an economic analysis of the impact of price policy and government support for my crops (wheat and barley) in Iraq for the period (1993-2019), Master's thesis, Tikrit University, 2020.
- Al-Dubaisi, Abdul Razzaq Majid Ali,. (2009) the Reality of the Agricultural Sector in Iraq and the Challenges It Faces in the Future, University of Baghdad, Volume (15), Issue (53),.
- Ali, Muzahim Maher, Agricultural Production in Iraq between Reality and Ambition, Al-Mustansiriya University, Al-Mustansiriya Journal for Arab and International Studies, No. (38).
- Ali, Rahman Hassan, Kazem, Baida Jawad, (2016) The Role of the Agricultural Sector in Diversifying National Income Sources, Al-Kut Journal of Economic and Administrative Sciences, Wasit University, College of Administration and Economics, Issue (21),
- Al-Koutji, Evin Thamer Nouri,( 2011) The reality of agricultural exports in some developing countries in light of the impact of the policies of the World Trade Organization (a comparative study), University of Mosul,.
- Al-Najafi, Salem Tawfiq,( 1999) Agricultural Economics, a methodological book, University of Mosul, Dar Al-Kutub for Printing and Publishing, Iraq,.
- Al-Najafi, Salem Tawfiq,( 1988 ) Al-Quraishi, Muhammad Salih, Introduction to Development Economics, Dar Al-Kutub, Mosul, AD.
- Al-Najafi, Salem Tawfiq, Hammadi, Ismail Obaid,( 1989) Agricultural Planning - Development Planning and Agricultural Policy, University of Mosul, Dar Al-Kutub Directorate for Printing and Publishing, Iraq,.

- Al-Rawi, Mansour,( 1991) Economic Integration Theory and Application in Economic Integration in the Arab World, Dar Al-Hikma, Baghdad,.
- Al-Taie, Bashir Hadi Odeh,( 2021) Role and Importance of Economic Diversification in Iraq: Conditions and Mechanisms Quantifying For Years (2003-2019), Basra and Arabian Gulf Studies Center, Department of Economic Studies, Basra University, Iraq,.
- Amira, Muhammad Saad,( 2002 ) The Realized Economy of the United Arab Emirates and Future Aspirations, Journal of Economic Cooperation among Islamic Countries, Volume (23), AD.
- Arab Monetary Fund Unified Arab Economic Report, (2009) League of Arab States, Abu Dhabi, UAE,.
- Awwad, Khaled Rokan, Assaf, Nizar Diab,( 2014) Requirements for Economic Diversification in Iraq in the Light of the Free Economy Management Philosophy, Master Thesis, University of Anbar, College of Administration and Economics,.
- ESCWA,( 2001) Economic Diversification in Developing Oil-Producing Countries, Economic and Social Commission for Western Asia, United Nations, New York,.
- Ghailan, Mahdi Sahar,( 2007 ) The Role of the Agricultural Sector in Iraq's Economic Diversification Policies, Karbala University Scientific Journal, Volume Five, Number Two, AD.
- Hamid, Jawad Kazim,( 2015) Reading in the Problems of Iraqi Agriculture, University of Basra, Gulf Economic Journal, Issue (26), AD.
- Hussein, Musab Abdul-Aali Thamer, ,( 2017) The development of the Iraqi economy between fluctuations in oil revenues and diversification of sources of income, Master's thesis, College of Administration and Economics, University of Al-Qadisiyah,.
- Khalaf, Balsam Jamil, ,( 2015) The importance of the government role in developing research centers and its reflection on Iraqi agricultural production, University of Baghdad, Journal of Baghdad College of Economic Sciences, Issue (41), AD.
- Khazal, Mowaffaq, ,( 2014) Agricultural price policy between the requirements of production growth and correcting the imbalance in the crop structure, Baghdad University College, Journal of the University of Baghdad College of Economic Sciences, Issue (40),.
- Lousif, Faisal, ,( 2014) the Impact of Foreign Trade Policies on Sustainable Economic Development in Algeria, Master's Thesis,.
- Maatouq, Safia Shaker, ,( 2015) Strategic Grain Production and Its Impact on Food Security, Basra and Arabian Gulf Studies Center, Maysan Research Journal, University of Basra, Volume (11), Issue (21), AD.
- Ministry of Finance, ,( 2009) Economic Department, Ways of Developing Public Revenue Sources in Iraq, AD.
- Ministry of Planning,( 2019) Central Statistical Organization, Directorate of Agricultural Statistics,.

## مساهمة القطاع الزراعي في تعزيز استراتيجية التنويع الاقتصادي في العراق للمدة (2004-2019)

هبة عادل زكريا الصباغ

صباح فيحان محمود

قسم الاقتصاد – الإدارة والاقتصاد – جامعة تكريت – تكريت - العراق

### الخلاصة

هدف البحث التعرف على أهمية سياسات تنويع مصادر الدخل القومي في الاقتصاد العراقي وتطوير القاعدة الانتاجية للقطاع الاقتصادية دون الاعتماد على قطاع النفط فضلاً عن تحديد دور الانتاج الزراعي ومساهمته في عملية تنويع مصادر الدخل. ويعتمد الاقتصاد العراقي بدرجة كبيرة على إيرادات النفط مما جعله عرضة للتقلبات التي تحيط بهذا القطاع وتذبذب الإيرادات المتأتية منه، عليه أصبح من الضروري تبني استراتيجيات وسياسات للتنويع الاقتصادي لمصادر الدخل القومي في الاقتصاد العراقي وتطوير القاعدة الاقتصادية دون الاعتماد على قطاع النفط وتحقيق الإيرادات وتنويع مصادر الدخل القومي. يعد قطاع الزراعة من القطاعات الرائدة بما يمتلكه من وفرة نسبية في الموارد الزراعية بما يسمح للسياسة الاقتصادية أن تنفذ بنجاح سياسة تطوير وتحقيق الإيرادات المتنوعة خارج إيرادات النفط، إذ يمكن ان يساهم القطاع الزراعي بدور رئيسي وفعال في تحقيق تنويع مصادر الدخل وذلك من خلال ما يوفره هذا القطاع الحيوي من منتجات غذائية ضرورية تلبي حاجات الطلب المحلي، فضلاً عن مساهمته في التجارة الخارجية من خلال تصدير الفائض من الإنتاج الزراعي ومساهمته في الناتج المحلي الإجمالي. واستنتج البحث عدم تنوع هيكل الصادرات العراقية إذ يستند العراق بالدرجة الأولى والاساسية على تصدير النفط الخام في تكوين صادراته بنسبة أكثر من (99%) مما جعل الاقتصاد العراقي أكثر عرضه للتأثر بالأزمات العالمية التي ممكن ان تحدث والتي تلقي بآثارها على تغيرات أسعار النفط.

### الكلمات المفتاحية:

التنويع الاقتصادي، مساهمة القطاع الزراعي، تنويع مصادر الدخل.