

Article

# Impacts of Iraq's WTO Accession on Agriculture

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**Abstract:** This research investigates the pivotal role of Iraq's agricultural sector in its national economy, emphasizing its significance in ensuring food security, fostering economic growth, and contributing to employment, capital formation, and export earnings. Despite this importance, there exists a gap in understanding the implications of Iraq's accession to the World Trade Organization (WTO) on its agricultural sector. The study aims to fill this gap by examining the conditions and obligations imposed by the WTO, permissible support types, and Iraq's economic resources. Utilizing a mixed-method approach, including literature review and empirical analysis, the research explores the potential for Iraq's agricultural sector advancement through strategic resource allocation and adoption of modern technologies. Findings reveal that Iraq possesses the necessary elements for economic development, particularly in agriculture, if resources are efficiently managed and modern techniques are embraced. The study offers conclusions and recommendations crucial for specialists in Iraqi economic affairs, especially those concerned with agricultural development and WTO implications.

**Keywords:** Iraqi economy, Main exports, Economic legislations, Sustainability.

## 1. Introduction

The World Trade Organization (WTO) was established in 1994 in the Uruguay session after it was preceded by several multilateral agreements that focused on customs tariffs and trade, starting in 1947, in order to liberate international exchanges from any obstacles that stand in the way of the free movement of goods and services between member states. This organization entered into existence starting in 1995 to assume leadership of the new global trading system, and then the pillars of the new global system were completed, represented by the International Monetary Fund, which is concerned with the affairs of the international monetary system, and the International Bank for Reconstruction and Development, which is responsible for managing the international financial system. These pillars gave the world a new economic face. All countries of the world are affected by it, whether they are members or countries that are still outside the framework of this system.

All countries have noticed that the effects of the WTO are many and cannot be limited to a specific field, but rather they have branched out and extended to affect all countries of the world, some positive and some negative depending on the development of economic activities and the percentage of their contribution to the gross domestic product of different countries, and the agricultural sector will be affected more compared to other economic sectors because This sector is distinguished by its great importance in the structure of the national economy, not only for Iraq, but for most countries of the world, especially developing ones, because this sector is linked to the food security requirements of citizens and meeting the requirements of other sectors with what they need of raw

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materials and labor, in addition to being an important source of necessary foreign currencies. To finance the requirements of economic growth and development.

The importance of the research: The importance of the research comes from the importance of identifying the content of the agricultural agreement in light of the new global system of international trade, and an attempt to touch upon its positive and negative effects on the agricultural sector in Iraq and its repercussions on the overall national economy.

## 2. Materials and Methods

The goal of the research is to diagnose the most important effects resulting from Iraq's accession to membership in the World Trade Organization in order to reduce the negative effects and make the most of what this system provides in terms of the principles and exceptions that the developed countries that are members of this system grant to developing countries, including Iraq.

Research hypothesis: Iraq possesses economic resources that, if exploited optimally, will enable it to protect its food security and reduce its dependency on other countries, and then properly integrate into the global economic system of international trade.

Research problem: Iraq adopted this system despite its inability to benefit from the advantages and exceptions it provides for developing countries, due to its adoption of an open-door policy in foreign trade, which led to the flooding of the Iraqi market with low-quality, low-priced products that greatly harmed national production and then disappeared from the market. Local as a result of strong competition from foreign products.

## 3. Results

The agricultural sector within the framework of the World Trade Organization. First the theoretical framework of the World Trade Organization

### Introduction to the organization:

The headquarters of the World Trade Organization, Geneva, in Switzerland, exercised its duties starting in 1995 to announce the beginning of a new era in the history of international economic relations, aiming to develop and strengthen international trade relations by liberating foreign trade from all restrictions and obstacles imposed on it to become Competition is the prevailing law in foreign and internal markets. Today, it is a global forum for conducting international trade negotiations, governed in accordance with the rules and customs that define global commercial behavior, as it is the sole regulator, monitor, and implementer of foreign trade agreements and obligations.

The number of its member states reached 118 in 1995, after it was 23 in 1995. 1947, and the number of its members increased to 123 countries in 1999, and countries continued to join, reaching 146 countries in 2003, then to 152 countries in 2006, including 13 Arab countries, and there are more than 30 countries on their way to gaining membership, including 6 Arab countries, including Iraq[1]. All countries realized that not joining this organization would mean remaining in international isolation and the possibility of being affected by negatives would be greater, which prompted them to accelerate their accession to the WTO, bringing its number in 2016 to 164 countries, in addition to 20 countries with observer status[2] and this organization created the legal right to fight all forms of policies that would hinder the freedom of foreign trade by subjecting all its member states to inspection and issuing rulings regarding international disputes of a Trade is the same as any international institution such as the International Bank and the Fund. Based on the above, there have been many definitions that address this topic, including:

1. It is an international institution that works to manage conflicting interests outside the umbrella of the United Nations and enjoys financial and administrative independence[3].

2. An international organization that works to ensure the free movement of goods, services, individuals, and capital between countries, and to protect intellectual property rights and the resulting political, economic, social, cultural, and environmental impacts[4].
3. An international multilateral agreement to exchange preferential benefits resulting from the liberalization of foreign trade from tariff and quantitative customs restrictions to support growth in member states[5].

No matter how many definitions the organization has, it does not deviate from being an economic organization with a global legal personality and an independent activity that works to manage the new global economic order and strengthen and consolidate its principles in the field of foreign trade liberalization. Member states are responsible for managing this organization, as important decisions are taken unanimously by ministers or delegates. Those concerned with this matter meet regularly every two years at its headquarters in Geneva.

The organization aims to achieve a general goal of increasing the rate of global economic development through liberalizing and expanding foreign trade so that the goods and services of member states are in one market (globalization of trade). As for the sub-goals that the organization seeks to achieve, they can be summarized as follows: optimal use of global resources, environmental protection. Achieving full employment, raising the standard of living and income of member states, stimulating and increasing effective demand, encouraging the movement of production and investments, resolving disputes between member states related to foreign trade, achieving transparency regarding commercial transactions between member states[6].

To achieve these goals, there are many functions that the organization must perform, the most important of which are[7]:

1. Implementing and managing trade negotiations between member states to achieve further liberalization of foreign trade.
2. Coordination and cooperation with other international organizations (the International Fund and the World Bank) to manage global economic affairs.
3. Settle commercial disputes that occur between member states.
4. Monitoring national trade policies and notifying member states of the results of those policies to negotiate them in order to achieve the principle of transparency.

To ensure the good performance of the organization, there is a set of principles through which foreign trade between member states can be regulated, which are[8]:

1. Unity of treatment: that is, not distinguishing between trading partners and granting all members of the organization the same treatment of benefits and exemptions that are granted to a party from another country, regardless of the size of the country and its economic capacity. This principle is known as the principle of the most favored nation, and it is the most important principles of the organization and is based on two rules: comprehensiveness. Equality, where the first guarantees trade freedom for all member states, and the second guarantees the application of reduced tariffs to all products and countries.
2. Transparency: This principle stipulates the adoption of customs tariffs as the only means of protection, if customs tariffs are included in the schedule of obligations of the member states of the organization and that all non-price means of protection are avoided.
3. Preferential treatment for developing countries: Developed countries grant developing countries trade advantages that enable them to protect their emerging industries by amending the customs tariff structure and imposing quantitative restrictions to remedy the imbalance in their balance of payments resulting from their imports for the requirements of economic development programmes. This principle means exempting developing countries from the first country requirement. Under its

sponsorship, it opens the markets of developed countries to the products of developing countries with the aim of stimulating international trade.

4. Access to markets: To ensure the free flow of goods between member states, they must commit not to place any non-tariff restrictions while reducing customs tariffs over time and fixing them at certain levels. They are recorded in the schedule of their obligations and are not lifted except through new negotiations regarding them. An exception to this principle is the protection of industries emerging in developing countries.
5. Avoid dumping and support exports: to ensure the entry of goods into the markets through free competition and oblige the contracting parties not to export their products at prices lower than the normal prices in their countries or to provide support for exports, specially manufactured goods.

Second: The Agriculture Agreement considering multilateral agreements

The agreement on agriculture in the Uruguay Round is the first serious and most important step in the field of liberating agricultural commodities from the trade barriers and distortions that prevailed between countries and the trend towards relying on market forces and competition between countries to create a unified global trading system free of customs and non-customs obstacles, subsidies and dumping to reach complete liberalization. International agricultural trade. There is a set of basic principles set by the agreement to regulate global trade in agricultural commodities, which are:

1. Access to markets: This principle aims to increase the opportunities for each country's products to access the markets of other countries through the organization's member states' pledge to transfer all non-tariff restrictions such as (the system of quantitative quotas, variable fees on imports, optional export quotas, and requiring minimum prices Imported goods and import licensing procedures that are based on discrimination between countries and public sector restrictions that are exercised on imports) to tariff restrictions that provide approximately the same amount of protection by calculating their equivalent value, that is, adopting the difference between local prices and external prices through the exchange rate, with a pledge not to return. To impose non-tariff restrictions after completing the conversion process, and the tariffs originally imposed on agricultural products and the tariffs resulting from the process of converting non-tariff restrictions are reduced by 36% and within 6 years for developed countries and 24% and within 10 years for developing countries starting in 1995. This principle included some Exceptions that allow some countries to delay the immediate conversion of non-tariff restrictions into tariff restrictions, that is, to maintain non-tariff restrictions on imports until the end of the implementation period, on the condition that a minimum amount of agricultural imports be allowed to enter within the national borders[7], Among these exceptions are[9] :
  - A. If the country's imports exceed the volume necessary for preventive intervention.
  - B. B - If the price of imports falls below the price necessary for preventive intervention.
  - C. C - If imports have not enjoyed any export support since the beginning of the base period 1986-1988.
  - D. D- If imports represent one of the elements of food security.

These exceptions are implemented by importing countries sending a notification to the Agricultural Committee of the World Trade Organization stating their intention to take their own preventive measures, provided that the goods that are subject to this measure are identified in their schedule of obligations, along with the prices necessary for intervention.

2. Domestic support: The Agriculture Agreement stipulates reducing domestic support for agriculture without canceling it, while giving some countries flexibility in setting their agricultural policies in accordance with their legitimate needs, provided that

national policies do not conflict with foreign trade policies. A measure called the Aggregate Support Measure (AMS) has been adopted. Aggregate Measure of Support by 20% of its average value in the base period 1986 - 1988 within 6 years for developed countries, and by 13.3% over 10 years for developing countries, and member states are free to choose the products and policies that they believe are appropriate for this reduction[10]. In order to implement this agreement, local support was divided into several types according to its distorting effects on production and trade according to different colors, which are[11]:

- A. The Yellow Box: It includes all forms of local support provided by the government that distort production and foreign trade, such as price support (subsidizing the prices of certain products above their real price, subsidizing input prices at prices below their cost, the government waiving its customs or tax revenues, providing loans For agricultural producers), this is one of the most distorting types of support for foreign trade because it puts local products in a more competitive position than foreign alternative products. It does not reflect the true costs of production and leads to poor allocation and use of resources. This agreement allows for the provision of support not exceeding 5% to developed countries. And 10% for developing countries of the average value of total agricultural production during the base period. In the case of goods that do not currently receive support, it is not permissible to provide any support for them in the future, as this procedure is considered a violation of international agreements.
  - B. The Blue Box: Support programs within the framework of this fund are excluded from the reduction conditions stipulated in the agreement, provided that its effects are not distorting trade or have a very minimal impact, meaning that the support directed under this fund does not affect production or trade, and includes directed support. On the basis of determining the cultivated area, number of animals, or input on the basis of 85% or less of the production level in the base period.
  - C. Green Box: It refers to support that is not related to prices or distortion of foreign trade and is not directed to a specific commodity, and all agricultural activities benefit from it, and it is provided through a government program to address agricultural problems in the member state, and this type of support benefits all member states. In the organization, regardless of whether it is developing or developed, and is not specified with a time or quantitative ceiling, this agreement approved the exception of direct payments from the reduction if they are directed towards development programs, regional aid, local food aid, storing agricultural products for food security purposes, and insurance plans for food. Agricultural goods and disaster situations, non-production income support, research and extension, epidemic control, infrastructure services, marketing and promotion services, training and inspection, investments, retirement programs and loss of resources[12]. Developing countries are exempted from reducing support directed to rural and agricultural development, supporting investments and production requirements for low-income producers who lack resources, supporting programs to diversify agricultural production, and support directed to protecting the environment[11].
3. Export Subsidy: The Agriculture Agreement included a reduction in support directed to exports by developed countries to increase the competitiveness of their products and maintain their shares in global markets. The agreement stipulated a reduction in direct financial support for exports by 36% of the level of support provided in the base period 1986-1990. Over a period of 6 years for developed countries and by 24% and within 10 years for developing countries and reducing the amount of subsidized exports by 21% for developed countries and 14% for developing countries. Member states are also not permitted to provide support for unsubsidized products during the base period and are not entitled to increase the level of support beyond Its levels stated in its schedule of obligations[13].

The agreement specified in Article[9] the types of export support subject to reduction obligations as follows[14] :

- A. Direct government financial support related to exports of agricultural products. The reduction includes support provided to an industry, company, producer, or association of producers of a specific product or to a marketing body.
  - B. The sale or disposal by the government of non-commercial agricultural products for the purpose of export at a price lower than the prices of competing products in the global market.
  - C. Government support for the export of any agricultural products, whether the support is from budget expenditures or is financed from the proceeds of a fee imposed on a specific product or agricultural product from which the exported product is derived.
  - D. Government support to reduce the costs of agricultural exports (excluding the costs of export promotion and advisory services), such as international shipping and transportation costs, improvement and handling costs, and other processing costs.
  - E. Financial support for agricultural products that are used as intermediate goods in the production of export products.
  - F. The agreement stipulated in Article[10] that the countries donors of food aid are obligated not to link that aid, whether directly or indirectly, to agricultural exports from the donor countries to the countries receiving that aid, and that it be provided in the form of full grants or on conditions that do not deviate from those stipulated in Article 10[4]. From the 1986 Food Aid Convention, whose provisions represent guidelines in this field[15].
4. Health measures: This agreement complements the Agriculture Agreement because it is linked to human, animal and plant health and protecting them from the dangers of toxins, pollution and the transmission of diseases, epidemics or diseases that are transmitted from animals and plants or their derivatives to humans. The agreement recognized the right of each member state to take measures based on evidence. Sufficient scientific knowledge to protect their food security and public health, provided that these measures are not applied in a way that hinders the movement of trade exchange, or on a discriminatory basis between member states, or for convincing protection of the local market.

The health agreement calls on member states to take measures related to human, animal and plant health and food safety in accordance with the specifications and recommendations of the World Health Organization (WHO), the Food and Agriculture Organization (FAO) and the Codex Alimentarius Committee to ensure the safety of food from preservative additives, pollutants, residues of veterinary drugs and pesticides, sampling and analysis methods, in addition to the directives of the office. International Animal Epidemic Diseases (IOE), as well as those related to plant health included in the International Plant Protection Treaty (IPPC), which relate to regulations, systems, laws, decisions, procedures, and requirements that affect final product standards, methods of production, processing, packaging, inspection, sampling, testing, granting certificates, approving procedures and treatments in sanitary quarries, statistical methods, and packaging requirements. Packaging and other characteristics related to food safety.

This agreement calls on member states to join international bodies concerned with this matter, such as the International Organization for Standardization and Standardization (ISO), which works to manage and implement quality for products, which includes technical standard specifications for products and systems for quality management, ISO 9000, and environmental management systems, ISO 14000. These standards are approved by the WTO. To demonstrate differentiation and competition between products to gain access to global markets[16]. The application of various types of quality specifications is of great importance as it is considered more complex than protective restrictions, as it is tantamount to a self-restraint in these products if the approved standard specifications.

Under Article 4, the agreement obligated member states to adopt the principle of transparency with regard to the procedures and rules related to the concept of areas free or in which the spread of diseases and pests is reduced within their territories, and to announce any change that occurs with regard to the procedures and measures taken to protect their food security and notify other states of their requirements with regard to Protection of humans, animals and plants.

Developing countries have received preferential treatment with regard to the implementation of this agreement so that the adoption of technical procedures does not lead to obstacles that limit their exports. They have also obtained flexibility in implementing the agreement extending to a period of two years from the date of the establishment of the WTO and five years for the least developed countries[17].

#### 4. Discussion

The reality of the Iraqi agricultural sector. Agriculture is of great importance not only in the Iraqi economy, but also in most economies of the world, as it is the main source that supplies the population with foodstuffs and factories with the raw materials they need. This sector contributes to absorbing a large percentage of the population and the workforce, achieving a large percentage of the gross domestic product, and reducing poverty and unemployment.

For the purpose of identifying the development of the agricultural sector in Iraq, it is necessary to know the resources it possesses and the size of its users in order to diagnose and study the problems that agriculture suffers from in order to find appropriate solutions to them to maximize production and raise its competitiveness in local and foreign markets in a manner consistent with international trends and agreements administered by the World Trade Organization Globalism .

First - Natural and human resources: Whoever looks at the data on natural resources available in Iraq will become clear to him that God has endowed this country with all the requirements for well-being and economic progress, making it possess comparative advantages in most of its economic sectors, especially the agricultural sector, which is the most important pillar of the economic structure, and history tells us that The Iraqis practiced agriculture and lived on it for a long period of time before they practiced any other craft, so much so that it was called the Country of Blackness due to the large number of trees there. Among the most important of these resources are:

Land is the vital space in which humans practice their various activities and it is the basis on which agricultural production is based. Countries differ in terms of the area of their lands, as the total area of Iraq is about 435 thousand km<sup>2</sup> (174.02 million dunums), of which 168.5 thousand km<sup>2</sup> are deserts and 132.5 thousand km<sup>2</sup> are deserts. One thousand square kilometers are plains, 92 thousand square kilometers are mountains, and the remaining 42 thousand square kilometers are undulating lands. These areas constitute 39%, 30%, 21%, and 10%, respectively. From the data in Table 1, the average area of arable land during the study period amounted to 35,671 thousand dunums, representing 20.5% of the total area of Iraq, of which 18,132 thousand dunums are irrigable and 17,539 thousand dunums are irrigable, and these lands constitute 50.83% and 49.17% of the total land. Arable land, respectively, was exploited by approximately 50.3% of irrigated land and 38% of agricultural land[18], while the ratio of the average cultivated land to the average arable land during the same period was 52.5 %, meaning that the average area of arable land is about 16,945thousand dunums, with a rate of 47.5% unexploited (unemployed). This indicates that there is a great potential for Iraq to expand horizontally in the use of land for agricultural purposes, and to expand agricultural land through reclaiming arable land. This expansion is one of the main requirements for achieving an agricultural renaissance, filling the major shortage in agricultural commodities, and reducing the country's dependency on the outside, as access to food is not available in all

circumstances, especially times of political and economic crises, natural disasters, and wars.

Table 1. Available and cultivated lands in Iraq during the period (1990 - 2016)

Years	*Available lands to cultivation (thousand dunams)	*Cultivated area (thousand dunams)	available lands to cultivation to Iraqi total lands percentage (%)	Cultivated lands to available land to cultivation percentage (%)	Cultivation lands to Iraqi total lands percentage (%)
1990	36920	20000	21.2	54.2	11.5
1991	38520	21600	22.1	56.1	12.4
1992	38200	21200	21.9	56.0	12.2
1993	39480	22400	22.7	56.7	12.9
1994	37400	20200	21.5	54.0	11.6
1995	36400	19200	21.0	52.7	11.0
1996	36400	19200	21.0	52.7	11.0
1997	34640	17600	19.9	50.8	10.1
1998	35600	18600	20.5	52.2	10.7
1999	35000	18200	20.1	52.0	10.5
2000	33200	16400	19.1	49.4	9.4
2001	33960	17200	19.5	50.6	9.9
2002	35360	18600	20.4	52.6	10.7
2003	34760	18000	20.0	51.8	10.3
2004	34760	18000	20.0	51.8	10.3
2005	37560	20800	21.6	55.4	12.0
2006	35960	19200	20.7	53.4	11.0
2007	36560	19600	21.0	54.2	11.3
2008	32760	16000	18.8	48.8	9.2
2009	31400	14600	18.0	46.5	8.4
2010	32880	16000	18.9	48.7	9.2
2011	34200	17200	19.7	50.3	9.9
2012	34274	17274	20.0	50.4	9.9
2013	35455	18454	20.4	52.1	10.6
2014	37076	20076	21.3	54.1	11.5
2015	37200	20000	21.4	53.8	11.5
2016	37200	20000	21.4	53.8	11.5
Mean**	35671	18726	20.5	52.5	

References: <https://data.albankaldawli.org>

\* The area was converted from km<sup>2</sup> to dunams (km<sup>2</sup> = 400 dunams).

\*\* Extracted by the researcher.

The data contained in the table above indicate that the arable area is almost stable throughout the study period, with the largest area reaching 39,480 dunams in 1993 and the lowest area 31,400 dunams in 2009. As for its percentage of the total area of Iraq, it is noted that it took an upward trend from 1990, the year in which Economic sanctions were applied to Iraq until 1996, the year in which the "Oil for Food and Medicine" agreement was concluded with the United Nations, as their percentage did not decrease to less than 21% in 1995 and 1996, and did not rise to more than 22.7% in 1993, which is the highest percentage.



During the study period, the increase in these percentages is attributed to the role played by the government at that time in encouraging the agricultural profession through the support provided to farmers to expand the cultivation of arable land to face the conditions of the comprehensive blockade imposed on the Iraqi people. As for after 1996, that is, after the signing of the memorandum of understanding with the United Nations, all the way to In 2003, it is noted that these percentages fluctuate between high and low and have a decreasing trend due to allowing Iraq, under that memorandum, to sell part of its oil in exchange for obtaining food and medicine, which led to the dispensing of some lands due to the continuous shortage of water resources for the Tigris and Euphrates rivers, which decreased to 74.2 billion cubic meters per year. In 2007, then to 51 billion cubic meters in 2009[19] and the rise in production costs and compensation for them with the foodstuffs included in that memorandum.

These percentages continued to decline until they reached their lowest level of 18% in 2007. 2009 This decline is due in large part to the mistakes of the economic policy in general and the trade policy specifically taken by the Coalition Provisional Authority in 2003, including the abolition of the quota and license system and the reduction or elimination of customs duties for most imported agricultural products, meaning the cancellation of all trade restrictions and the complete opening of borders to Low-priced foreign products when compared to the local product under the pretext of compensating for the deprivation that the people suffered throughout the duration of the siege. In this regard, it issued Order No. 38, which stipulates the imposition of the Iraqi Reconstruction Tax on all products imported into Iraq from all countries with the exception of some goods, especially agricultural ones[20], which led to the flooding of the Iraqi market with foreign agricultural goods that the local producer could not compete with, which forced most farmers to leave their lands and migrate to the city to work in marginal service professions or to join the Ministries of Defense and Interior, and this applies Also on the ratios of the area of cultivated land to arable land in terms of rise and fall, it is noted that the ratio of cultivated land to arable land reached 46.5% in 2009, which is also the lowest percentage achieved during the period 1990 - 2016, after which these ratios began to rise to reach the highest level.

It has 21.4% for the first and 53.8% for the second in the years 2015 and 2016. The most important factors for this increase are due to the agricultural initiative launched by the government in early 2008, which is a road map to advance the agricultural sector by providing soft loans to small farmers to establish productive projects of an agricultural nature. And contracting with farmers to exploit new lands exclusively for agricultural purposes[21].

**Location and climate:** Iraq is located in the southwest of the continent of Asia, bordered to the north by Turkey, to the east by Iran, to the west by Syria, Jordan and Saudi Arabia, to the south by Kuwait and the Arabian Gulf, and between longitudes 38 and 48 east and between latitudes 29 and 37 north. Its climate is characterized as continental, subtropical. Iraq is affected by the climate of the Mediterranean Sea, and its rains are limited to the winter[22]. Iraq can be divided in terms of climate conditions into three regions: the northern region, which is characterized by abundant rain and humidity in quantities that meet the needs of agricultural production, and the northern region. The central and southern regions are dominated by desert and semi-desert climates and lack of rain. If this diversity in climate were exploited efficiently, Iraq would be able to produce most of the foodstuffs it needs and build comparative advantages in producing most of them, and then improve its exports of them.

**Water resources:** The demand for water for agricultural irrigation purposes is a demand derived from the demand for agricultural products, and the value of these products determines the size of the demand for water. There are three main sources of water resources in Iraq:

- A. Surface water: The waters of the Tigris and Euphrates rivers and their tributaries and the Diyala and Shatt al-Arab rivers represent most of the surface water resources in Iraq. The Tigris and Euphrates are the most important of them, as the water coming from them is estimated at about 77 billion cubic meters in a moderate water year and 44 billion cubic meters in a dry water year, of which it is used. - Excluding losses due to evaporation and penetration into the soil - 53 billion cubic meters distributed among 34 billion cubic meters in the Tigris Basin and 19 billion cubic meters in the Euphrates Basin. 68% and 100% of the water resources of the Tigris and Euphrates rivers, respectively, come from outside the country's borders, and these percentages show the extent to which revenues are subject to Iraq's water supply depends on the interests and will of the upstream countries, as the size of the water deficit in Iraq reached 5 billion cubic meters in 2000 and increased to 15 billion cubic meters in 2005 due to the construction of dams and reservoirs by Turkey and Syria[23]. In addition, there is still a large waste of Iraq's water resources due to its reliance on traditional methods of agriculture - which consume about 80-85% of the total water consumed in the country - and the failure of successive governments to rule Iraq to build dams or projects to collect and store water over the years. Abundance and its reuse in times of drought, despite the fact that the lands irrigated by the Tigris and Euphrates rivers constitute 80% of the irrigable lands in the center and south of the country[24], and that water is left to go to the Arabian Gulf without the slightest benefit to the Iraqi people.
- B. Rain and snow water: In addition to being seasonal and irregular, it is rare and confined to the northern and northeastern parts of Iraq. The regular lands in Iraq are divided into guaranteed rain, semi-guaranteed, and non-guaranteed, and they constitute, respectively, 15%, 23%, and 62% of the lands. Al-Dimiya, where the average rainfall reaches 45, 35 and 20 cm annually, respectively. This reality indicates that the devastated region is largely subject to conditions of uncertainty, as the amount of rainfall during the period 1998-2000 amounted to less than 50% of its natural rates[25], which affected Iraq's overall water resources because Rainwater and snow are responsible for recharging river water and groundwater, as well as reducing the volume and quality of agricultural production in the Dhimaya region.
- C. Groundwater: It is the stagnant and flowing water that exists under the surface of the earth, and in Iraq it represents a third source of irrigation water, especially in the desert areas, the northern regions, and some parts of the island. It is a good alternative to surface water and rain, as the renewable reserve reached about 3.460 billion m<sup>3</sup> / year. The investable amount is 2.965 billion m<sup>3</sup>/year, and the invested amount is 1 billion m<sup>3</sup>/year[26]. The previous data show that the exploitation of this resource still suffers from a lot of wastage and loss due to not following modern irrigation methods, as the exploited water is estimated at up to 41% of the total water available in Iraq[27].

**Human Resources:** Iraq is considered one of the young countries due to the large size of the economically active age group, which is the group whose ages fall between the upper and lower limits of the age of people who are willing and able to work. The main source of the Iraqi labor force is the population and any change in it in terms of age, gender, or its distribution. Between rural and urban areas, it will change the supply of the labor force. Data from Table 2 indicate that the population of Iraq witnessed rapid and continuous growth during the period of the study, reaching 17,890 thousand people in 1990, rising to 24,086 thousand people in 2000, and to 32,490 thousand people in 2010, reaching 37,896. One thousand people in 2016, and Iraq is classified as a high-fertility country, reaching 5.2 and when compared with developed countries 1.7 and developing countries 3.1 and at the world level 2.8.

The previous table shows that the compound population growth rate reached 2.8% during the study period and this rate ranks 34th at the level The world is out of 232 countries and ranked 9th at the level of Arab countries, led by the United Arab Emirates, Oman, Kuwait and Palestine, in which the compound growth rate reached 8.3%, and the high rate of this rate is a result of the population policies of these countries as well as the high rates of immigration to them[28], and despite the unstable conditions that Iraq went through in terms of wars and economic blockade, its population increased during the period 1990 - 2016 by 20,006 thousand people, meaning that it more than doubled in 27 years, and thus it is witnessing very high growth rates at Comparison with the global average, which does not exceed 1.7%, developed countries 0.6%, and European countries 0.3% annually.

These data show that the population doubles every 116 years in developed countries and 233 years in Western European countries. As for Iraq, its population has doubled more than 2.1 times. For 27 years due to the natural increase of the population resulting from the high fertility rate, the issue of doubling the size of the population is not now considered an economic or social problem for a situation like Iraq, due to the presence of large areas amounting to more than 16,945 thousand dunums, and 47.5% of the arable land is unexploited and unused. Work, and a portion of oil revenues can be transferred and invested in reclaiming them and making them productive lands, but the continued population increase at this speed will in the future pose a serious challenge to the available natural resources, including land resources, and reaching the stage of diminishing yields despite the presence of ongoing technical developments, as the latter could delay Reaching the stage of diminishing returns, but it cannot cancel this law.

In addition, this increase in population will stand as an obstacle to achieving acceptable growth rates of the per capita share of the gross domestic product, which requires that there be compatibility between the population increase and economic growth, which is the gross domestic product. The total and its per capita share are its most important measures. Looking at the total rural population and their percentage of the total population, it is noted that they are constantly increasing throughout the study period, with the exception of the years 2012 and 2013, in which they decreased to reach 12,054 and 10,700 thousand people, respectively, after which it rose again to reach 12,234 thousand people.

The increase in the population is due to the natural increase. Resulting from the rise in fertility rates, while its decline during the previous two years. It may be attributed to inaccurate data or to the annexation of some rural areas (villages) and turning them into residential neighbourhoods within cities. As for the ratio of the rural population to the total population, it is noted that during the period of the blockade, which lasted from 1990 to 2003, it witnessed a continuous increase except for 1997 and the period (2000 - 2002). Then it rose again to reach its highest level of 36.2% in 2011. This increase is due to the conditions of the economic blockade that The importance of agriculture and the state's support for it increased to become a factor that attracts many residents and the labor force, accompanied by a decrease in immigration to the city due to the deterioration of the security situation in the cities after its occupation by the United States of America in 2003, after which it decreased to 35.2% in 2012 and continued to decrease to reach 30.1% in 2015 The reason for this, as previously mentioned, is due to the phenomenon of urban encroachment on rural areas and their transformation into settlement centers within large cities.

As for labor force data, it indicates that the total labor force and workers in the agricultural sector is constantly increasing, reaching 4,294 thousand and 537 thousand in 1990 and continuing to rise, reaching 10,235 thousand and 1,623 thousand in 2016, respectively. This increase came as a result of the natural increase in the size of the population, which led to An increase in the number of entrants to the labor market, while relative indicators show that the ratio of the labor force in agriculture to the total population or to the total labor force is constantly increasing during the period (1990 -

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1998), as it increased from 3% and 12.5% to 4.3% and 17.7. % successively. This increase is due to the conditions of the siege, which increased the importance of agriculture in the Iraqi economy and the feasibility of work in this sector.

After this period, these percentages began to fluctuate slightly between increases and decreases, recording the highest percentages of 4.7% and 20.5% in 2008 and after, despite the large increases. The total population size decreased continuously, reaching 4.3% and 15.9% in 2016, respectively, which indicates a direct and significant impact by foreign agricultural imports that flooded Iraqi markets and local products became unable to compete with them, which led to the flight of the labor force from agriculture. Because it is not useful to work in other activities.

Table 2. Iraq's population, labour force, and agricultural worker's share of arable and cultivated land during the period (1990 – 2016).

Years 1	Total populatio n (thousand person) 2	Rural populatio n (thousand person) 3	Rural Popula tion percent age (%) 4	Total labour fource (thousa nd worker) 5	Labour force in agricult ure (Thousa nd worker) 6	Labour force in agricult ure to total populati on percenta ge (%) 7	Labour force in agricult ure to total labour force percenta ge (%) 8	Share of agricultur al workers from available lands to cultivatio n (thousand donums) 9	Share of agricultura l workers from cultivated lands to cultivation (thousand donums) 10
1990	17890	5433	30.4	4294	537	3.0	12.5	68.8	37.2
1991	18419	5636	30.6	4421	553	3.0	12.5	69.7	39.0
1992	18949	5846	30.9	4548	682	3.6	15.0	56.0	31.1
1993	19478	6065	31.1	4675	701	3.6	15.0	56.3	32.0
1994	20007	6292	31.4	4802	768	3.8	16.0	48.7	26.3
1995	20536	6527	31.8	4931	888	4.3	18.0	41.0	21.6
1996	21124	6771	32.1	5065	912	4.3	18.0	40.0	21.1
1997	22046	6977	31.6	5284	937	4.3	17.7	37.0	18.8
1998	22709	7228	31.8	5448	966	4.3	17.7	36.9	19.3
1999	23382	7471	32.0	5617	990	4.2	17.6	35.4	18.4
2000	24086	7639	31.7	5791	1060	4.4	18.3	31.3	15.5
2001	24813	7855	31.7	5839	1042	4.2	17.9	33.0	16.5
2002	25565	7877	30.8	5875	1116	4.4	19.0	31.7	16.7
2003	25609	7921	30.9	6061	1139	4.4	18.8	30.6	15.8
2004	26340	8260	31.4	6244	1229	4.7	19.7	28.3	14.6
2005	27138	8607	31.7	6458	1229	4.5	19.0	28.3	17.0
2006	27960	9071	32.4	6657	1304	4.7	19.6	27.6	14.7
2007	29681	9929	33.5	6854	1343	4.5	19.6	27.2	14.6
2008	30581	10608	34.7	7039	1443	4.7	20.5	22.7	11.1
2009	31508	10708	34.0	7246	1452	4.6	20.0	21.6	10.1
2010	32490	11690	36.0	7490	1467	4.5	19.6	22.4	11.0
2011	33339	12056	36.2	7716	1471	4.4	19.1	23.2	11.7
2012	34196	12054	35.2	8064	1482	4.3	18.4	23.1	11.7
2013	35087	10700	30.5	8389	1470	4.2	17.5	24.1	12.6
2014	36000	10921	30.3	9015	1473	4.1	16.3	25.2	13.6
2015	36936	11100	30.1	9984	1583	4.3	15.9	23.4	12.6
2016	37896	12234	32.3	10235	1623	4.3	15.9	23.0	12.3
Mean of combin ed growth	2.8%								

**Source :**

1. Central Agency for Statistics and Information Technology, Population and Labor Force Statistics, Statistical Collection for various years. Arab Organization for Agricultural Development, Yearbook of Agricultural Statistics, Volume 30, Khartoum 2010, Table 1, p. 2.
2. <https://data.albankaldawli.org>
3. Arab Monetary Fund, Unified Arab Economic Report, Abu Dhabi, 2018, p. 293.

4. Iktifa Azab Zaghir, Ministry of Planning, Sector Planning Department, the role of Agricultural Bank loans in developing the agricultural sector in Iraq for the period (2010 - 2016), 2016, p. 11.
5. Columns (4), (7), (8), (9), and (10) and the compound growth rate are the work of the researcher.

From the previous table, it is also clear that the share of the agricultural worker in arable land is constantly decreasing from 68.8 thousand dunums in 1990 to 23.0 thousand dunums in 2016. This is generally attributed to the increasing numbers of the labor force in agriculture with the relative stability of the area of arable land, while the index The agricultural worker's share of cultivated land, which indicates labor density over the area of cultivated land and the extent of the use of modern technologies in agricultural operations. This indicator shows that labor density is constantly increasing with a slight fluctuation between rise and fall, as the worker's share of cultivated land reached 37.2 thousand dunums in 1990.

It decreased continuously to reach 12.3 thousand dunums in 2016. These data indicate that the agricultural worker's share of cultivated land decreased at the end of the period to less than half of its area at the beginning of the period, and the reason for this decrease is due to the large increase in the number of the workforce in the agricultural sector, which It increased at the end of the period to more than three times its value at the beginning of the period, and the cultivated area did not witness any change at the end of the period from the beginning, despite the fluctuation occurring in the area within the years studied.

This confirms that the expansion of the use of modern machinery and equipment was not of significant importance in agricultural operations, which It had a negative impact on worker productivity, as is evident from Table 3, as the average share of the agricultural worker in agricultural output decreased from 27.6 thousand dollars in 1990 to 4.1 thousand dollars in 2016. This is one of the effective reasons for the decline in the ability of the local product to compete with alternative foreign products.

The contribution of the agricultural sector to the gross domestic product: The agricultural sector in Iraq is one of the important sectors in the economy. It operates in a stage of increasing yields. Iraq is classified as one of the sparsely populated countries and possesses few resources, but they are available and unexploited. It has great potential that will lead if it is exploited well. To support and diversify the national economy, however, reality indicators indicate that this sector is affected by legislative, political and economic factors, and this is then reflected in the percentages of its contribution to the gross domestic product, as shown in Table 3, as this percentage reached 19.8% in 1990, which is the year before. Imposing economic sanctions on Iraq due to its invasion of Kuwait, and after this year (1991 - 2002), it is noted that the contribution of the agricultural sector to the gross domestic product exceeded 30% and, in some years, reached 37.6%.

This increase is attributed to the decrease in food imports due to the conditions of the siege. The economic sanctions imposed on the Iraqi people, and these sanctions prompted Iraq to follow an agricultural policy that enables it to confront the negative effects of the blockade, including increasing government support for agricultural products and increasing the cultivated areas through cultivation of marginal lands, which led to an increase in agricultural production and then an increase in its contribution to the domestic product. Overall, this means that the agricultural sector in Iraq has potential potentials that can be exploited efficiently to meet the increase in demand for foodstuffs.

However, in 2003, the year in which the American forces invaded Iraq and the accompanying systematic destruction of all its economic components, including the basic foundations of the agricultural sector, which Its contribution to the gross domestic product decreased to 18.9%, and this percentage continued to decline, reaching 3.8% in 2016. This is due to internal factors, represented by the distortions and imbalances that it inherited from the last two decades of the last century, resulting from wars and economic blockade,

which led to the underdevelopment and destruction of infrastructure. Including, for example, roads, irrigation and drainage networks, the decline in irrigation water quantities, and the spread of the phenomenon of salinity to 75% of irrigated agricultural lands due to the failure of irrigation operations[29].

The increase in this phenomenon leads to an expansion of the area of decertified lands threatened by it, reaching the former to reach 167 thousand km<sup>2</sup> and the second 238 thousand km<sup>2</sup>, constituting 38% and 54.7% respectively of the total area of Iraq[30] in addition to attracting the workforce in this sector to other activities such as the army and police or working in the service sectors. Marginal within cities, and objective factors resulting from the increase in the contribution of other sectors, especially the oil sector, to the gross domestic product from 13.3% in 1990 to 50.5% in 2003 [31], and it continued to increase to reach 62.5% in 2016[32].

By carefully looking at the numbers in the previous table, we find that the share of the Iraqi individual and the agricultural worker in the agricultural output are two other indicators of the continuing deterioration of this sector, as the average share of the Iraqi citizen amounted to 800 dollars in 1990 and increased to range between (1.0 - 1.5) thousand dollars during the period (1991 - 2002) which is the period of the economic blockade after which it decreased to less than \$300 annually during the period that followed its occupation until 2016, and this share is considered very modest when compared with the per capita share of Saudi Arabia, Algeria, and Sudanese, amounting respectively to 960, 501, and 534 dollars. In 2016[33], this analysis also applies to the average share of the agricultural worker in agricultural output in terms of rise and fall and the reasons during the periods mentioned above.

The agricultural sector's contribution to foreign trade. It is clear from Table 4 that the value of agricultural exports did not exceed 4% of the value of total merchandise exports, with an annual average of 0.6% throughout the study period. This indicates the deterioration of the agricultural sector and the weakness of its contribution to foreign trade despite Iraq possessing all the material components of agriculture. While the value of agricultural imports constituted 36.31% of the value of total imports in 1990, the year that preceded the economic blockade, and after this year, i.e. during the period (1991 - 1995), this percentage increased and reached its highest level of 44.73% in 1992, and after this period, i.e.[34].

After implementing the memorandum of understanding (oil in exchange for food and medicine), according to which Iraq was allowed to sell part of its oil to cover part of its need for food and medicine, this percentage increased in the period (1996 - 2001) and exceeded 96% in the year 2000, and after this period the percentage of imports decreased. Agricultural imports to total imports, reaching in some years less than 3%, due to the occupation of Iraq by the United States of America and its destruction of all infrastructure of the economy, whether service, industrial or agricultural, and opened the borders for foreign products to invade Iraqi markets without controls or restrictions to the extent that led to The disappearance of all forms of Iraqi products from local markets.

This decrease is not due to a decline in agricultural imports, but rather due in large part to an increase in other non-agricultural imports to compensate for the deprivation that the Iraqi people suffered during the period of the siege that was imposed on them[35]. What confirms the validity of what we have reached is The absolute values of agricultural and total imports amounted to (1,332 and 53,177) million dollars respectively, although the ratio between them was 2.5% in 2014, which is the lowest percentage during the study period.

Table 3. Gross domestic product and agricultural products at current prices during the period  
(1990 - 2016)

Years 1	Total GDP (Million US\$) 2	Agricultural outputs (million US\$) 3	Contribution percentage 4	Iraqi per capita share of agricultural output (thousand dollars) 5	Agricultural worker's share of agricultural output = agricultural income (thousand dollars) 6
1990	74933	14839	19.8	0.8	27.6
1991	66131	20547	31.1	1.1	37.2
1992	75533	24218	32.1	1.3	35.5
1993	76668	28821	37.6	1.5	41.1
1994	77815	27047	34.8	1.4	35.2
1995	78055	26432	33.9	1.3	29.8
1996	78064	26826	34.4	1.3	29.4
1997	78856	26465	33.6	1.2	28.2
1998	79530	26495	33.3	1.2	27.4
1999	81916	26822	32.7	1.1	27.1
2000	83544	26848	32.1	1.1	25.3
2001	81038	26296	32.4	1.1	25.2
2002	81849	25010	30.6	1.0	22.4
2003	10621	2006	18.9	0.1	1.8
2004	24700	2347	9.5	0.1	1.9
2005	31719	2940	9.3	0.1	2.4
2006	54475	3713	6.8	0.1	2.8
2007	74235	4346	5.9	0.1	3.2
2008	107672	4740	4.4	0.2	3.3
2009	97302	5219	5.4	0.2	3.6
2010	121335	7114	5.9	0.2	4.8
2011	157454	7529	4.8	0.2	5.1
2012	185945	8992	4.8	0.3	6.1
2013	205186	9213	4.5	0.3	6.3
2014	196493	9350	4.8	0.3	6.3
2015	171136	6999	4.1	0.2	4.4
2016	172479	6626	3.8	0.2	4.1

References : Arab Monetary Fund, Unified Arab Economic Report, Abu Dhabi, various years.

Columns 4, 5, and 6 were extracted by the researcher based on the data in Table 2.

As for the numbers of the sixth column in the previous table, they indicate that the agricultural balance achieved a continuous deficit during the period studied, as the lowest deficit reached 743 million dollars in 1994, and the highest deficit reached 7318 million dollars in 2013. Since the agricultural balance is an important tool for identifying the economic performance of the agricultural sector, this deficit indicates a dangerous phenomenon represented by the level of Iraq's dependence on abroad to meet the need for domestic demand for agricultural products, especially the main ones[36].

While the fifth column in the table above shows the coverage rate of agricultural exports for agricultural imports, which at best reached 5.9% in the years 2014 and 2016, the lowest coverage rate reached 0.4% in 1993, and the coverage rate during the period (1999 - 2005) indicates The values of Iraq's agricultural exports meet only a very small percentage



of the value of its agricultural imports[37]. Therefore, we see that the agricultural balance is in a state of deficit throughout the period studied, as this rate shows the state's ability to control its imports and the extent to which the foreign exchange obtained from agricultural exports contributes to meeting the value of agricultural imports. When this rate reaches 100%, it indicates that the value of agricultural imports is covered by the value of agricultural exports.

However, if this rate exceeds 100%, it indicates a surplus in the agricultural balance, but if it falls below this percentage, that is, less than 100%, it indicates that The agricultural balance is in a state of deficit, which confirms the deterioration and backwardness of this sector, its lack of diversification, and the decline in achieved production rates to much less than the volume of increasing demand for it resulting from the increase in population and income.

Table 4. Total merchandise and agricultural exports and imports during the period  
(1990 - 2016) (million dollars)

Years	Total merchandise exports	Total merchandise imports	Agricultural exports	Agricultural imports	Coverage Mean %	Agricultural balance	Percentage of agricultural exports out of total exports	Percentage of agricultural imports out of total imports
1	2	3	4	5	6	7	8	9
1990	10314	5100 *	60	1852	3.2	-1792	0.58	36.31
1991	487	2000*	10	823	1.2	-813	2.05	41.15
1992	609	2600*	9	1163	0.8	-1154	1.48	44.73
1993	471	2400*	4	988	0.4	-984	0.85	41.17
1994	382	1900*	8	751	1.1	-743	2.09	39.53
1995	451	2350*	8	803	1.0	-795	1.77	34.17
1996	518	1900*	20	940	2.1	-920	3.86	49.47
1997	2331	1700*	20	1488	1.3	-1468	0.86	87.53
1998	4649	1833*	8	1719	0.5	-1711	0.17	93.78
1999	9080	2072*	7	1603	0.4	-1596	0.08	77.36
2000	14097	1781	7	1720	0.4	-1713	0.05	96.57
2001	12872	2527	7	1583	0.4	-1576	0.05	62.64
2002	12219	9346	7	1720	0.4	-1713	0.06	18.40
2003	9711	9288	7	1720	0.4	-1713	0.07	18.52
2004	17810	19918	7	1650	0.4	-1643	0.04	8.28
2005	29343	22002	7	1720	0.4	-1713	0.02	7.82
2006	30528	26262	10	1510	0.7	-1500	0.03	5.75
2007	37992	29020	10	1997	0.5	-1987	0.03	6.88
2008	61929	34025	70	5305	1.3	-5235	0.11	15.59
2009	39303	41377	54	4396	1.2	-4342	0.14	10.62
2010	51500	43691	64	5190	1.2	-5126	0.12	11.88
2011	79681	47803	43	6729	0.6	-6686	0.05	14.08
2012	94172	55169	50	7018	0.7	-6968	0.05	12.72
2013	89768	59349	44	7362	0.6	-7318	0.05	12.40
2014	83981	53177	79	1332	5.9	-1253	0.09	2.50
2015	43442	39045	70	1310	5.3	-1240	0.16	3.36
2016	28360	23029	81	1374	5.9	-1293	0.29	5.97
المتوسط	28370.4	20024.6	28.6	2435.8	1.4	2407.2	0.6	31.82

Source: Arab Monetary Fund, Unified Arab Economic Report, Abu Dhabi, various years.

\*Food and Agriculture Organization of the United Nations (FAO), Trade Yearbook, Rome - Italy, for the years 1993, 1997 and 1999. Columns (6, 7, 8, 9) are the work of the researcher.

Iraq and the World Trade Organization. After the occupation of Iraq by the United States of America and the change of the regime in 2003, the American authorities instructed Iraqi officials to submit a request to join the World Trade Organization (WTO), and with America's support, Iraq's request was approved and it was granted observer status in the organization at the end of 2004, and committees were formed. A specialized technician will prepare the necessary documents to obtain full membership.

Today, Iraq and other countries realize that the issue of joining or not is not an option because the potential losses will affect all countries, both organized and unorganized, and it must follow modern commercial and economic strategies and policies that are in line

with the requirements of economic openness. Implementing the necessary measures and procedures to reform the economy, including the agricultural sector, removing the distortions from which it suffers, and enacting regulations and laws to implement the Agricultural Agreement in a manner consistent with the provisions of the WTO, to reduce the amount of damage and maximize the desired gains from the new trends[38].

These trends impose a shift from the central economy that was controlled by the government to the market economy and restore Restructuring the agricultural sector, expanding its production base, liberalizing trade and prices from qualitative and quantitative restrictions, and giving the private sector (individuals and companies) the opportunity to bear the responsibility of this transformation and properly join the new world order in a way that enhances the role of trade as an engine of economic growth. Among the most important positives that Iraq can achieve by joining the WTO are:

1. Most of the countries in the world are either members of the WTO or are on their way to gaining membership. These countries operate in accordance with the organization's controls, and Iraq has important economic relations with them. This requires the authorities concerned with Iraqi affairs to truly study the country's desired need and benefit from the experiences of other countries that preceded it in Join.
2. Adopting procedures and decisions that work to properly intertwine the Iraqi economy with the global economy, through restructuring the local economy, diversifying its production base, liberating prices and trade from quantitative and qualitative restrictions that were previously imposed, and giving the private sector a greater role in managing the economy to achieve high rates of growth. Capital formation and economic growth.
3. By joining the World Trade Organization, Iraq can obtain advanced technology in all its economic sectors, especially in the agricultural sector, from member states of the organization to improve its performance and competitive ability, and obtain agricultural production requirements such as fertilizers, seeds, and other equipment.
4. The condition of reducing support and removing customs barriers will encourage Iraqi producers to increase their production, promote exports, and increase their flow to global markets in accordance with the specifications required by those countries, and this will be reflected in improving production and its methods, and then developing the Iraqi agricultural sector.
5. Through research, it became clear that the agricultural sector in Iraq possesses huge resources, but they have not received sufficient attention, and it is almost completely dependent on natural conditions, except in light of the implementation of the provisions of the agricultural products liberalization agreement and the accompanying rise in the prices of imported agricultural commodities in international markets. This will serve as an incentive to expand crop production and improve productivity in the agricultural sector, and this will require Iraq to make adjustments to the infrastructure and amend its agricultural policy in a way that is consistent with the World Trade Organization agreements, leading to an increase in farmers' income, and this in turn leads to the creation of new economic activities in agriculture. And then ensuring food security.
6. Iraq can benefit from the preferences, facilities, exceptions, and grace period of ten years that the Agriculture Agreement made available to developing countries that are members of the World Trade Organization to build their economic, service, and financial structures in a way that achieves their proper integration into the global economy.
7. Increasing Iraq's export capacity to global markets, including the markets of developed countries, benefiting from the reduction of customs tariffs and the abolition of the quota system and administrative and quantitative restrictions, especially in goods whose production it has traditional comparative advantages. This increases the

- rate of export coverage of imports and reduces the deficit in the agricultural and trade balance.
8. Developing countries from developed countries obtained many of the preferences and privileges included in the Agreement on Agriculture within the framework of the World Trade Organization, such as implementation periods, support rates, investment encouragement, technical assistance, food aid, and taking measures to protect local products from subsidies and dumping. These privileges and permissions can be benefited from by Iraq. The extent of the positive effects will be increased at the expense of the area of negative effects if these exceptions are properly implemented, as Iraq can benefit from the benefits granted by the organization to its developing member countries, such as exemptions that affect several sectors, including the agricultural sector, as the period of the exemption reaches 10 years and supports exports for a period of up to 8 years. Years, compensation for developing countries that are net food importers, gradual trade liberalization for a period of up to 10 years, and balance of payments provisions for a period of up to 5 years.
  9. Reducing customs tariffs by member states will lead to reducing the prices of modern technologies and agricultural production requirements, and this will reflect positively on reducing the final costs of agricultural production, as this contributes to supporting the global and national competitiveness of agricultural production and achieving a certain level of food security.
  10. Achieving positive results in Iraqi agriculture from the implementation of the World Trade Organization agreements depends on the commitment of all member states to fully and objectively implement the rules of the free economy and the obligations that were specified in the agricultural agreement and other agreements related to this sector and to remove all market distortions, and the Iraqi economy is suffering. Due to the increasing gap between the rates of food production and the demand for it due to the high rates of population growth and purchasing power of citizens, these variables necessitated resorting to abroad and importing in large quantities and amounts, despite the fact that Iraq is relatively rich in agricultural resources such as water (if invested in a modern scientific method) and land in addition to There is great human wealth and huge financial resources, so the process of paying attention to this sector and developing it is a must[39].

## 5. Conclusion

This research underscores the critical significance of Iraq's agricultural sector within its national economy and its pivotal role in ensuring food security, fostering economic growth, and sustaining employment, capital formation, and export earnings. The study reveals a substantial gap in understanding the implications of Iraq's accession to the World Trade Organization (WTO) on its agricultural sector, particularly regarding the distribution of benefits and costs associated with liberalization. Despite Iraq's aspiration to leverage WTO membership to enhance economic growth and technological advancement, the country's agricultural production faces significant challenges, including low productivity and competitiveness vis-à-vis international markets, exacerbated by historical factors such as conflict and political instability. While joining the WTO offers potential benefits such as increased trade volume and access to modern technologies, the research emphasizes the urgent need to address the structural deficiencies and inefficiencies plaguing Iraq's agricultural sector. Moving forward, future research should delve deeper into the specific policy interventions and strategic resource allocation required to bolster agricultural productivity, enhance competitiveness, and mitigate adverse effects resulting from trade liberalization, thereby fostering sustainable economic development and food security in Iraq.

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