



Available online at <http://jeasiq.uobaghdad.edu.iq>
DOI: <https://doi.org/10.33095/653wsb27>

The Effectiveness of The Agricultural Investment Environment in Supporting the Production of Strategic Crops in Iraq for The Period From 2003-2021

Salman Imran Musa *

Department of Economics
College of Administration and Economics
University of Baghdad
Baghdad, Iraq
salman.omran1102a@coadec.uobaghdad.edu.iq
<https://orcid.org/0009-0004-9938-6405>

*Corresponding author

Faris Kareem Brehy

Department of Economics
College of Administration and Economics
University of Baghdad,
Baghdad, Iraq
drfaris@coadec.uobaghdad.edu.iq
<https://orcid.org/0009-0009-7874-0117>

Received:26/12/2023

Accepted:7/4/2024

Published Online First: 1 /10/ 2024



This work is licensed under a [Creative Commons Attribution-NonCommercial 4.0 International \(CC BY-NC 4.0\)](https://creativecommons.org/licenses/by-nc/4.0/)

Abstract:

Maximizing the effectiveness of the agricultural investment environment for all its basic inputs from the economic and human resources available in Iraq represents a qualitative breakthrough in the production of strategic crops, therefore, the research problem came from the weak production of strategic agricultural crops in Iraq in quantity and quality, due to the ineffectiveness of the agricultural investment environment, as a result of the lack of government support, the deterioration of the infrastructure of the agricultural sector, and a shortage of monetary capital, Finally, the scarcity of water resources, the problem was treated using the analytical method, thus, the research aims to demonstrate the importance of developing the agricultural investment environment and increasing government support and its impact on the production of strategic agricultural crops, the research concluded that Iraq possesses most of the basic inputs to the agricultural investment environment, but it lacks efficient management and optimal use, in addition to climate change, which has helped increase drought and desertification, the research also concluded that agricultural policy in Iraq includes obliging the investor to an agricultural plan in which the cultivated area is determined under the pretext of limited the capacity of the stores and the amount of strategic water storage despite Iraq's need for strategic crops and thus the state's attempt to meet the increasing demand for strategic crops through imports, which makes Iraq subject to the fluctuations of the global market and the depletion of hard currency, the researcher recommends efficient and optimal exploitation of natural, financial and human resources and keeping pace with scientific and technological progress in the production of strategic crops. In conclusion, the research included the deductive approach through the method of analytical description to advance the agricultural investment environment in Iraq.

Paper type: Research paper.

Keywords: Agricultural Investment Environment, Strategic Agricultural Crops, Agricultural Economic Policy, Agricultural Technology.

1. Introduction

The agricultural investment environment in Iraq must be free of regulatory and administrative problems, in order to raise investment rates in the agricultural sector compared to investment in other economic sectors, in addition to a relatively fair distribution of agricultural investments among multiple activities within the agricultural sector itself, while determining public investment spending and raising the proportion participation of the private sector, which makes the production of strategic agricultural commodities high in quantity and quality.

The research problem revolves around the weak production of strategic crops due to the ineffectiveness of the agricultural investment environment, because of the deterioration of the agricultural sector infrastructure and a lack of capital, in addition to the gradual decrease in Iraq's water share by the upstream countries.

As for the research aims is to demonstrate the importance of development in the agricultural investment environment and its impact on increasing the production of strategic crops in Iraq, in addition to developing immediate and future treatments to reduce the problems facing the agricultural investment environment, which are represented by climate change, drought, scarcity of water resources entering Iraq, the legal framework and constitutional legislation as well as the investment climate in the agricultural sector. The importance of the research comes to reaching self-sufficiency and then achieving food security from strategic crops.

The importance of the research lies in the importance of the agricultural investment environment in producing strategic crops in Iraq and thus achieving self-sufficiency and then achieving food security from strategic crops.

The researcher used the deductive approach through the analytical description method and benefited from it to promote agricultural investment in Iraq.

Moreover the research included an analytical description of both the agricultural investment environment and strategic crops in Iraq, through agricultural economic reality and policies and their implications for the production of strategic agricultural crops, Since the public sector looks primarily at social benefits, on the basis of that, it invests in projects of public benefit, such as infrastructure projects (dams, agricultural land reclamation, roads and canals), While the private sector is the growth engine of the national economy, and the main attractor of agricultural investments, which seeks quick profits by increasing production and reducing costs, and it does not give importance to social benefits unless government agencies stipulate it in the concluded contract, therefore, we will discuss the role of the public sector first, then the private sector on the agricultural investment environment and strategic crop production, and finally the results reached by the researcher will be discussed.

Finally, the research is based on the hypothesis that the agricultural investment environment is affected by the components of agricultural economic policy and is directly linked to the production of strategic agricultural crops.

1.1 Literature review

There are studies that have addressed the agricultural investment environment with research, including:

Al-Bolani (2016) showed the problem of the lack of coordination and compatibility between agricultural financing policy and agricultural economic policies, and thus their weak effectiveness in stimulating agricultural investment and the delay in achieving their development goals. The research came with the hypothesis that there is a positive relationship between agricultural financing and stimulating agricultural investment, but it is conditional on the extent to which the financing policy adheres to the correct legal rules and foundations of financing on the one hand, and the extent of harmony and coordination between it and agricultural economic policies on the other hand.

Al-Minshedawi (2016) illustrated that there is a package of challenges facing the agricultural investment environment in Iraq related to land ownership, water scarcity, and legislation related to agricultural investment, as well as desertification and financial and administrative corruption.

Nazmi (2018) included revitalizing the private sector by encouraging investments, as well as using tax mechanisms as incentives to obtain new investments and liberalizing the monetary and financial market to complete the steps of economic adjustment and reform.

Hamza and Mohamed (2019) indicated the role that investment in the agricultural sector plays in pushing economic development in Algeria, through the contribution of agricultural investment in economic activity and demonstrating the most important available capabilities, natural and human resources, supporting agricultural investment and working to introduce modern innovations that contribute to its development.

Mashhour et al. (2022) started from the problem of the decline in capital intended for agricultural investment, and that it represents a small percentage compared to other economic sectors, and there is a slowdown in the overall activities of agricultural investment, the research aims to identify the most important factors affecting agricultural investment in Egypt and used the descriptive analysis method and quantitative when estimating economic criteria, researchers confirmed that agricultural investment rates are growing in an upward manner, especially private investment, to compensate for the shortfall in government investment in the agricultural sector.

And there are studies that discussed the strategic crops, including:

Ahmed et al. (2014) showed that the decline in agricultural production rates is one of its reasons weak agricultural financings, and not allowing the import of necessary agricultural inputs such as pesticides, fertilizers, and improved seeds from reliable global origins, the study also showed the lack of long-term strategic plans to advance the sector agricultural.

Ismail et al. (2016) explained the impact of technological progress on strategic crops, the most important of which are wheat, rice, and barley in the Arab Republic of Egypt, and measuring the technological impact on productivity. The study concluded that technological development is sufficient to increase the production of strategic crops by 41.5% of the actual average production. This works to save the cultivated area by 113.41 thousand acres as an average over the period (1995 - 2014), representing about 71.9% of the annual average of the cultivated area. It is necessary to adopt technology and apply it to modern varieties High productivity, which in turn works to reduce the food gap between consumption and production.

Hamad (2019) discussed that investment expenditures have a direct impact on the production of strategic agricultural crops in terms of increasing fixed capital for agricultural output in Iraq, and that there is a balance relationship between the research variables, in that investment expenditures in the long term positively affect the effectiveness of the agricultural investment environment and production of strategic crops and thus increase the rate of economic growth.

As for the Hameed (2023) referred that the weakness of agricultural policy, climate changes, and the scarcity of water revenues, which are among the most important reasons for the deterioration of agricultural production, and the widening of the food gap for most agricultural crops and products in Iraq, and the researcher recommends activating the role of agricultural policy through structuring support government support for the agricultural sector, which works to build a real production base.

While there are studies combined the agricultural investment environment with strategic crop production, which are as follows:

Zaghir (2017) showed an evaluation of the Cooperative Agricultural Bank with all its procedures and lending activities, the study concluded that the bank derives its strength from the instructions and legislation that regulate its work within the framework of the Central Bank of Iraq, it suffers from several organizational, administrative and financial problems, and weak employee commitment to bank management instructions, accumulation of overdue balances from loans, and uncertainty about the identity of the borrower, which is one of the important pillars for granting loans, and granting loans outside the agricultural season, the researcher recommended taking into account the instructions stipulated by the relevant authorities, and granting agricultural loans in a timely manner .

Hussein and Hamdan (2020) stated that Iraq is characterized by an abundance of human and natural resources, but this abundance was not invested rationally, and instead was neglected, in addition to the weakness of financial and monetary policy in stimulating the circular economy in Iraq, and the researcher recommends investing in wasted water and energy. And other resources, through fiscal and monetary policy, which can control macroeconomic variables positively.

2.1 Reality of the agricultural sector in Iraq:

Iraq possesses diverse agricultural, mineral, human and other resources, and by exploiting them efficiently, it is possible to enhance the competitiveness of its facilities in the foreign market, and thus improve the agricultural investment environment and the production of strategic crops (Al-Ward and Yas, 2005).

2.1.1 The natural ingredients:

- 1 Fertile agricultural lands, estimated at 28 million dunams, of which the exploited area is estimated at 53.9%, this indicates that there is unexploited arable land, estimated at 46.1%, and that exploitation of fertile and non-fertile agricultural lands is one of the basic components for stimulating the agricultural investment environment.
- 2 Human resources, which are one of the important production elements that contribute to the process of stimulating the agricultural investment environment, and Iraq has an agricultural workforce with different talents to develop the agricultural investment environment, and the agricultural workforce is estimated at approximately 30.1% of the Iraqi population estimates for the year 2020-2021.
- 3 Water resources are considered one of the most important foundations of national security, especially in Iraq, as it is in an arid and semi-arid region, and its sources are scarce and come from outside international borders, it is one of the basic requirements for developing the agricultural investment environment (Ministry of Planning, 2021).

2.1.2 Unnatural ingredients:

- 1 Financial resources are not a major obstacle to the implementation of agricultural projects and any policy taken to develop the agricultural sector, rather, What is more important is the strategic vision and clear agricultural policy that has the desire and ability to develop the above sector and raise its efficiency, and then increase its absorptive capacity for more investment allocations, leading to the efficient exploitation of its resources available and its relative advantages (Dahesh, 2010).
- 2 Legislation and laws established by the government to regulate the work of the agricultural investment environment to advance the reality of strategic crops in Iraq.
Table 1 shows the cultivated area, production, and yield number of strategic crops in Iraq for the years (2020 and 2021).

Table 1: Area, production, and yield of strategic crops during (2020-2021)
(Area/thousand dunums) (Production/thousand tons) (yield/kg/dunum)

Percentage of change %			2021			2020			The crop
Yield	Production	Cultivated areas	Yield	Production	Cultivated areas	Yield	Production	Cultivated areas	
-38,5	-32,1	10	447,3	4233,7	9464,2	7276,6	6228,4	8573,7	Wheat
-77,4	-84,8	-33	87,7	266,6	3038,2	387,8	1756,2	4528,5	barley
-3,8	-9	-5,4	1097,5	422,5	384,9	1140,8	464,2	406,9	the rice
13,6	-10,7	-21,4	1174,8	374,4	318,7	1034,3	419,3	405,4	yellow corn
	-40,3	-5,1	401,1	5297,2	13206	638	8878,1	13914,5	the total

Source: Ministry of Planning, Crop and Vegetable Production Synthesis Report for 2020-2021, Central Bureau of Statistics, Department of Agricultural Statistics.

Table 1 shows a decrease in wheat crop production by 4233.7 thousand tons for the year 2021 compared to the year 2020, in which production reached 6283 thousand tons, by 10% , and the yield of one dunum of wheat also decreased for the year 2021 by 38.5% compared to the year 2020, the reason for this is due to a decrease in water imports as well as a decrease in the yield per dunum, despite the increase in the cultivated area.

As for barley, the data indicate a decrease in barley production for the year 2021 by an amount of 84.8% compared to the production achieved in the year 2020 for several reasons, including a decrease in the areas cultivated with this crop by an amount of 33% , the productivity of one dunum of barley for the year 2021 also decreased by 77.4% compared to what it was in 2020, for reasons related to the fluctuation and scarcity of water resources as well as the low yield per dunum.

Likewise, the rice crop witnessed a decrease in production in 2021 by a rate of 9% compared to that of 2020, the main reason for this is the reduction of the cultivated areas for the year 2021 compared to the cultivated areas for the year 2020 by 5.4%, in addition to a decrease in the productivity of one dunum for the year 2021 by a rate of 3.8%.

As for yellow corn, it does not differ from the rest of the crops above in terms of a decrease in productivity for 2021 by an amount of 10.7% compared to the production achieved in 2020, as a result of the decrease in cultivated areas for the year 2021 compared to the areas cultivated during the year 2020, by an amount of 21.4%, while the productivity of one dunum has increased by 13.6% in 2021 than in 2020.

2.2 Challenges of the agricultural investment environment and strategic crop production in Iraq.

2.2.1 Internal challenges:

- 1 Desertification is considered one of the challenges facing the agricultural investment environment in Iraq, as it covers large areas estimated at 54% of the total area and 15% of the agricultural land area. The percentage of lands threatened by desertification reaches 55% and increases annually, in addition to sand dunes that are no less dangerous than desertification (Al-Jazairy, 2010).
- 2 Misuse of water resources leads to the emergence of the phenomenon of desertification because of wastage of water, as watering agricultural lands in larger quantities than their actual need leads to negative effects that lead to a decline and deterioration in the productive capacity of the land and thus the occurrence of desertification (Ani and lifta, 2016). And the decrease in water supply in Iraq compared to the increase in demand resulted in a water gap, which is represented by an increase in demand for various needs, especially agricultural and then household needs, as

a result of the high population growth rates to approximately 3%, on the other hand, the demand for water quantities for agricultural and industrial needs and for electricity production varies according to estimates of the Ministry Of Water Resources (Ministry Water Resources, 2009).

- 3 The destruction that occurred in the infrastructure in the agricultural sector in Iraq after 2003 led to a decrease in the competitiveness of strategic crops, high costs, and loss of the agricultural investor, and thus the lack of a real desire for agricultural investment in Iraq (Al-Dulaimi, 2014).
- 4 The spread of financial and administrative corruption in Iraq has led to the disruption of many opportunities for obtaining foreign and local investments, in addition to imposing additional taxes on investment exceeding 20%. The higher the corruption indicators, the lower the marginal efficiency of capital, and thus the lower the incentive to invest. Administrative and financial corruption is one of the obstacles to the development of the agricultural investment environment in Iraq and represents a major threat to security and political stability. Corruption affects the Iraqi economy remarkably and has deep roots since the 1980s last century to the present day (Issa, 2012).

Financial and administrative corruption also weakens economic growth, distorts the elements of government expenditures, the migration of scientific talent, the disruption of public order in the country, the increase in the volume of external debt, the unequal distribution of income and wealth, the high costs of capital formation in economic projects, and the high volume of job evasion (Al-Ani and Al-Ani, 2005).

- 5 Commercial legislation and laws: the importance of legislation and laws lies in creating a stable environment that provides reassurance and confidence to investors in the agricultural sector, as it is a sector characterized by risks and uncertainty, as well as determining the efficiency and effectiveness of systems of laws and legislation, which is achieved goals related to the investor in the field of competition and monopoly, achieving transparency, as well as preventing dumping and resolving trade disputes in accordance with fair rulings (Al-Shammari, 2010).
- 6 The decline of the foundational structures in the agricultural sector, as well as the weakness of agricultural policies and limited government support

2.2.2 External challenges :

- 1 The lack of water in the Tigris and Euphrates rivers and their tributaries entering Iraq is one of the most serious challenges facing the agricultural investment environment and the production of strategic crops, through its negative impact on the overall activities of the agricultural investment environment in particular and the agricultural sector in general, which is the first sector affected by the decline in the level of the Tigris and Euphrates rivers , thus reducing large agricultural areas of production and entering them into agricultural lands declining in production (Al- Rawi and Al-Bayati, 1988).
- 2 Iraq's desire to join the World Trade Organization before reaching the stage of economic integration, which will make the agricultural investment environment captive to the international economic system.
- 3 The difficulty of importing modern technology and applying it in the Iraqi agricultural sector, as well as ill-considered economic openness and the inability to compete in the foreign market for agricultural commodities.

2.3.1 The role of economic policies in the agricultural investment environment and strategic crop production in Iraq:

Represents the agricultural investment environment the overall economic and legislative conditions that affect the investor's confidence and convince him to direct his investments to one country rather than another, because it is the environment in which the requirements for agricultural investment are available. Therefore, the success of economic policies at the present time and in the future, that is, the sustainable development strategy it depends not only on macroeconomic policies aimed at economic stability, but more importantly, it depends on the implementation of an integrated public investment program (Salem, 2005).

Result from the economic openness of Iraq to the countries of the world after 2003, with the weakness of the necessary support for the agricultural sector and the lack of effective standardization and quality control devices, this led to the exposure of agricultural strategic crops to a decline and the inability to compete, thus, Flooding Iraqi markets with imported agricultural commodities (Al Majeed et al., 2022).

1. The role of price policy in the agricultural investment environment and strategic crop production

Iraq suffers from a decline in the level of agricultural price policy of successive governments for productive cultivated areas, and a decline in the level of production response to the effects of annual purchasing prices in the medium and long term, because of deep state interference in production and marketing conditions, in addition to technical reasons related to productivity (Al-Dabbagh, 2014).

Iraq also suffers from the lack of support provided in implementing the price support policy, as this policy, which guarantees a minimum price for some strategic agricultural crops, is considered the main regulator and effective tool in the country to increase production and direct it for the benefit of the national economy, because the failure of this policy leads to several problems, the most important of which is the abandonment of agricultural land and migration to the city, thus increasing the burden on urban areas.

2. The role of fiscal policy on the agricultural investment environment and strategic crop production

Fiscal policy affects the agricultural investment environment through government spending on infrastructure for agricultural projects, taxes in Iraq also have an economic role by reducing inflation and their role in encouraging investment, reviewing the laws and regulations related to taxes and their types, and organizing revenues with new laws (Al-Samarrai and Alwan, 2005).

Also, the adoption of financial policy tools, such as the carbon tax, which is proportional to the carbon content and which would influence the relative prices of fossil fuels with the aim of excluding fuels that pollute the environment, in addition to its impact on production factors and replacing energy with labor and capital in some sectors (Khudair, 2005).

3. The role of monetary policy in the agricultural investment environment and strategic crops

The agricultural investment environment in Iraq suffers from confusion and confusion between fiscal and monetary policy, and each of them has a scope, means and duties to influence agricultural policy, for advance and achieve the goals set in the agricultural plan, and to overcome crises, through coordination and appropriateness between these two policies, for avoiding conflict and contradiction between them (Al-Dulaimi, 2022).

Monetary policy plays a very important role on the agricultural investment environment through the central bank's tools in influencing the money supply and controlling the management of the volume of credit granted, by increasing credit and reducing the interest rate and thus reducing the cost of agricultural investment and then increasing the production of strategic agricultural crops.

Finally, monetary policy in Iraq has a negative role in the production of strategic crops through the decline in the exchange rate of the Iraqi dinar against its counterpart, the US dollar, and the significant impact on the purchase of agricultural supplies, most of which are imported from abroad, which leads to an increase in agricultural costs for the agricultural investor.

4. The role of production policy in the agricultural investment environment and strategic crop production:

Price policy in Iraq has proven that price alone is not the only factor affecting agricultural production, indeed, many factors play in the decisions related to this: the national economic structure, the imbalance in the crop structure, foreign trade relations, the contribution of private activity to agricultural production, as well as price developments in economic variables, are all factors taken into consideration by the agricultural price policy maker (Ahmed, 2013).

The agricultural investment environment in Iraq depends on the production policy in particular and its implications for the production of strategic crops, as well as the demand for products and the ability to access various markets, the agricultural investment environment represents the source of production of strategic agricultural crops, so production policy must find a balance between relying on financing institutions owned by the public sector on the one hand and owned by the private sector on the other hand to provide the necessary physical support for the agricultural investment environment and the production of strategic crops.

5. The role of marketing policy in the agricultural investment environment and strategic crop production:

The marketing policy in Iraq suffers from neglect, which has led to weak marketing services, as the storage and marketing of strategic crops depends on the state's silos, which suffer from several problems, including the deterioration of infrastructure and its need for rehabilitation, and poor management and operation that has led to the lack of modern warehouses with international specifications.

It requires the need to organize marketing institutions and bodies to encourage productive incentives among investors, and thus develop the agricultural investment environment and increase the production of strategic crops.

6. The role of some macroeconomic variables on the agricultural investment environment and strategic crop production

Inflation has a negative role on economic growth, as it reduces the real income of farmers and widens the income inequality gap, on the other hand, high inflation rates contribute to a weak agricultural investment environment on the actual value of profits (Ali, 2022).

2.3.2 Investment spending on strategic crops and its role in the agricultural investment environment and production of strategic crops in Iraq:

The agricultural sector in Iraq is characterized by the backwardness of production forces, the decline in the volume of agricultural production for most strategic crops, and the inability to keep pace with the needs of local demand, which led to a decline in production, and thus failure to reach self-sufficiency rates (Al Majeed, 2023).

Public investments in Iraq are determined through the amounts allocated by the state in its national plans to develop sectors of the national economy through the annual general budget, the disbursement of these amounts is called (public investment spending), this public spending includes many diverse aspects, including spending on the agricultural sector.

The bulk of agricultural investment spending in Iraq was focused on the main infrastructure, such as buildings, road construction, machinery and equipment, in addition to means of transportation, which aim to support the investment effort to raise the level of agricultural production by the state, which represents the public sector on the one hand, and on the other hand a decline in agricultural investment by the private sector (Ministry of Planning and Development Cooperation, 2012).

Public investment in Iraq is determined according to economic development plans, and is subject to investment allocations, which depend largely on oil revenues, therefore, productive investment in strategic agricultural crops in Iraq is subject to these allocations, the effect of which appears in increasing the gross domestic product in Iraq (Mutlaq, 2014).

The agricultural sector in Iraq is also one of the main sectors in absorbing the workforce, and the volume of employment in this sector was estimated at between 21% - 23% from 2000 - 2016, because it is considered a labor-intensive economic sector (Al-Anbari, 2019).

The bulk of investment spending in Iraq was focused on reclaiming agricultural land and purchasing modern irrigation systems, which aim to support the investment effort to raise the level of agricultural production of strategic crops (Al-Minshedawi, 2012).

The table (2) shows the annual financial allocations for agricultural investment budget projects for the period (2004-2021).

It is clear from the table below that there is a drop in the level of annual governmental allocations to the agricultural sector, despite the noticeable increase from year to year on the one hand, On the other hand, we find that investment spending for the agricultural sector wasn't at the required level of spending what was allocated to it, this is due to several reasons, the most important of which are mismanagement and limited absorptive capacity of the agricultural sector with the lack of a real will for change, not to mention administrative and financial corruption and the resulting waste of economic resources, and then the reluctance to implement annual agricultural plans, and the occurrence of a gap between the planned goals and what is actually achieved.

The decline in investment spending for the agricultural sector is an indication of the weakness of financing and support granted to the agricultural investor because of the exceptional financial circumstances that Iraq is going through, which made it turn to investing in the oil sector, because the Iraqi economy is a unilateral rentier economy.

Table 2: Annual Fiscal allocations for agricultural investment budget projects for the period (2004 –2021)
(Million dinars)

Growth rate of agricultural investment spending (3)	Investment spending for the agricultural sector (2)	Annual allocations to the agricultural (1) sector	The year
-	186,100	270,535	2004
5.4	198,229	272.863	2005
45.5	223899.6	319,477	2006
4.7	301,822	381,889	2007
107.2	625,390.7	1,511,113	2008
0.45	911,402.7	1062237.4	2009
-5.1	964,662.6	1633233.1	2010
13.6	1423264.1	2.310.672.4	2011
-13.5	1448038.4	2.354.542.3	2012
-83.8	137,4203.3	2.440.258.4	2013
609.10	126587	2795109.1	2014

-84.803	148261	1820750	2015
140.106	355,984	174832.2	2016
-36.973	224364	3197063	2017
29.331	290,174	332113	2018
-88.44	105,156	267567	2019
115.80	926,933	109906841	2020
-72.74	252,668	14001474	2021

Source: Central Bank of Iraq, General Directorate of Statistics and Research, Annual Bulletin for the years (2004 - 2016). Column (3) is the work of the researcher.

2.3.3 The role of the private sector on the agricultural investment environment and the production of strategic crops in Iraq:

Most developing economies do not have the necessary requirements for the functioning of the market mechanism, which requires the growth of private sector institutions and companies (Ghazal, 2005). The process of developing the private sector has become one of the influential forces in most countries of the world in terms of providing goods and services, accumulating wealth, and employment (Al-Atraqji, 2005). The private sector is the backbone of the market economy, which undertakes a large relative share in production, use, innovation, initiative, expanding markets, and strengthening economic relations (Shaalán, 2005). And the stimulating the public sector to raise the quality of the goods it provides considering the competition it faces from the private sector works to raise the rate of economic growth (Farhan, 2005).

The economic policy directions in Iraq came after 2003, which aim to transform from a state-controlled economy to a free market economy that ensures economic growth, through restructuring the national economy, expanding its production base in quality and quantity, and integrating it with the global economy, based on market mechanisms and the liberalization of prices and trade from qualitative and quantitative restrictions, and to leave the private sector to lead in achieving this by strengthening its technical and financial capabilities, in order to play the main role in capital formation, treating unemployment, increasing employment, and achieving ambitious rates of economic growth, as well as rebuilding state institutions, modernizing their work methods, and maintaining economic stability, by adopting the method of decentralization in decision-making, transparency, and accountability, and this is what was included in the National Development Strategy (2005-2007) (Al-Hafiz, 2004).

That is, the trend is to adopt the market system, which began in Iraq on the basis that it is the most suitable tool for growth, development and success, most of the countries of the world, after exceptional circumstances that the economies of those countries have gone through, require the availability of general stability, technical capacity, and human resources development, and the availability of a national private sector that includes investors who have the financial ability to advance the national economy (Al-Shamaa et al., 2007).

Small projects also contribute to creating new job opportunities and generating income considering the transition to the private sector, as well as increasing population growth and the need for new investment opportunities (Al-Khazraji, 2005).

The agricultural investment environment in Iraq is determined within private activity, but part of it depends on the state, whether in preparing its requirements or marketing various crops (Al-Omari, 2005).

As for Iraq, the private sector has a low economic impact on the sectors of the national economy, especially the agricultural sector, as a result of its search for quick profit and personal benefit, which depends primarily on imports. Therefore, it does not represent the real private sector, but rather a group of capital owners served by the exceptional circumstances that passed after 2003 and they are achieved high levels of profits.

3. Discussion of Results:

3.1 Supporting and financing the agricultural investment environment and the production of strategic agricultural crops.

The Iraqi economy is distinguished by the fact that it belongs to the group of oil economies, whose extractive industries, especially oil, account for the largest proportion of its national income (Al- Ani, 2005).

The decline in the productivity of the agricultural sector in Iraq and the decline in the level of infrastructure prompted the government to search for realistic solutions to save it, and on this basis the agricultural initiative was launched in 2008 to expand lending and financing, after the success achieved by the soft lending experience by the Ministry of Agriculture in 2004 (Ministry of Agriculture, 2008).

Financing agricultural investments in Iraq is done through the government and private sectors, and the nature of investment projects undertaken by the public sector varies, as it is responsible for infrastructure projects related to roads, water provision, digging sewers, reclaiming agricultural lands, and other services that the private sector cannot perform while the private sector carries out agricultural production (Zaghir, 2017).

Agricultural loans also play a major role in supporting and financing the agricultural investment environment in Iraq through the growth and stimulation of available investment opportunities, as well as the sustainability and development of existing agricultural projects, as the agricultural sector is characterized by the specificity of its seasonal production conditions and fluctuations in productive conditions, which makes the state of uncertainty greater, therefore, the need for any agricultural project for financing is continuous and urgent if it wants to continue production and development in all its stages (Muhammad, 2017).

Supporting and financing the investment environment takes several directions, such as providing financial facilities, guarantees for marketing and production, providing protection for the local product, exemption from taxes and fees, and providing cash liquidity, there are several reasons for providing support and financing, including: (Al-Hakim, 2013).

1. Work to encourage the local producer to continue in his producing, by supporting the price of the final output.
2. Reducing production costs, and thus reducing the final price as a means of supporting the local consumer.
3. Encouraging local and foreign investment companies to invest their capital in the agricultural sector.

The agricultural initiative in Iraq in 2008 aims to develop a road map for all agricultural sectors to reach advanced stages of self-sufficiency, by setting customs tariffs that protect the local product and achieve great productivity to improve the reality of the agricultural investor (Al-Bujari, 2019).

Whereas the initiative is one of the types of direct support to the agricultural sector, after the decline in production rates for strategic agricultural crops and the heavy reliance on imports from abroad, to fill the food gap, which negatively affected the trade balance and the balance of payments through the exit of hard currency, as well as adherence to fluctuations in global crop prices strategic agricultural.

The agricultural initiative in Iraq is not without drawbacks, such as lending loans to the agricultural investor outside the agricultural season, and thus using them outside the scope of agricultural investment on the one hand, on the other hand, there are many fictitious loans, as well as **reluctance** in repaying loans because of the lack of economic feasibility of economic project existing agricultural.

Supporting and financing agricultural investment depends on the size of the financial allocations allocated to the agricultural sector, and the ability of workers in this sector to spend the amounts through the actual implementation of agricultural and irrigation projects, and this is determined by the sector's ability to absorb various investments that depend primarily on political, security and economic stability.

3.2 The role of agricultural technology in the agricultural investment environment and the production of strategic crops in Iraq.

Increasing the production of strategic agricultural crops represents a basic input for developing the agricultural sector by strengthening the Iraqi research capacity so that it can keep pace with scientific and technical developments in countries of the world and then employ them according to the environmental conditions in Iraq (Hussein, 2017). And The agricultural investment environment in Iraq suffers from a low level of use of advanced and modern technology, as it still uses primitive means in the agricultural production process, due to the weakness of the financial and technical capabilities necessary to finance the acquisition of modern technology and its application in the agricultural production process, or to produce it locally to develop agricultural production inputs from effective pesticides, hybrid seeds, modern agricultural machinery and how to use them (Khalaf, 2006).

It is possible to describe agricultural technology as a leveraging force that affects all elements of production to transform their entity towards creating a latent ability that qualifies them to achieve the optimal and efficient use of available economic resources (Saleh and Janaei, 2018).

One of the main reasons for the decline in production in the agricultural sector in Iraq is due to its reliance on traditional methods agricultural activity, and despite the introduction of a significant portion of technology into the agricultural sector, productivity remained modest, and thus low growth in the agricultural sector (Shinjar, 2007).

Agricultural technology plays a prominent role in increasing the production of strategic crops and improving their quality, through applying the Green Revolution method and disseminating and applying modern agricultural technology in Iraq, to achieve qualitative developments in adaptation to environmental and climatic factors and water resources, an addition the requirements for agricultural production, marketing, manufacturing and storage, and Modern technology has contributed the strategic agricultural crops increasing their competitiveness in global markets by improving and increasing production, as well as reducing production costs.

The use of agricultural technology is clear through agricultural mechanization, which is one of the basic requirements that works to increase production and reduce costs, through the efficiency of agricultural machines and machinery used in the production process, as well as the level of use of improved seeds, effective fertilizers, and advanced pesticides. Table 3 shows the fiscal allocations allocated to agricultural researches for the period 2004-2021, it shows the modest fiscal allocations for agricultural researches and studies, which depends on the amount allocated to the agricultural sector through the general budget, and a clear fluctuation is noted, as it depends on changes in global oil prices, as well as the financing of military operations that drain much of the annual fiscal budget allocations.

The amount allocated to agricultural researches in 2010 reached its highest rate at 293,873.5 million dinars, and this indicates the encouragement of researches and studies for their major role in increasing productivity and developing the agricultural investment environment, as well as the fiscal abundance for that year, in contrast to the year 2009, when the amount allocated reached its lowest level is 20,125.5 million dinars, and indicates the low amount allocated for investment spending for the agricultural sector in that year.

Table 3: Annual fiscal allocations allocated to agricultural research for the period (2004 - 2021)
(Million dinars)

growth rate % (4)	Allocations for agricultural research and studies (3)	growth rate % (2)	Agricultural sector allocations (1)	The year
	48229.6		270,535	2004
72.091	82999	0.860	272,863	2005
-3.410	80168.4	17.083	319,477	2006
19.086	95469.7	19.535	381,889	2007
146.717	235540.6	295.530	1511113	2008
-91.455	20125.5	- 27.291	1,062,237.4	2009
1360.204	293873.5	47.102	1633233.1	2010
-47.194	155180.0	42.747	2310672.4	2011
10.001	170700.4	2.086	2354542.1	2012
9.999	187770.2	3.651	2,440,258.4	2013
1.157	2360688	-62.706	2795109.1	2014
-99.2	18869	-47.566	1820750	2015
-49.5	9534	-63.361	174832.2	2016
22.5	11682	82.864	319706.3	2017
-9.2	10608	3.880	332113	2018
5.06	11145	-19.434	267567	2019
875.908	108765	40976.381	109906841	2020
912.343	1101075	-49.878	55087204	2021

Source: Republic of Iraq, Ministry of Planning, Sector/Agricultural Planning Department, and Government Advisory Programs Department for the years (2004 - 2021). The fiscal allocation for the year 2020 was extracted using the arithmetic mean method. fiscal allocations for research from 2017-2020 were extracted using the arithmetic average.

3.3 The annual agricultural plan and its implications for the agricultural investment environment and strategic crop production in Iraq.

The agricultural plan is drawn up according to the summer and winter agricultural season by the Ministry of Agriculture in coordination with the Ministry of Commerce and the Ministry of Water Resources and according to the water storage available in dams and water tanks as well as rainfall expectations.

Local wheat for the 2022-2023 season is considered one of the best types of wheat. This is due to several reasons, including that the rainfall rate was abundant, and the specific weight of one grain for the current marketing season has reached 82 milligrams in many governorates, including Holy Karbala and Samawah, while the weight is The quality of Australian wheat per grain is 81 milligrams, meaning that the size of the Iraqi grain exceeds the size of the Australian grain, while the weight of one grain, which in previous years amounted to between (70 - 73) milligrams, and this is one of the positive indicators that contribute to increasing the production of the strategic wheat crop.

According to data from the Ministry of Planning for recent years, production has reached more than four million tons, so it is expected that production will exceed 4 million tons in the coming years.

The barley crop is a strategic crop as it is a major food for livestock, and its importance comes after the wheat crop in terms of production and area in Iraq, and it comes in fourth place after the wheat, yellow corn, and rice crops globally (Habib and Fares, 2006).

There is a gap between the rates of local consumption of rice, and what is produced of it locally, and this requires searching for the most important reasons and addressing them, since the rice crop occupies an important place in the Iraqi economy, and identifying the most important factors that affect supply and demand for the crop, in addition to evaluating the performance of agricultural policies governmental (Mutlaq and Al-Hayali, 2010).

The agricultural plan determines the number of imports that represent the food deficit to meet the amount of local demand for strategic crops, therefore, the FAO and the Arab Organization for Agricultural Development determine the consumption equation, which is production plus imports, and it represents the food deficit (Mudhi et al., 2012).

As a result of the water shortage in Iraq, the Ministry of Agriculture put a plan to reduce the agricultural areas of rice in Iraq, even though it is a strategic crop not only in Iraq but also in most regions of the world, as it provides calories estimated at 40% of the calories an individual needs (Al-Wasiti, 2003).

Although the agricultural sector in Iraq has many elements that encourage at investment in this sector, it suffers from the low value of agricultural output (Abd and Al-Jumaili, 2023). In addition, there is About 3.9 million hectares of Iraq's area are unsuitable for agriculture and can be converted into arable land through agricultural reclamation programs (Jameel and Alobaidy, 2019).

The population is the main source of labor force, and this indicator is considered one of the basic components on which the agricultural sector is based, any progress in the field of agricultural production must depend to a large extent on the availability of labor force, and Iraq does not suffer from a lack of labor availability in terms of numbers, but there may be some of the indicators that workers lack are the experience and skill that requires dealing with modern technologies (Al abbasi, 2021).

The agricultural sector is one of the chock sectors for economic development, but in Iraq, the opposite has become due to its backwardness compared to other countries such as the Kingdom of Saudi Arabia, despite its limited capabilities in terms of agricultural land and water, it is developed in terms of production and productivity, and has created from its agricultural economy a developed economy that works to export surplus local production (Al-Mukawtar, 2007).

The Ministry of Agriculture aims to implement a plan that has sufficient flexibility to confront emergency circumstances, the aim of which is to improve the agricultural investment environment, through examining and certifying agricultural seeds, by developing new varieties of seeds that are superior to those used in previous seasons, which are seeds that are resistant to environmental conditions and salinity in Iraq, About 10 varieties were submitted to the competent committee for examination and acceptance for the purpose of approval for use it, they are new varieties and awaiting approval, and they are local seeds with high productivity approved by the Ministry of Agriculture, as for imported ones, they are subject to several specialized laboratory tests to ensure their quality and ensure that they are harmless.

3.4 The relationship between the agricultural investment environment and the production of strategic agricultural crops:

The agricultural sector in Iraq has the potential to invest in the production of strategic agricultural crops as food industries that have inputs and outputs and are rich in sources of generating secondary income from side activities, as well as working in agricultural investment as the main activity, which creates investment opportunities and new productive horizons to generate income, in addition to the possibilities for social integration resulting from that, but the exceptional situation that Iraq is going through has made it at the back of countries that encourage agricultural investment and support it with all the necessary capabilities to advance it.

The forward and backward connections of the agricultural sector with the rest of the sectors of the national economy are very similar to the harmonic relationship between the above variables, it is not possible to increase the production of strategic crops without developing the investment environment and making it attractive to agricultural investors, and this reflects on the entire agricultural sector, which is the main base for economic growth.

The lack of water in the Tigris and Euphrates rivers and their tributaries entering Iraq has a negative impact on the overall activities of the agricultural investment environment in particular and the agricultural sector in general, which is the first sector affected by the decline in the level of the Tigris and Euphrates rivers, thus reducing large agricultural areas of production and entering the space of declining agricultural lands about production, noting that running surface water is one of the most important water sources in Iraq, and this results from the inability to equate it with other water sources, and its importance increases in the southern and central section's due to the small amount of rain that these areas receive (Al Rawi and Al-Bayati, 1988).

The importance of rainwater harvesting, in addition to its economic and environmental advantages, is evident in its direct impact on increasing and improving the productivity of strategic agricultural crops by providing irrigation water and the simplicity of its facilities and ease of implementation. The majority of economic indicators indicate an increase in field plants in water spreading areas, which may range from 5-7 times compared to in other cases, without applying the techniques, the importance of these techniques increases in arid and semi-arid areas where water resources are limited (Al-Hadithi et al, 2010).

The reduction of the land invested in agriculture and the variation in its area from year to year, depending on the economic, natural, and social conditions, as all of them affect the area and size of agricultural production in Iraq, and irrigation methods differ according to the area and its location in the water sources, and thus the entry of some agricultural lands within the scope of the lands invested.

The issue of enhancing storage and refilling reservoirs with lakes, dams and natural storage sites has a priority, in addition to completing the agricultural plan and securing drinking water for the next season.

The joint coordination between the Ministries of Water Resources and Agriculture results in an agreement on the area of the agricultural season, through indicators on the basis of which the agricultural plan will be approved, including the size of surface and groundwater reserves and what can be used to secure agricultural requirements, while the second indicator includes the expected quantities of Iraq's revenues through The Tigris and Euphrates basins, direct rain, or through the process of snow melting, as well as global market indicators, and the related issue of supply and demand, the production of crop types, crop density, agricultural cycle, and the market mechanism.

The area of the agricultural plan proposed by the Ministry of Agriculture is estimated at 1.5 million dunums, while the remaining areas are linked to groundwater, in the event of a water abundance, the area of the agricultural plan is reconsidered, but the priority is given to the issue of strategic storage and strengthening it, especially since there are large storage voids Linked to the four dry seasons that Iraq witnessed.

4. Conclusion:

The hypothesis has been proven, which states that there is a positive relationship between the agricultural investment environment and the production of strategic crops and some macroeconomic variables. It can be said that Iraq possesses many of the elements of an agricultural investment environment, but it lacks efficient management and use optimum. Drought and desertification are among the main obstacles to a sustainable agricultural investment environment, and the dilapidation of infrastructure and the lack of its maintenance compared to neighboring countries and developed countries, has led to the reluctance of foreign companies to invest in the agricultural sector. On the other hand, we note that the agricultural policy in Iraq includes obligating the investor to adopt an agricultural plan in which the cultivated area and the quantity of production are determined under the pretext of the limited capacity of the warehouses, despite Iraq's need for strategic agricultural crops, and the state's efforts to fill the shortfall in imports, which makes Iraq a dependent country to global market fluctuations and failure to reach advanced stages of self-sufficiency .

Authors Declaration:

Conflicts of Interest: None

-We Hereby Confirm That All The Figures and Tables In The Manuscript Are Mine and Ours. Besides, The Figures and Images, Which are Not Mine, Have Been Permitted Republication and Attached to The Manuscript.

- Ethical Clearance: The Research Was Approved By The Local Ethical Committee in The University.

References:

- 1.Abd, H.A. and Al-Jumaili, J.S.A. 2023. Measuring and analyzing the overall impact of agricultural investment efficiency standards on the value of agricultural output in Iraq for the period (1990-2020). *Tikrit Journal of Administration and Economics Sciences*. 19(63), pp.478-492.
- 2.Ahmed, A.I. 2013. An Economic View of the food problem in Iraq, Dar Zahran for Publishing and Distribution, Oman, Jordan.
- 3.Al-abbasi, M.K.J.M. 2021. The impact of investment and agricultural employment on the growth of agricultural output in Iraq for the period (1990-2018). *Al turath Journal*. 11(05), pp.114 – 129.
- 4.Ali, A.H. 2022. Economic Stability and Its Role in Achieving Inclusive Growth in Iraq. *the journal of agrobiotechnology management & economics (AgBioForum)*. 24(3), pp.109 – 119.
- 5.Alani, I.M.A. and Alani, T.M.R. 2005. Functional Corruption in the Iraqi economy - its causes, consequences, and ways to confront it, the Seventh Scientific Conference of the College of Administration and Economics, held on November 23, 2005, Iraq, pp. 246 – 266.
- 6.Alani, T.M.R. 2005. The World Trade Organization and its repercussions on the reality of the industrial sector in Iraq, the Seventh Scientific Conference of the College of Administration and Economics, held on November 23, 2005, Iraq, pp. 162-184.

7. Alani, T.M. and Lafta, F.M. 2016. The Problem of desertification - its concept, causes and repercussions on the agricultural sector at the level of Arab countries. *Al-Kut Journal of Administrative and Economic Sciences*. 1(23), pp.1 – 19.
8. Al-Anbari, M.A. 2018. The Reality of the Agricultural Sector considering the Economic Transformations in Iraq, PhD thesis, University of Baghdad, Baghdad.
9. Al-Atraqji, H.T.A. 2005. Means of Promoting Small and Medium Industries in Iraq, the Seventh Scientific Conference of the College of Administration and Economics, held on November 23, 2005, Iraq, pp. 344 – 353.
10. Albujiari, W. 2019. Agricultural investment in Iraq (Reality and determinants) for the period (1995-2015). *Al – Rafidain Agriculture Journal*. 47(1), pp.13-24.
11. Al-Dabbagh, J.M.J. 2014. The Economics of Agricultural Marketing, Dar Al-Murtada, Baghdad.
12. Al-Dulaimi, K.J.A. 2022. The Problem of point bargains in dealing with the rentierism of the Iraqi economy - a study in light of the implementation of the Iraqi-Chinese agreement, PH. D thesis, University of Baghdad, Baghdad.
13. Al-Dulaimi, B.J.K. 2014. The Importance of Agricultural Investment in Achieving Food Security in Iraq. *Journal of Baghdad College of Economic sciences University*. 2014(5), pp.1 – 20.
14. Al-Hadithi, I.K. et al. 2010. Modern Irrigation Technologies - and other topics on the water issue, first edition, press of the Ministry of Higher Education and Scientific Research, Iraq.
15. Al-Hafiz, M. 2004. National Development Strategy (2005 - 2007), Ministry of Planning, Baghdad.
16. Al-Hakim, A.N. 2013. Studies in Iraqi Agriculture, Future Agriculture, Part One, First Edition, ministry of agriculture press, Baghdad.
17. Al-Jazaery, M.A. 2010. The Oil and Uranium War, The Crime of the era, Dar Al-Salam Press, Beirut, Lebanon.
18. Al-Khazraji, T.A. 2005. A Proposed Program for Financing Small Projects in Iraq, the Seventh Scientific Conference of the College of Administration and Economics, held on November 23, 2005, pp. 297 – 315.
19. Al-Makoutar, R.H. 2007. Agricultural Economics, Taif Printing Company, Iraq.
20. Al-Minshdawi, W.A. 2016. The Reality of Agricultural Investment in Iraq in light of the Development of the Structure of Local Demand for Agricultural Crops, PH.D thesis, University of Baghdad, Baghdad.
21. Al-Omari, S.A. 2005. Towards a more Effective Contribution of Women to Economic Activity in Iraq, the Seventh Scientific Conference of the College of Administration and Economics, held on November 23, 2005, pp.316 – 343.
22. Al-Rawi, S.M. and Al-Bayati, A.H. 1980. Foundations of Climatology, 2nd edition, Ministry of Higher Education and Scientific Research press, Baghdad.
23. Al-Samarrai, Y.M. and Alwan, A.H. 2005. Tax Allowances and Their Impact on the Tax Revenue, the Seventh Scientific Conference of the College of Administration and Economics, held on November 23, 2005, pp.96 – 117.
24. Al-Shamaa, H. et al. 2007. A Vision into the Future of the Iraqi Economy, Iraq Center for Studies, Baghdad.
25. Al-Shammari, S.M.Z. 2010. Agricultural Investment in Iraq and Ingredients of its Success. *Univesity of Thi-Qar Journal*. 5(6), pp.1 – 12.
26. Al-Ward, I.M. and Yas, R.A. 2005. A Proposed Strategy for Developing Small and Medium Enterprises in Iraq, the Seventh Scientific Conference of the College of Administration and Economics, held on November 23, 2005, pp.12 – 30.

27. Al-Wasiti, R.T. 2003. Evaluation of Agricultural Policies for Basic Grain Crops in Iraq, PH. D thesis, University of Baghdad, Baghdad.
28. Dahesh, F.J. 2010. The Implications of Iraq's Accession to the World Trade Organization on the Future of the Agricultural Sector, Al-Azza Press, Baghdad, Iraq.
29. Farhan, A.K. and Farhan, A.M. 2005. Privatization and its Effectiveness in Developing Countries (experiences in selected developing countries with reference to (Iraq), the Seventh Scientific Conference of the College of Administration and Economics, held on November 23, 2005, pp.267 – 296.
30. Ghazal, M.Q.M. 2005. Features of the Economic System and the New Economic Policy in Iraq, the Seventh Scientific Conference of the College of Administration and Economics, held on November 23, 2005, pp.1 – 11.
31. Habib, J.M. and Faris, A.M. 2006. Necessary Parameters Used in Determining Supply Response of Barley Crop in Iraq. *Iraqi Agricultural Sciences Journal*. 37(2), pp.23 – 28.
32. Hamad, M.J. and Ali, J.H. 2019. Measurement and analysis of the impact of investment spending and fixed capital formation on the output of the agricultural sector in Iraq for the period (2004-2017). *Anbar University Journal of Economic and Administrative Sciences*. 11(27), pp.60 – 78.
33. Hussein, I.A. 2017. Sustainable Agricultural Development in Iraq ... Solutions and Treatments Obstacles. *Journal of Economics and Administrative Sciences –JEAS*. 23(95), pp.345 – 366.
34. Hussein, S.A. and Hamdan, A.A. 2020. The Role of Fiscal and Monetary Policy in Stimulating Circular Economy in Iraq. *Firenze University Press*. 20(2), pp.125-145.
35. Issa, R.A. 2012. Financial Corruption and Investment Opportunities in the Iraqi Economy. *Journal of Economic and Administrative Sciences*. 18(68), pp.287 – 288.
36. Jameel, A. and Alobaidy, A.S. 2019. The Factors Affecting Investment of the Agricultural Land in Iraq for the Period 1990-2017. *Tikrit Journal of Administration and Economics Sciences*. 15(48), pp.535-543.
37. Khalaf, F.H. 2006. Development and Economic Planning, 1st edition, World of Modern Books, Jordan.
38. Khudair, I.A. 2005. globalization and the challenges facing the oil industry in OPEC countries with special reference to the Iraqi oil industry, the Seventh Scientific Conference of the College of Administration and Economics, held on November 23, 2005, pp.205 – 226.
39. Majeed, O.H. 2023. The Food Gap of Most Important Agricultural Products in Iraq for the Period 2003-2020 and Ways to Face It. *Journal of Namibia Studies*. 33(2), pp.1038-1049.
40. Majeed, O.H., Farhan, M.N. and Salloum, T.M. 2022. The Impact of Dumping Policy on the Food Gap of Chicken Meat in Iraq For the Period (2004-2019) - Turkish Imports Of Chicken Meat a Case Study. *International Journal of Professional Business Review*. 7(3), pp.1-14.
41. Mashhour, A.F., Laban, A.A., Abd El Mouiz, A., and Ismael, M.R. 2022. *Zagazig Journal of Agricultural Research*. 49(5), pp.719 – 731.
42. Ministry of Planning/Sector Planning Department, Agricultural Planning Section, Agricultural Sector Production Report for the year 2021.
43. Mudhi, A.A., Hameed, B.H. and Faris, A.M. 2012. Self-sufficiency and Food Gap for main grain crops in some arab countries for the period (2005 - 2015). *The Iraqi Journal of Agricultural Sciences*. 43(1), pp.130 – 146.
44. Mutlaq, Q.N. 2014. An Economic Analysis of the factors determining domestic and foreign direct investment in Iraqi agriculture For the period from 2000 – 2010, PhD thesis, University of Baghdad, Baghdad.

- 45.** Mutlaq, Q.N. and Al-Hayali, A.D.K. 2010. Demand and Supply Functions for the Rice Crop in Iraq During the Period (1980 - 2005). *Iraqi Journal of Agricultural Sciences*. 5(41), pp. 164.
- 46.** Saleh, L.Y. and Janani, H.R. 2018. Obstacles to Economic Development in Iraq After 2003, first edition, Kareem House and Library, Baghdad.
- 47.** Republic of Iraq, Ministry of Water Resources, Irrigation, and drainage projects in Iraq, 2010.
- 48.** Salem, A.A. 2005. Privatization, Reform and Economic Transformation, Perceptions and Strategy for Economic Development in Iraq, the Seventh Scientific Conference of the College of Administration and Economics, held on November 23, 2005, pp.141 – 161.
- 49.** Shaalan, H.Y. 2005. Reforming the Iraqi Economy Stock of the Past - expectations the future, the Seventh Scientific Conference of the College of Administration and Economics, held on November 23, 2005, pp.366 – 379.
- 50.** Shanjar, A.J. 2007. The Agricultural Sector in Iraq After International Sanctions. *Iraqi Journal of Science Economics*. 5(13), pp. 1-14.
- 51.** Zaghir, I.A. 2017. The Role of Agricultural Bank Loans in Developing the Agricultural Sector in Iraq for the Period (2010-2016), Ministry of Planning - Sector Planning Department, Baghdad.

فاعلية بيئة الاستثمار الزراعي في دعم إنتاج المحاصيل الزراعية الاستراتيجية في العراق

فارس كريم بريهي
جامعة بغداد /كلية الإدارة والاقتصاد/ قسم الاقتصاد
بغداد، العراق
drfaris@coadec.uobaghdad.edu.iq
<https://orcid.org/0009-0009-7874-0117>

سلمان عمران موسى*
جامعة بغداد /كلية الإدارة والاقتصاد/ قسم الاقتصاد
بغداد، العراق
salman.omran1102a@coadec.uobaghdad.edu.iq
<https://orcid.org/0009-0004-9938-6405>

Received:26/12/2023 Accepted:7/4/2024 Published Online First: 1 /10/ 2024

هذا العمل مرخص تحت اتفاقية المشاع الإبداعي تُسبب المُصنّف - غير تجاري - الترخيص العمومي الدولي 4.0
[Attribution-NonCommercial 4.0 International \(CC BY-NC 4.0\)](https://creativecommons.org/licenses/by-nc/4.0/)



مستخلص البحث:

إن تعظيم فاعلية بيئة الاستثمار الزراعي لجميع مدخلاته الأساسية من الموارد الاقتصادية المتاحة في العراق، يمثل طفرة نوعية في إنتاج المحاصيل الاستراتيجية، لذا جاءت مشكلة البحث من ضعف إنتاج المحاصيل الزراعية الاستراتيجية في العراق كما ونوعاً، بسبب عدم فاعلية بيئة الاستثمار الزراعي، نتيجة قلة الدعم الحكومي وتهالك البنى التحتية للقطاع الزراعي وقصور في رأس المال النقدي. وعولجت المشكلة بالأسلوب التحليلي، ليهدف البحث بذلك إلى بيان أهمية تطور بيئة الاستثمار الزراعي وزيادة الدعم الحكومي وانعكاس ذلك على إنتاج المحاصيل الزراعية الاستراتيجية، وتوصل البحث إلى امتلاك العراق لمعظم المدخلات الأساسية لبيئة الاستثمار الزراعي إلا أنها تفتقر إلى الإدارة الكفوءة والاستخدام الأمثل فضلاً عن التغيرات المناخية والتي ساعدت في زيادة الجفاف والتصحر، وكذلك توصل البحث إلى أن السياسة الزراعية في العراق تتضمن إلزام المستثمر بخطة زراعية تحدد فيها المساحة المزروعة بحجة محدودية الطاقة الاستيعابية للمخازن وكمية الخزين الإستراتيجي للمياه على الرغم من حاجة العراق إلى المحاصيل الإستراتيجية وبالتالي إقدام الدولة على سد الطلب المتزايد على المحاصيل الإستراتيجية من خلال الاستيراد، الأمر الذي يجعل من العراق تابع إلى تقلبات السوق العالمية واستنزاف العملة الصعبة. ويوصي الباحث إلى الاستغلال الكفوء والأمثل للموارد الطبيعية والمالية والبشرية ومواكبة التقدم العلمي والتكنولوجي في إنتاج المحاصيل الإستراتيجية. وتضمن البحث المنهج الاستنباطي من خلال أسلوب الوصف التحليلي للنهوض ببيئة الاستثمار الزراعي في العراق.

نوع البحث: ورقة بحثية.

المصطلحات الرئيسية للبحث: بيئة الاستثمار الزراعي، المحاصيل الزراعية الإستراتيجية، السياسة الاقتصادية الزراعية، التقانة الزراعية.