

دور السودان في معالجة مشكلة الأمن الغذائي العربي

Sudan Role in Treating Arab Food Security Problem

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الملخص:

تناولت هذه الدراسة واقع الأمن الغذائي في الدول العربية والفجوة الغذائية المتوقعة في ظل مخاوف منظمة الأغذية والزراعة وكذلك برنامج الغذاء العالمي من التداعيات والتحديات التي تواجه الأمن الغذائي في المنطقة العربية نتيجة لأزمة كورونا وأزمة الحروب والنزاعات القائمة بين روسيا وأوكرانيا. وهدفت هذه الدراسة إلى تسليط الضوء على دور السودان في معالجة الفجوة الغذائية، وتمحورت مشكلة الدراسة حول التساؤل الرئيسي: هل يمكن للسودان أن يلعب دوراً مؤثراً في معالجة أزمة الأمن الغذائي في الوطن العربي؟ تم استخدام المنهج الاستقرائي في عملية جمع المعلومات ومن ثم تحليل هذه المعلومات واستنباط النتائج كما تم استخدام المنهج الوصفي للقيام بالمقارنات بين مختلف الظواهر ومعرفة خصائص ومواصفات كل منها واستنباط أوجه التشابه أو الاختلاف فيما بينها. وتوصلت الدراسة إلى عدة نتائج أهمها أن السودان يتميز بموقع إستراتيجي في القارة الإفريقية وأرضه من أغنى أراضي المنطقة العربية والعالم خصوبة، لذلك اتجهت الكثير من الأنظار نحو السودان كمساحة زراعية غنية يمكن الزراعة فيها بمعدلات هائلة يمكن أن توفر الكثير من الإنتاج الزراعي الذي يكفي لسد الفجوة الغذائية للمنطقة العربية ككل، كما يتمتع السودان بمحفزات عديدة للاستثمار منها تنوع فرص الاستثمار في قطاعات الاقتصاد المختلفة من زراعة وصناعة وطاقة وتعددين ونقل وخدمات اقتصادية أخرى. توصلت الدراسة إلى ضرورة دعوة مؤسسات التمويل والشركات العربية إلى تخصيص نسبة من رؤوس أموالها لدعم السودان للتوسع في الاستثمار الزراعي بالتركيز على صوامع الغلال وتخزين الحبوب واللحوم والأسماك والنقل والتعليب وتعبئة الخضار، كما يجب أن يتم التنسيق مع السلطات السودانية لعقد اجتماعات مع المؤسسات والهيئات العربية ورجال الأعمال العرب للترويج لتنفيذ مشروعات في مجال الاستثمار الزراعي والصناعي.

الكلمات المفتاحية: الأمن، الغذاء، الأمن الغذائي، الفجوة الغذائية

Abstract:

This study addressed the reality of food security in Arab countries and the expected food gap in light of concerns from the Food and Agriculture Organization and the World Food Programme about the consequences and challenges facing food security in the Arab region due to the Corona-virus crisis and the ongoing conflicts between Russia and Ukraine. The study aimed to shed light on Sudan's role in addressing the food gap, and the problem of the study revolved around the main question: Can Sudan play

an influential role in addressing the food security crisis in the Arab world?. The inductive method used to collect and analyze information, also the descriptive method used to compare phenomena and identify their characteristics. The study found several results including that Sudan is characterized by a strategic location in the African continent, and its land is one of the richest lands in the Arab region and the world in terms of fertility. Therefore, many eyes have turned to Sudan as a rich agricultural area that can be cultivated at huge rates that can provide a lot of agricultural production that is sufficient to fill the food gap for the Arab region as a whole. Sudan also has many incentives for investment, including diverse investment opportunities in various economic sectors, such as agriculture, industry, energy, mining, transport, and other economic services. The study concluded that it is necessary to call on Arab financing institutions and companies to allocate a percentage of their capital to support Sudan to expand in agricultural investment, focusing on grain silos, storage of grains, meat, fish, transportation, and vegetable packaging. Also coordination with Sudanese authorities should also be done to hold meetings with Arab institutions, bodies and Arab businessmen to promote the implementation of projects in the field of agricultural and industrial investment.

Keywords: food. security, food security, food gap.

Methodological Framework of the Study

Introduction:

Food security is a major concern in the Arab world due to the high population growth, limited agricultural resources, and frequent natural disasters. Many Arab countries are facing challenges in meeting the basic food needs of their people, which has led to an increase in hunger and malnutrition. The situation is further compounded by conflicts and political instability in some countries, which disrupts the food supply chain and exacerbates the crisis.

Due to the COVID-19 pandemic and ongoing conflicts, particularly the war between Russia and Ukraine, the global food security situation has become more precarious. The pandemic has disrupted global supply chains, leading to shortages of food and increasing food prices. Additionally, the conflicts in some Arab countries have severely impacted their agricultural production, making it more difficult to meet the basic food needs of their people.

In this context, Sudan's potential contribution to addressing the food security crisis in the Arab world becomes even more critical. By leveraging its agricultural resources and experience, Sudan can play a pivotal role in ensuring food security in the region and mitigating the impact of these external factors. However, to achieve this, Sudan must address its own internal challenges and adopt policies that support sustainable agricultural development.

In this study, we shed light on the reality of food security in Arab countries, especially in light of the concerns raised by the Food and Agriculture Organization and the World Food Program about the negative consequences on food security and the widening circle of hunger. We also highlight the role of Sudan in addressing the food gap.

Study problem:

The problem of the study revolves around the main question: Can Sudan play an effective role in addressing the food security crisis in the Arab world?

Study methodology:

The study methodology involves the use of inductive method for collecting and analyzing information, and drawing conclusions. Additionally, a descriptive method was employed to compare different phenomena and identify their characteristics and specifications, as well as to deduce similarities and differences between them.

1. The concept of food security:

The origin of the term (food security) dates back to the global food crisis of the last century (1973–1974), where developing and poor countries faced a serious food problem due to a severe shortage in basic food supplies (grains) and fluctuations in their international prices. Therefore, its concept initially relied on economic aspects (quantity and price), but this concept, in line with the changes that have taken place, has been updated in the mid–1990s to become a more comprehensive concept that includes qualitative and human dimensions¹.

1.1. Definition of food security:

Defining food security requires considering it from two different perspectives: the perspective of security and the perspective of food. Security, as defined in linguistic sources, refers to reassurance and

¹ Taouagini Zine El Abidine, "Food Security in Algeria: Current Situation and Future Prospects, Indicators of Quantity", Third International Forum on Agriculture and the Requirements for Achieving Food Security in Arab Countries, Medea University, October 28–29, 2014, Algeria, pp. 1–2.

protection, that is, finding protection for a country's borders, territories, resources, political prestige, and people against any direct or indirect aggression, whether political, economic, or military, from within or outside the country. To provide this protection, it is necessary first and foremost to secure the basic needs of the people of that country, and food is at the forefront of their basic needs. Therefore, food security is considered the foundation of national and international security, politically, economically, and socially. The definitions of food security have varied in defining its meaning as follows¹:

- According to the World Food Summit held in Rome in 1996, food security is defined as "the state achieved when all people (regardless of the economic, social and material conditions in which they live), at all times, have access to sufficient, safe, nutritious food to meet their dietary needs for an active and healthy life"².
- The Arab Organization for Agricultural Development defines food security as "providing the necessary quantity and quality of food continuously for all individuals of the Arab nation, relying on local (domestic) production first and foremost, based on the comparative advantage of commodity production for each country, and making it available to all citizens at prices that are affordable based on their income and financial capabilities"³.

¹ Haboul, Mohamed. "**Agricultural Policies and the Issue of Food Security in Algeria**". PhD thesis, University of Algiers 3, Faculty of Economic and Management Sciences, 2020, p. 29.

² United Nations Food and Agriculture Organization (FAO), **The State of Food and Agriculture: Agricultural Trade and Poverty, Can trade work for the poor?**, Rome, Italy, 2005, p. 82.

³ Arab Organization for Agricultural Development (AOAD), **Annual Report on Agricultural Development in the Arab World**, Khartoum, Sudan, 2008, p. 43.

- As defined by economist Mohamed El-Sayed Abdel-Salam, food security is "the ability of a state to provide the basic nutritional needs for its people, ensuring a minimum level of those needs regularly. Basic food needs can be provided either by local production or by producing a portion of them and fulfilling the remaining needs through providing a sufficient yield from agricultural exports to be used in importing those needs"¹.
- According to economist Mr. Mohammed AlSeriti, food security is defined as "the ability of a society to provide its members with an acceptable level of food within the limits of their available income, while ensuring an adequate level of food for those who cannot afford it, whether through domestic production or importation based on local resources"².

Through these definitions, we notice that the modern concept of food security has expanded to include new dimensions such as access to food, food stability, quality and safety, as well as food provision. Therefore, it does not focus solely on the idea of self-sufficiency and producing all the needs domestically as it was prevalent in the past, but rather on how to provide and make food accessible to all segments of society, and the possibility of benefiting from it.

Based on the above, achieving food security in any country is conditional on the achievement of four main dimensions together: availability of food, accessibility, stability, and the ability to benefit from it.

¹ Mohammed El-Said Abdel-Salam, "Food Security in the Arab World," World of Knowledge Series, National Council for Culture, Arts and Literature, Kuwait, February 1998, p.76.

² Alsayed Mohamed El-Serity, **Food Security and Economic Development**, New University Press, Alexandria, 2000, p.1.

Any deficiency or failure in one of these dimensions leads to a state of food insecurity.

2. The food security situation in the Arab world

The Arab world stretches between the continents of Africa and Asia, occupying the northern part of Africa overlooking the Mediterranean, Atlantic, and Indian oceans, while its Asian part occupies the southwestern part of the continent. The Arab world overlooks important waterways that facilitated its external connections, whether for commercial, cultural, or social purposes, and for this reason, the Arab world was never isolated. The climate in the Arab world varies, which has led to a diversity of vegetation that is reflected in its economic resources, especially agriculture. The Arab world combines the yields of tropical and equatorial regions with those of temperate regions. In addition, some crops are distinct to the desert climate, which dominates most of the Arab world's lands¹.

2.1. Agricultural lands in the Arab world.

The Arab region is rich in natural agricultural resources, which provide the potential for increasing agricultural production and achieving better levels of food security if those resources are used efficiently. A suitable investment climate for agriculture, including appropriate mechanisms for financing agricultural development and food security, is also required. Arab countries vary significantly in terms of the amount of land used for agriculture, due to numerous factors such as geography, environment, natural resources, infrastructure, agricultural policies, and the level of investment in the agricultural sector.

2.2. Factors of Agricultural Development in the Arab World:

¹ Hussam Jad Al-Rab, **Geography of the Arab World**, Kotobarabia.com, 2005, p. 21.

The Arab world possesses many elements that help achieve agricultural development, including¹:

1. The Arab world extends over multiple environmental belts, which enables the production of diverse agricultural crops, and increases opportunities for integration between Arab countries.
2. There are significant opportunities to increase agricultural production through the expansion of the use of fertilizers, improved seeds, machinery, advanced technology, and by reducing the system of overgrazing of agricultural lands.
3. The presence of qualified technical agricultural personnel.
4. There are some Arab financial surpluses that can be invested in agriculture.

All the data and natural conditions indicate the possibility of developing the agricultural sector to play its optimal role in the economic development process, and it is possible that this can go beyond that to make the Arab world a source of agricultural products. This can be applied through agricultural development, the development of agricultural investment, and the optimal utilization of natural resources, especially water resources, and rationalizing their use in agriculture.

2.3. The state of agricultural wealth in the Arab world

In addition to the importance of the Arab agricultural sector in providing food, it is one of the key economic sectors upon which social and economic development relies in many Arab countries. It contributes to the Gross Domestic Product (GDP) and provides job opportunities for

¹ Mustafa Al-Abdullah Al-Kafri, **Agricultural Development in the Arab World: Characteristics, Components, Requirements**. Al-Hewar Al-Mutamadden Magazine, Issue No. 819, April 29, 2004, p. 34.

a significant portion of the population, as well as supplying raw materials for many industries. The research capabilities in agriculture vary between Arab countries, but in general, they do not match the importance of the agricultural sector in many Arab countries. This is due to the lack of necessary investments in infrastructure, scientific and institutional capacity building, as well as the low spending on agricultural research in the Arab world.

Arab countries have abundant agricultural potential, as the geographical area in Arab countries is estimated at about 349.1 million hectares, and the area suitable for agriculture is estimated at about 519.4 million hectares. Around 72.85 million hectares are actually cultivated, which represents about 4.5% of the total geographical area. The workforce in agriculture is estimated at about 8.135 million people.

Arable lands in the Arab world are located around major inland rivers such as the Nile, the Euphrates, the Tigris, the rivers of the Arab Maghreb and the Levant, as well as in coastal Mediterranean and Atlantic regions, the Fertile Crescent, and the lands of Sudan. However, agriculture has not reached the level of abundance to meet the needs of the population. Agriculture contributes to about 13% of the Arab world's GDP, with the cultivated area being distributed among many crops. Cereal crops account for about 50.5% of the total, followed by oilseed crops at about 11.8%, while sugar crops account for only 0.7%.

There are several problems facing irrigation sources in the Arab world:

- Scarcity of freshwater resources.
- Traditional irrigation methods and high rates of loss.
- Groundwater located at deep depths and difficult to exploit for agriculture.

Some Arab countries have resorted to desalinating seawater, such as Saudi Arabia, to obtain freshwater and building dams to reserve river water¹.

2.4. Obstacles to agricultural development in the Arab world:

The agricultural sector in most Arab countries faces various and numerous challenges and problems, including²:

- Weakness in strategic planning and integration of work between government agencies, farmers, the private sector, and others.
- Failure to capitalize on the comparative advantage of specific regions.
- High risks and weak insurance coverage for farmers against any losses beyond their control.
- High fees and taxes on agricultural inputs such as seeds, fertilizers, pesticides, etc.
- High costs of necessary infrastructure for farms, such as water, electricity, and transportation.
- Reliance on traditional agricultural methods and limited use of modern agricultural techniques.
- Limited water resources in some countries, depletion of groundwater, and fluctuations in rainfall amounts.
- Fragmentation of agricultural land ownership, especially high-quality land, and an increase in urban sprawl.

¹ The Arab Organization for Agricultural Development, the Annual Book of Arab Agricultural Statistics, and the Food and Agriculture Organization of the United Nations website on the following link: <https://aoad.org/AASYXX.htm>.

² Previous reference.

- Climate change and an increase in dry areas, which reduces agricultural production.
- Local production overlap and flooding of markets with products that exceed demand, and a lack of support for local exports.
- Weak local and global agricultural marketing.
- Weak regulations governing the agricultural sector.

3. Impact of the COVID-19 crisis on food security in the Arab region.

The COVID-19 pandemic has disrupted the world and the way of life that we knew, resulting in devastating losses of lives and economic activities. Its rapid global spread has posed a threat to millions who already suffer from food insecurity, malnutrition, and the impact of conflicts and other disasters.

Arab countries, like the rest of the world, were affected by the COVID-19 pandemic, which led to the closure and suspension of activities in all aspects of life. The pandemic has led to a decline in food security for millions of people in the Arab region due to border closures and restrictions on movement, disruptions in shipping and air industries, making it difficult to continue food production and transport internationally, which puts countries with few alternative food sources at great risk. This has prompted Gulf governments to reopen the food security file at the current crisis, given the threats facing food supplies in the Arab and Gulf regions in particular, in addition to food loss and waste.

4. The risk of conflicts and the impact of external crises on food security:

The food security situation in several Arab countries has been greatly affected by internal disturbances and conflicts that have occurred in recent years. These conflicts have led to a shortage of locally produced food commodities and difficulties in financing and providing imported goods. The conflicts that have occurred in the Arab region over the past few years have contributed significantly to the deterioration of food security conditions in the Arab region, especially in countries experiencing instability, unrest, and displacement, as well as countries where malnutrition rates are currently on the rise and populations in need of food assistance, in addition to the deterioration of productive facilities and displacement from agricultural lands.

In addition to the effects of disturbances that have occurred in some Arab countries, there are also risks of external crises that have demonstrated their severe impact on food security conditions in the Arab region, such as the global food crises during the past decades that have affected the Arab region, and their food security situation was affected by rising food prices and policies prohibiting the export of food from the main producing country to other countries. All Arab countries, like other countries in the world, have been affected.

4.1. The impact of Russia's invasion of Ukraine on the Arab region

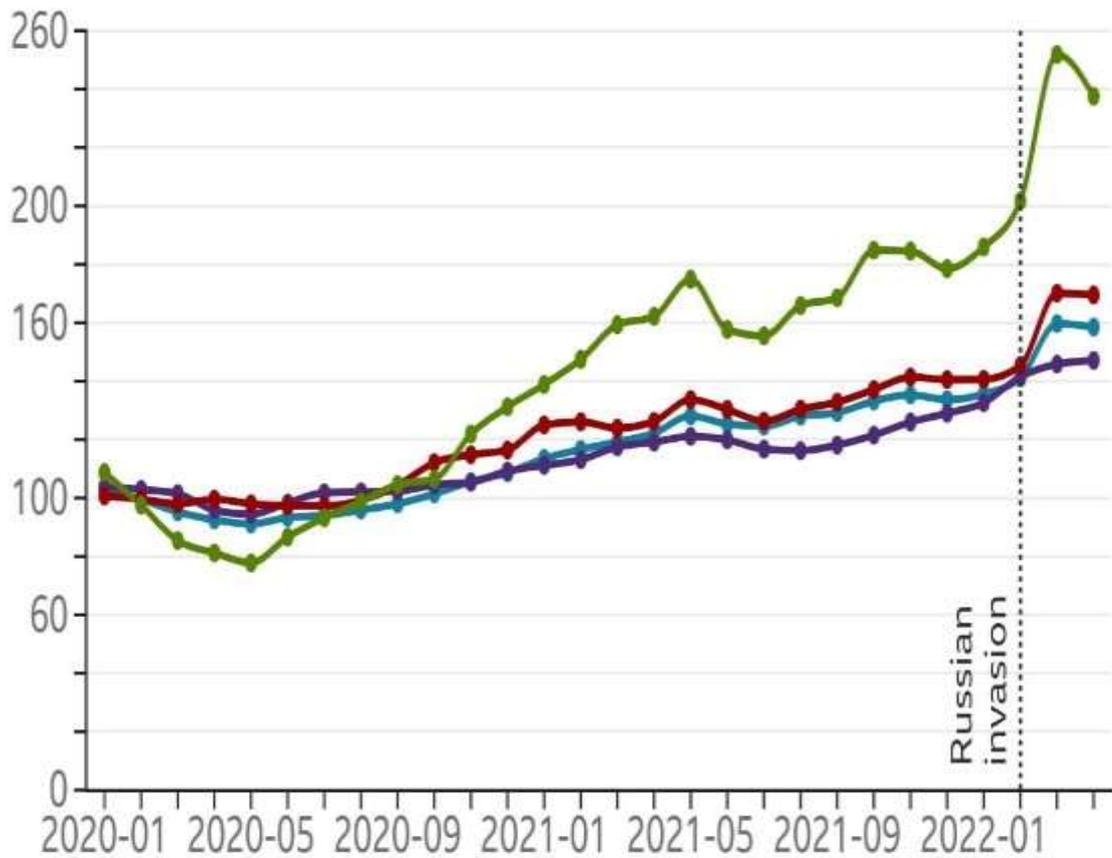
It's not surprising that the Arab region is greatly affected by the repercussions of the Ukrainian war, as it imports around 42% of its wheat needs and 23% of its vegetable oil needs from both Ukraine and Russia, according to the World Food Program. The war has led to a sharp increase in wheat prices, as Russia and Ukraine were among the largest exporters of this commodity, and both countries account for 29% of global

wheat exports, according to the World Bank. Russia and Ukraine are also among the top five global exporters of many important grains and oilseeds such as barley, sunflower seeds, sunflower oil, and corn, according to the International Food Policy Research Institute. With Russia's blockade of Black Sea ports, the necessary supplies of grains, cooking oils, and fertilizers face enormous obstacles in reaching the rest of the world. The Russian blockade of Ukrainian ports has led to an unprecedented historical rise in grain prices, pushing millions of people to the brink of hunger.

Figure (4.1) The impact of Russia's invasion of Ukraine on the Arab region:

Global food prices reached their highest levels ever following the Russian invasion.

الزيوت ■ الحبوب ■ منتجات الألبان ■ مؤشر أسعار الغذاء



Source: FAO – <https://www.fao.org/worldfoodsituation/foodpricesindex/en>

5. The role of Sudan in addressing the food gap

Indeed, Sudan's land is one of the richest and most fertile lands in the Arab region and the world. Sudan also has a strategic location in Africa. That is why many eyes have turned towards Sudan as a rich agricultural area where farming can be done at enormous rates and can provide a lot of agricultural production that is enough to bridge the food gap in the Arab region as a whole.

5.1. Sudan's agricultural, animal and water potentials

Sudan is a vast country rich in natural resources, including fertile agricultural land, animal resources, minerals, plants, and water. Agriculture is the mainstay of the Sudanese economy, accounting for 80% of the population's livelihood.

Sudan has vast and rich natural resources in agriculture (in fertile lands), animal husbandry, minerals, plants, and water. Agriculture represents 80% of the activities of the Sudanese population. Sudan possesses arable lands that enable it to play an important role in supporting Arab food security and contributing significantly to the Arab food basket. Sudan has 48% of the total agricultural land in the Arab world. Additionally, Sudan has a unique geographical location where it borders nine countries. Sudan also has massive natural resources and abundant water resources, along with an estimated livestock population of about 103 million heads of cattle, sheep, and goats. The agricultural area in Sudan is estimated at about 84 million hectares, equivalent to 200 million acres, of which the regularly cultivated area is less than 10 million hectares. Sudan also has natural pastures estimated at about 47 million hectares and forest resources of about 74 million hectares. Sudan has high rainfall rates, ranging from 50 mm in the north to 1500 mm in the south. Sudan's water resources are divided into two categories: flowing water estimated at about 28 billion cubic meters, and rainfall water estimated at about 400 billion cubic meters annually.

The livestock sector is the second most important sector in the Sudanese economy in terms of importance, as Sudan owns more than 130 million heads of cattle, and Khartoum alone has more than one million heads of cattle, in addition to the fish wealth in freshwater in rivers such as the Nile and lakes such as Lake Nubia, and saltwater like the Red Sea, as well as the wild animals and birds.

5.2. Land in Sudan

The land in Sudan is divided as follows¹:

¹ Union of Arab Banks, studies, research and reports, **the Arab food gap and the role of Sudan in addressing it**, at the link <https://uabonline.org/>

- **Desert lands:** Covering an area of approximately 668,000 square kilometers, the average rainfall in these lands is less than 100 millimeters per year. Agricultural activity is limited to raising camels and goats, and irrigated farming is practiced in the areas adjacent to the Nile River.
- **Semi-desert lands:** Covering an area of about 289,000 square kilometers, the amount of rainfall in these lands ranges between 100 and 225 millimeters per year. Livestock grazing and drought-resistant crop farming, such as millet, are practiced in these lands.
- **Coastal lands:** Adjacent to the Red Sea coast, these lands are dominated by winter rainfall and are used for livestock grazing.
- **Qoz lands:** Covering a total area of approximately 240,000 square kilometers, its economic activities include animal grazing, rain-fed, and mixed farming.
- **Central clay plains:** Covering a total area of approximately 119,500 square kilometers, these lands are characterized by cracked clay soils and are one of the most important agricultural production bases in Sudan, where irrigated farming, rain-fed farming, and animal husbandry are practiced.
- **Southern clay plains:** Covering an area of approximately 247,000 square kilometers, forests are scattered in these lands, and irrigated farming, rain-fed farming, and livestock grazing are practiced.
- **Southeastern lands:** Covering approximately 105,000 square kilometers, the annual rainfall in these lands ranges between 600 and 1500 millimeters. Crops such as coffee, tea, fruits, and forests are grown, and livestock grazing is practiced.

- **Mountainous lands:** These include Mount Marra lands, which are located at an altitude of 1000 meters above sea level and cover an area of approximately 29,000 square kilometers. The average annual rainfall ranges between 600 and 1000 millimeters, and they are suitable for growing crops that are not suitable for cultivation in other areas of Sudan. Additionally, livestock grazing, mechanized farming, and forest cultivation are practiced in these lands.
- **Nuba Mountains lands:** Covering an area of approximately 65,000 square kilometers, these lands are suitable for mechanized agriculture and livestock grazing.

5.3. The agricultural sector in Sudan

Sudan tops the list of African countries in terms of arable land area, which constitutes one-third of its total area, and it is the richest in water resources. The forests and grazing areas alone cover 52 million acres, and the average annual rainfall exceeds 400 billion cubic meters¹. The agricultural sector, both plant and animal represents the driving force of the national economy in Sudan, playing a pivotal role in economic and social development, contributing to about 43 percent of the gross domestic product (GDP).

Despite being expected to become the third country in the world to achieve food security alongside Australia and Canada, Sudan still suffers from a severe shortage of food, especially staple grains, and is among the largest importers of wheat, importing around 2.2 million tons annually.

The Sudan is qualified to be a hub for Arab agricultural investment, and is suitable for producing basic food commodities such as grains,

¹ Saber Tantawi, "Agriculture in Sudan: The Enormous Wealth That Is Being Squandered," Noon Post Magazine – published on May 31, 2022, on the following link: <https://www.noonpost.com/content/44233>

sugar, oilseeds, meat, and dairy products, which represent a significant portion of the Arab food gap. With the increasing global food crisis and its impact on the Arab region, interest in agricultural investment in Sudan has grown, and Sudan's importance as a food basket for the Arab world has increased. Arab investors have begun to turn to Sudan in search of agricultural investment opportunities.

The Sudanese government has provided great facilitations for exporting and marketing agricultural products, and has made intensive efforts to attract Arab investments in the agricultural sector. Many agricultural projects have started operating in Sudan, including Jordanian, Emirati, Libyan, Egyptian, and Saudi investments in cultivating and breeding various essential crops, especially wheat, corn, and animal feed.

5.4. Investment environment in Sudan.

During the past ten years, the state has developed infrastructure and services, and directed a portion of its oil resources towards basic infrastructure such as roads, dams, and reservoirs. It has also developed laws and policies as follows¹:

- Reducing the role of the state in economic activities and production, and creating opportunities for the private sector. This includes liberalizing foreign trade, encouraging exports, abolishing state and local taxes on agricultural products, reducing taxes on public joint-stock companies, and introducing tax amendments to encourage capital movement.
- Implementing a new tariff on capital goods benefiting from exemptions, reducing fees on some food items, and abolishing fees on computers and their accessories.

¹ Arab Union of Banks, previous reference.

- Removing restrictions on foreign currency transactions, liberalizing price systems from administrative control, adopting policies to unleash investment and production forces, and supporting economic liberalization policies. Additionally, floating the national currency so that its real value is determined by market mechanisms in a free and organized market governed by production and consumption incentives, transaction freedom, and the banking system serving as a corrective for market imbalances.
- Abolishing the currency declaration system upon entering the country, facilitating visa procedures for foreigners and businessmen, easing foreign registration procedures, and facilitating the entry of skilled foreign labor and ensuring freedom to transfer money abroad.
- Granting strategic projects exemptions from corporate income tax for no less than ten years, as well as granting non-strategic projects tax exemptions for no more than five years, with the possibility of granting a similar period. In addition, the investment project is granted full customs exemptions for all its capital equipment, production inputs, and transportation means. Furthermore, the strategic project is given the necessary land free of charge and at the encouraging price for the non-strategic project. The law also prohibits discrimination between invested money (whether local, Arab, foreign, public, cooperative, or mixed), and it prohibits imposing any state taxes or fees on federal projects during the tax exemption period granted to the project.
- Ensuring the conversion of profits and financing costs on foreign capital in the currency in which the capital was imported on the maturity date, and not nationalizing or expropriating foreign capital unless for public interest and with just compensation.

6. Discussion

Sudan enjoys many incentives for investment, including:

- Diverse investment opportunities in various sectors of the economy, including agriculture, industry, energy, mining, transportation, and other economic services.
- Easy investment procedures and granting of facilities, as a specialized ministry for investment affairs has been established and the "one-stop shop" policy has been adopted to facilitate procedures and allow investors to obtain licenses and benefits in the shortest possible time.
- Availability of qualified and trained human resources and cheap labor in all production areas and in different sectors.
- Presence of established financial and banking institutions specialized in investment, in addition to professional and non-official institutions operating in the economic field such as the Chamber of Commerce and Industry and others.
- Adoption of economic and financial policies that encourage investment and enactment of legislation that forms a strong basis for foreign investments and their protection.

On the other hand, Sudan suffers from a general weakness in infrastructure, particularly a severe shortage of roads. It is undoubtedly true that these agricultural roads are of utmost importance as they are the economic arteries for implementing the agricultural development plan in Sudan. Despite the country's rich fertile land, farmers face many difficulties due to the lack of agricultural roads. Poor roads incur additional financial burdens and losses, such as the unavailability of production inputs, financing, and labor during the planting and harvesting season.

Furthermore, the absence of a network of agricultural roads poses a challenge to the exploitation and cultivation of more land suitable for agriculture.

Despite all the measures mentioned above to improve the investment climate, we believe that Sudan needs more important and supportive measures to improve the investment climate. These measures include, for example, political, security, social, and economic stability, as well as improving and developing infrastructure in general, especially roads and transportation, including rehabilitating railways, electricity, storage, and refrigeration. In this context, we should not forget the stability of laws (especially those related to investment) and the independence of the judiciary, as these two factors give confidence to investors.

7. Conclusion and Study Recommendations

Utilizing Sudan's vast agricultural resources to ensure Arab food security requires a number of mechanisms and procedures, including improving and enhancing the investment climate as mentioned above, as well as providing the necessary funds for investment. To achieve Arab agricultural self-sufficiency, a sustainable Arab funding source must be secured to contribute to providing safe food for Arab people and building more stable agricultural communities. To achieve this, the study recommendations are as follows:

1. Calling on Arab financial institutions and companies to allocate a percentage of their capital to support Sudan in expanding agricultural investment, focusing on grain silos, storage of grains, meat, fish, transportation, packaging, and vegetable packaging. Arab holding companies should also be established, with periodic reports submitted to the Economic Council on progress made in implementation.

2. Coordinating with Sudanese authorities to hold meetings with Arab institutions, organizations, and businessmen to promote projects in the field of agricultural and industrial investment.
3. Supporting the recommendation of the Arab Banks Union, which proposed assigning the Arab Organization for Agricultural Development (based in Sudan) to oversee and finance the following proposals:
 - A. Establishing an Arab financial institution or fund for agricultural development in Sudan, with the following entities invited to participate in financing: Arab governments, Arab sovereign wealth funds, Arab investment funds, the Arab Organization for Agricultural Development, the Arab Authority for Agricultural Investment and Development, the Islamic Development Bank, and major Arab banks.
 - B. Supporting the financial resources of the Arab Organization for Agricultural Development and the Arab Authority for Agricultural Investment and Development to enable them to work on developing and supporting agricultural investment in Sudan, as they possess extensive knowledge and experience in the field of agricultural investment in Sudan, as well as technical expertise in agricultural investment.

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