



The reality of the agricultural sector and the most important policies adopted in Algeria to achieve sustainable food security

Sid Hayet*

*L'intégration Economique Algrero-Africaine,
University of laghouat, (Algeria)*

ha.sid@lagh-univ.dz

Kalakhi Latifa

University tiaret, (Algeria)

latifa.kalakhi@univ-tiaret.dz

Abstract

This study aims to clarify Algeria's efforts to develop the agricultural sector as one of the main alternatives outside the fuel sector .to achieve this, it is necessary to adopt economic policies and strategies and implement them in a comprehensive and integrated manner in cooperation between the government, the private sector and civil society to achieve food security.

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* Corresponding author

1. **Introduction**

The agricultural sector is one of the pillars of economic and social development for many countries, whether they are developing or developed, as agriculture is a major source of food and contributes to the creation of jobs, it also contributes to providing raw materials for many industries, providing financial resources through export revenues or substitution of imported agricultural goods, as well as its place in achieving economic stability And socialization of traditional and modern societies.

History has witnessed several crises that have affected many economies as a result of food shortages , which the world is facing at the present time .to this day, the food problem continues to worry many politicians, economists, financial and social, while the world is striving to recover from the impact of the food price crisis and economic recession , hundreds of millions of people are facing real hunger .

Algeria is one of the international parties that has pledged through international documents to achieve food security at the national level.for this purpose, it has enacted legislation and established a specialized mechanism in this field. it has paid attention to the agricultural sector as an important contributor to achieving food security, and has adopted reform policies in the field of Agriculture to achieve this.

Based on the above following problem can posed:

What is the reality of the agricultural sector in Algeria and how effective the policies adopted by Algeria to achieve food security ?

2. **Basic concepts of food security**

2.1 **Definition of food security**

many definitions food security a this concept , but they not fundamentally from each other

and of these are:

- Health Organization defines food security as " ensuring all necessary conditions and standards (during the processes of production, processing, distribution and preparation of food) necessary to ensure that food is safe, reliable, healthy and suitable for human consumption.
- TheWorlddefines food asensuring all people in country concerned at all times to food an active and healthy.Its elements are:abundance food and the ability to collect. (Hassan, 2010)
- It is definedby the FAO as "ensuring adequate food supply to all individuals at all times". (Courade ,1995)
- Foodsecurity is also defined as: " the ability of a society to provide objective (potential) food needs for its members that enable them to live healthy and active

while ensuring this for those whose income does not enable them to obtain it, whether through local production or import depending on self-resources " . (Munir, 2007)

- Security can also be defined as the ability of society to provide adequate food for citizens in long term quantity, quality with incomes. (Congratulations, 2011)

Food security is characterized by a set of characteristics that economists have agreed on the following: (Salmani, 2020)

- The goal of continuity is for the ecosystem to be protected and improved over time.
- Consistency: seasonal, cyclical and other variations in access to food should be kept to a minimum.
- The goal of sufficiency is the ability to produce, store and import enough food to cover the nutritional needs of all human groups.
- The advantage of autonomy : which reduces exposure to global market fluctuations and political pressures.
- The principle of justice: at a minimum, it means that all human groups have access to adequate food.

2.2 Types food security:

A distinction should be made between types of food security namely : (Al-Bakri, 2015)

- ✓ **About absolute food security:** is a synonymous term full self-sufficiency also food self-producing food within one country or , but it is very difficult to achieve this status, as it does not enable the state to benefit from international trade exploitation .
- ✓ **Relative food security:** it is the ability of society of commodities in of those .

2.3 Levels of food security:

Food security includes three levels as follows: (Mustafa, 2007)

- **Subsistence level:** consists in the ability of the state to provide the minimum food needs for the survival of the individual.
- **Intermediate levels:** this level expresses the ability to get rid of malnutrition and this is done by ensuring the appropriate level of biological nutritional needs of all members of society. Also, the middle levels are represented by the usual level, which is above the subsistence level, and does not reach the potential level, It represents the ability of the state to raise the level of food for members of society to a level that enables them to carry out their productive work.

- **The potential level of food** is focused on two sides of the food security equation: (Al-saraiti, 2011)

A-the supply of food, whether from the state of production, storage or trade.

B-the demand for food, and how to obtain it through production or from buying it from the market, or from food transfers in a different way.

2.4 Components of food security:

The components of food security are classified into (Grabb, 2015):

- The factors and means that enable the production of food, including natural and other resources.
- Purchasing power : purchasing power is defined as the financial ability of a citizen to buy food, and here comes the importance of providing job opportunities for these segments in order to obtain income that enables them to purchase power .Therefore, the development of food policy has become linked between the labor market (the availability of job opportunities) and food market policies.

3. The reality of the agricultural sector and food security in Algeria:

1.1 The capacity of the agricultural sector :

the total agricultural area is **2,371** million square kilometers, the total agricultural area is **48,1** million hectares, of

which **32,7** million hectares are pastoral lands, **4,1** million hectares are forests, and the Allied cover is **2,8** million hectares. The arable area represents **8.5** million hectares, of which **5.7** million hectares belong to private property and **2.8** million hectares belong to state private property distributed between collective peasant investors and individual peasant investors, Model farms, institutes and public bodies. There are also **1,203,869** investors in the country, **50%** of which have less than **20** hectares and **26%** have less than **10** hectares . The average size of farms decreased by about 11.5 hectares in 1973 to 8.3 hectares in **2002**. As for the irrigated areas at the end of **2021**, it amounted to **1,430,000** hectares, compared to **350,000** hectares in **2000**. The area equipped with water-saving irrigation systems is about **897,600** hectares by the end of **2019**, compared to **75,000** hectares in 2000.(<https://gloriousalgeria.dz/Ar/Achievements/show/178> ,2024).

In this context, the minister of Agriculture stated that the value of agricultural production increased during **2022** by 38 percent compared to 2021, and said that Algeria "is able to achieve self-sufficiency in grain production and thus reduce the import bill, which has already been recorded". He also described the last grain season **2021/2022** as good compared to previous seasons, and that the production of hard wheat is sufficient to meet national needs, as opposed to soft wheat, which still

needs to develop its production capacities to reduce the import bill. He also stressed that the main agricultural materials recorded a remarkable increase in production in **2022**, explaining that, on top of the strategic materials for the sector, "we find the grain division, whose production reached **41** million quintals in the **2021/2022** agricultural season, an increase of **48** percent compared to the previous season," and defined the production of dry pulses increased by **20** percent. The production of potatoes, which is one of the basic food products for Algerians, increased by **30** percent, and the production of red and white meat and milk also witnessed remarkable increases, according to the minister of the sector, who pointed out that "this production allowed covering local food needs by **75** percent". (radioalgerie.dz/ar/node/20510 ,2024).

3.2 The of the agricultural sector to employment and GDP

The agriculture sector is a major sector in Algeria and a key pillar of the national economy due to its contribution to employment and GDP, it employs about **2.6** million people as agricultural workers, who represent more than **74%** of the rural workforce and **24%** of the national workforce. Moreover, the country's food security is guaranteed by covering more than **74%** of the national needs for agricultural products. (Algerian agency for investment development, 2024) .

3.3 is the fifth Arab country in the Food Security Index for the second quarter of 2022

Algeria ranked fifth in the Arab World Food Security Index for the second quarter of **2022**, according to the report of Deep Knowledge Analytics. Algeria is working on preparing a plan to reorganize the agriculture sector within several initiatives aimed at intensifying its efforts to ensure food security, especially in the field of cereals, in light of the international changes witnessed by this file, and also plans to expand agricultural land for feed production. With the adoption of the use of modern technical means and fertilizers, to increase agricultural areas, agriculture will contribute to **12.3%** of GDP in Algeria in **2021**, according to the World Bank. (Algerian radio, 2024)

In the above-mentioned report, Algeria was mentioned as an example of countries that aspire to improve their production, ensure food stocks for a long period of time, as well as move towards achieving sufficiency in the field. The report of the foundation "Deep Knowledge Analytics" said that Algeria has been able to achieve positive results in the field of Agriculture in light of global challenges to ensure food security. With regard to the Global Food Security Index, which consists of a set of indicators from (**171**) countries, Algeria ranked 43rd, and measures food security in most countries of

the world was published for the first time in 2012, and is prepared and updated by a number of international journals specialized in economics, the most important of which is the magazine (The Economist) and the foundation "Deep Knowledge Analytics". The latter, based on 3 main factors-the accessibility of food, the risks of the crisis, the resilience of the economy in 171 countries around the world, determine the sum of points for each country, and the value closer to 10 points shows a safer and more stable state in the food security profile. (elghadeldjazair ' 2024)

4. The efforts of the Algerian state as policies and regulations adopted to promote the agricultural sector to achieve sustainable food security

4.1 The purpose tax privileges under the investment law

Within the framework of the Investment Law No. 22-18, agricultural investors operating as an Algerian company benefit from tax privileges for a period ranging from 3 to 10 years, depending on the approved system of privileges.

❖ Types loans with reduced interest

- **Seasonal loan (comrade)** : offered by the Bank of Agriculture and Rural Development (BADR), it is aimed at farmers, breeders and investors who work within the framework of the development of sectors and national productions that contribute to the intensification,

transformation, strengthening, export and storage of agricultural products.

- **Investment loan (challenge)**: is a subsidized investment loan granted by the Bank of Agriculture and Rural Development, and its term is determined according to the feasibility study of the project, in accordance with the beneficiary.

❖ Our support

- **Financial subsidies** : these are the assistance that are granted to farmers in the framework of obtaining agricultural inputs and means of production.

- **Incentive grants** : these are the amounts of money that are granted to producers and dealers as an incentive.

4.2 To limit the agricultural data under the banner of valid data ... Sustainable development:

Algerian agriculture has undergone significant transformations over the past two decades, which has led to an increase in peasant capital and its potential, which must be documented and integrated into an updated agricultural statistical system according to advanced monitoring technology. In this context, the minister highlighted that "the actual launch of the general census of Agriculture will be carried out during the first trimester of the current year," noting that the operation is considered the third of its kind after those carried out in 1973 and 2001. The minister

of the agriculture sector in Algeria explained that the General Statistics is a "huge national process" and a tool for collecting comprehensive statistical data on the sector, highlighting that the data collected will allow "a better view of the sector, especially with regard to identifying and controlling public policies at the local and national level and improving decision-making and decision-making process". (Algerian radio, 08/01/2024) he also considered this statistic as a "prelude to drawing a stable agricultural policy that ensures sustainable food security and ends the randomness of decisions," stressing that the achievement of modern agriculture is based on "a database provided by Statistics and scientific data and a technical path that increases profitability. (Algerian Press Agency, 2024)

The importance that the public authorities attach to this periodic process as a practical and basic tool for drawing up effective agricultural development programs that suit the needs and aspirations of citizens and allow them to be taken care of optimally, as well as the General Data provided by its outputs on the agricultural situation and the geographical distribution of agricultural investments, as well as its social characteristics, forming a reference information base for various sectors, rely on it to outline general development plans commensurate with the specifics of agricultural investments that will be counted across all regions of the

country. This huge national process is a tool for collecting comprehensive statistical data on agricultural investments, which will provide a vision. It also enables to obtain accurate and up-to-date statistical data on the structural structure of the agriculture sector with its production systems and peasant labor, as well as the characteristics and patterns of peasant investments with their performance. This process also allows us to put at our disposal for the first time statistics that accurately determine the agricultural potential in the south of the country. (Ministry of Agriculture and Rural Development, 2024)

4.3 Submission of the agricultural and Rural Development Roadmap (2020-2024)

In order to embody the path of agricultural and Rural Development and to continue efforts, based on the achievements of successive agricultural policies, a roadmap for agricultural and Rural Development for the period 2020-2024 has been prepared, based on a number of axes, as follows : (glorious history, new era, 2024)

1. Development of agricultural production through the expansion of irrigated areas.
2. Increased production and productivity.
3. Rationalization of agricultural land use.
4. Agricultural and Rural Development in mountainous areas.

5. Preservation, Development and promotion of Forest Heritage.

6-agricultural and Rural Development in the steppe and agro-pastoral regions.

7. Development and promotion in desert areas.

8. Integrating knowledge and digitization into development programs.

In the same context, priorities have been identified, so that a short-term program has been prepared and another of a continuous nature, the short-term program is focused on the development of desert agriculture, through the expansion of areas with capacities and the development of industrial crops (such as corn, soybeans, sugar beets, etc.), as well as the establishment of the National Bureau for the development of industrial agriculture in desert lands.

4.4 The following gstrategies needed to achieve food security in Algeria:

The increasing rise in the population and the misuse of agricultural and other natural resources are factors that have exacerbated the food problem in Algeria, which is why the strategic option to get out of this crisis requires achieving sustainable agricultural development.

Therefore, the Algerian state has defined the parameters of the agricultural strategy in light of the current international conditions, through the National sessions

of Agriculture, in which the minister of Agriculture stated that agricultural production has increased by one thousand billion dinars, that is, by about ten billion dollars, and that agriculture in the South requires other measures now, including production twice a year. He added that only our southern states are able to achieve self-sufficiency in grain, and the Algerian state is ready to finance projects of agriculture-related industries up to 90 percent. Agriculture accounts for 14.7 percent of the gross domestic product, second only to hydrocarbons with 24 percent. Cereals will be of the utmost importance in the Algerian state's strategy for agricultural production. (National Bureau of agricultural lands, 2023)

As part of the promotion and encouragement of structured investment in the south through the activation of the Bureau of industrial agriculture development in the desert lands, a real estate portfolio of more than 460 thousand hectares has been transferred to investors, of which more than 283 thousand hectares were distributed to 464 investors.

In order to support agriculture in the southern regions, which have an abundance of water and land that can be reclaimed, work is being done to create integrated agricultural poles such as grain cultivation poles, milk production pole, sugar beet, potato seed production and intensification, as well as cotton cultivation in addition to oil plants. (Algerian radio, 08/01/2024)

When analyzing the Sustainable Agricultural Development Strategy and the policies and programs it includes to achieve sustainable food security, the main pillars on which this strategy is built are clear: (the Algerian agency for investment development;/, 2024)

- * Valorization of peasant lands, especially in the Great South.
- * Development of strategic divisions (corn, sunflower, oily Herring, soy, cereals, food legumes, etc...
- * Development of Integrated Farms;
- * Promoting public-private partnership within the framework of model farms
- * Development of agricultural mechanization
- * Development of irrigation systems and water saving equipment
- * Development of composting techniques to improve the use of inputs in different agricultural divisions
- * Establishment and development of modern nursery farms
- * Development of greenhouse cultivation (multi-domed houses)
- * Development of feed cultivation (alfasa, hydroponics,...)
- * Valuing agricultural production in the sheep, cows and goats, white meat, fruits

and vegetables, as well as the milk division‘

- * Valorization of local peasant products (dates, oils, grapes...)
- * Development of cold storage and storage capabilities‘
- * Development of wool wrapping and converting workshops
- * Logistics base for the export of agricultural products‘
- * Marketing of meat products (red meat) (slaughter, conversion and packaging)‘
- * Development of breeding and fattening of cattle (sheep and cows)‘
- * Development of leather conversion units‘
- * Forest economy and valuation of forest products‘
- * Agrotourism and wet tourism in lakes and wetland.

A policy has been envisaged for the development of the agricultural and rural sector, through a structured and integrative endeavor based on a structure consistent with other sectoral policies. This approach will allow the development of agriculture, making it a tributary of economic diversity and growth.

As for the economic growth model adopted in the field of Agriculture, which responds to several challenges, it is based, as a matter

of priority, on the promotion of agricultural investment and agro-food industries based on greater mobilization of capital and the necessary private initiative to revive the agricultural and rural sector. in this regard, the priority actions that the government aspires to achieve in the horizons of 2024, are mainly:

As for the economic growth model adopted in the field of Agriculture, which responds to several challenges, it is based, as a matter of priority, on the promotion of agricultural investment and agro-food industries based on greater mobilization of capital and the necessary private initiative to revive the agricultural and rural sector. in this regard, the priority actions that the government aspires to achieve in the horizons of 2024, are mainly: (Algerian agency for investment development; <https://aapi.dz/ar/secteur-de-lagriculture-ar> 2024)

* Covering basic food needs by increasing production and agricultural productivity.

* Development of a new agricultural and rural model driven by private investment and the emergence of a new generation of producers.

* Improving the competitiveness of agricultural and forest food products and integrating international value chains.

* Sustainable and balanced development of rural areas, especially in mountainous and desert areas.

* Modernization of agriculture through the integration of knowledge-related products and digitization.

These upstream policies and strategies can only happen by achieving the following goals: (gharab, the problem of sustainable food security in Algeria, reality and prospects, 2015)

- ❖ **The first objective** is to increase agricultural production in quantity and quality so that it can meet the requirements of food consumption.
- ❖ **The second objective** is to improve the performance and effectiveness of the agricultural sector and raise agricultural productivity through the optimal exploitation of productive resources and the increasing introduction of various innovations and agricultural technical inventions, in order to enhance the competitiveness of Algerian agriculture. And to enable national production to replace agricultural imports, which deplete the trade balance .
- ❖ **The third objective** is that sustainable agricultural development is a basic requirement to achieve food security in the Arab world, and that achieving this requirement requires achieving Arab agricultural economic integration, creating a stimulating climate for agricultural investment, and being able to acquire agricultural technology and control the determining factors of trade

exchange and the resulting development of Arab agricultural exports.

The agricultural sector in Algeria has recently started to achieve the development goals, based on the requirements of the stage and in line with current and future bets through the embodiment of programs that are of a priority nature and relate to the development of strategic agriculture, as is the case with grain crops, especially hard and soft wheat, legumes, milk, meat and We are looking forward to developing oil, fodder and sugar products, as far as possible, in order to reduce imports and balance the agricultural trade balance, in particular, and the national balance, in general.

5. CONCLUSION

Algeria has been interested in the development of the agricultural sector through the adoption of support policies and some economic reforms, and despite the human and material potential that Algeria has in the agricultural sector, this sector is unable to meet the requirements and needs of the population for food, that is, agriculture in Algeria has not achieved the target increase in production to meet the demand for Despite the efforts made by the state to increase production and reduce the this is the result of several difficulties and , foremost of which is the growing population growth, which is followed by an increase in the needs of the population. That is, Algeria still suffers

from a food problem, which is mainly represented by increasing dependence on imports from the outside world to meet its food needs, although it has enormous potential for agriculture and other untapped potentials(agricultural components in the south), the agricultural sector is one of the most important economic sectors to achieve in Algeria, and this is achieved only by the concerted efforts of other sectors.

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