

## Evaluation of agricultural development policies and programs as a mechanism for achieving food security in Algeria

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### Abstract:

Due to the current global economic transformations and the numerous challenges they present, particularly for developing countries, it was necessary for these countries, including Algeria, to work to reduce their dependence on the outside world, particularly with regard to achieving food security by finding solutions and adopting development policies, the foundation of which was based on achieving a national consensus on the issue of food security to ensure national sovereignty and social cohesion.

**Keywords:** Agricultural policies; agricultural production; development programs; food dependency.

## **I- Introduction:**

The goal of achieving food security has been and continues to be the area of interest of governments, many specialized international bodies, and non-governmental organizations. Algeria is among the countries that have sought and are still seeking to achieve this goal by following the strategy of agricultural policies in order to achieve agricultural development within the framework of supporting plant and animal production in light of the rational exploitation of natural resources to ensure their sustainability, within the framework of the development plans adopted to achieve agricultural development during the period 2000–2022, in order to give a strong impetus to support deteriorating food security.

The basis of these policies was based on achieving a national consensus on the issue of food security to ensure national sovereignty and social cohesion, as well as the liberalization of initiatives and energies, the modernization of production devices, and the translation of the great capabilities contained in the national economy.

All these policies have been rolled out in order to achieve agricultural development capable of supporting the agricultural sector as a strategic choice as an alternative to the hydrocarbon sector in order to contribute effectively to supporting and developing the national economy to provide the largest possible number of jobs in the agricultural sector, absorb part of unemployment, and achieve food security.

In light of the above, the problem of research is as follows:

Have the agricultural development policies and programs implemented in Algeria been able to achieve food security during the period 2000–2022.

To address this topic, it is worth asking a set of questions that require special attention, as follows:

- What is meant by food security? What are its dimensions, and what is its importance?
- What are the most important development policies and programs adopted by Algeria to achieve food security?

### **The importance of the study:**

The study deals with a very important topic, which is mainly food security, which is the focus of everyone's attention at all international and Arab levels. Food security is still a tangible challenge despite the availability of all possibilities to achieve it, and this is what makes it the center of thinking for scholars and those interested in it.

### **Objective of the study:**

This study aims to shed light on the efforts made to achieve food security by identifying several policies, programs, and development plans adopted by the Algerian authorities to achieve food security.

### **Methodology used in the study:**

The study dealt with the descriptive approach by describing the phenomenon of food security as well as presenting the most important development policies that the concerned authorities sought through their adoption to achieve food security.

To familiarize ourselves with the aspects of this research, we will shed light on the following axes:

The first axis is theoretical concepts about food security.

The second axis is agricultural development programs and policies adopted to achieve food security and evaluate their outcomes during the period 2000–2022.

### **The first axis: theoretical concepts about food security.**

#### **1- The concept of food security.**

The use of the term food security appeared almost half a century ago, as it began to circulate at the beginning of the seventies of the last century and took several trends since the global food crisis (1973–1974), which was accompanied by a sharp rise in food prices and a significant decrease in the global stock of food, and it was difficult to provide it to citizens and was also followed by international political crises that made food and oil the most important strategic commodities in the global economy.

Its concept represents a point of convergence between two words: security on the one hand and food on the other. Security, as reported by linguistic sources, is intended for reassurance and protection and is one of the first basic needs that man seeks to achieve, while food is all that is suitable for human consumption, whether of animal or plant origin. (Al-Bayani ,2011,p13)

#### **2- Definition of food security.**

There is no uniform definition of food security, it was defined by FAO as "ensuring adequate food supply for all individuals at all times" (Courade, 1995, p. 45) .....Based on this definition, food security is achieved by providing individuals with sufficient food to live, and this is either by local production or by completing consumption needs by resorting to the international market.

The supply of food to individuals is not the only and primary cause of the rise in food production; it is also related to the high purchasing power of groups. The level of food security can change between different regions within the same country (Courade, 1995, p. 49).

The World Bank defined it as the access of all people at all times to enough food for an active and healthy life.

While the World Health Organization considers that food security is achieved under all necessary conditions and standards, during the processes of production, processing, storage, distribution, and preparation of food to ensure that food is safe, reliable, healthy, and suitable for consumption, food safety goes through all stages from agricultural production to final consumption.

To unify the scientific vision towards food security, the Food and Agriculture Organization of the World (FAO) has defined it as "the availability of physical, economic, and social possibilities for all human beings to obtain adequate and healthy food, which provides the necessary nutrients, to carry out healthy life activities (FAO, 2003, p. 20).

### **3- Dimensions of food security:**

Food security has several basic dimensions, which are as follows:

- **Food availability:** Availability is an important dimension of food security; supplying enough food to the population is necessary, but it is insufficient, and it is also a condition to ensure the appropriateness of food access, meaning sufficient food of appropriate quality for individuals. Availability assessment indicators include the adequacy of food energy supply, the percentage of calories derived from grains, the average supply of proteins from an animal source, and the average value of food production (Makaid & Ben Ayad, 2017, p. 12).
- **Food use:** It means the good use of food by individuals that does not interfere with the maintenance of health and is free from hygiene problems such as potable water, sanitation, various medical services, and others (Meetz, 2013, p. 2). In the sense of enjoying an appropriate dietary pattern that works to meet all the physiological needs of individuals and achieves a state of nutritional well-being.
- **Actor status:** individuals or groups with the ability to act independently to choose what they eat, the food they produce, how to produce, process, and distribute it, as well as participate in the political processes that determine food systems.
- **Sustainability:** The sustainability dimension includes food systems practices that contribute to the long-term regeneration of natural, social, and economic systems, taking into account ensuring that the nutritional needs of current generations are met and taking into account the nutritional needs of future generations (Expert Group, 2021, p. 10).

### **4- The importance of food security:**

The importance of food security for individuals, communities, and governments is highlighted in the following points (Al-Sufyani, 2020, 1380):

The provision of food is the main pillar of food security, as it preserves the human soul, which the Shariah says must be preserved, and forbids encroachment on it.

Food security protects people from hunger and poverty, which have spread in many parts of the world. Famine has become a phenomenon observed at this time, threatening the world, especially the Islamic world, as a result of wars, conflicts, and natural disasters.

Food security has a major role in the security and stability of society. The society in which food fear is widespread is vulnerable to instability, the spread of thefts and crimes, and the infringement of property, which is evident in reality, where there is a close link between poverty, hunger, and the loss of food security, and between the spread of crime and the absence of security and stability. The more food security is lost, the greater the crime rate and the weaker social stability.

**The second axis: development programs and policies adopted to achieve food security and evaluate their outcome during the period 2000-2022.**

#### **First: Agricultural development policies in Algeria during the period 2000-2022**

The nineties witnessed the encouragement of the agricultural sector of the private sector and the liberalization of the agricultural system, but the reforms did not achieve decisive results due to the accumulation of some problems generated by the previous reforms before 1987 and the emergence of problems resulting from this reform and the Real Estate Guidance Law.

Algeria's intention to integrate into the world system by joining the World Trade Organization and linking a partnership with the European Union made it necessary to achieve efficiency in production, improve quality, and integrate into global markets, so the state has developed several programs to provide the necessary facilities for farmers so that they can face the difficulties they face.

#### **1- Policy to support agricultural development through the Economic Recovery Support Program 2000-2004:**

To build modern agriculture with efficiency that contributes to raising the challenges that agriculture faced in the past and that it faces in the present, the National Plan for Agricultural Development came to embody these ambitions through the rational exploitation of natural resources and existing capabilities, adopting several agricultural policies, including those related to real estate, agricultural land reclamation, financing, support, and agricultural loans, or those related to the diversification and intensification of production, and others (Ministry of Agriculture and Rural Development, 2000, p. 70).

The National Plan for Agricultural Development is a holistic strategy aimed at developing and increasing the effectiveness of the agricultural sector. It is based on a series of specialized programs adapted to the Algerian agricultural climate, and it can also be

considered a program developed to protect agricultural procurement and agricultural production, whether plant or animal, as well as to protect the rural population (Zerman, 2010, p. 200). It consists of several sources of financing, including the National Fund for the Control of Agricultural Development (FNRDA) (Madani, 2008, p. 14).

### **Policies to support agricultural development applied during the Supplementary Growth Support Programme 2005-2009:**

After the positive results achieved by the program to support the economic recovery in the agricultural sector, as well as the desire of the custodian authorities to consolidate the achievements made in the previous period and to establish the appropriate conditions for sustainable growth-generating social welfare, the total five-year program in 2005/2009 was 4202.7 billion dinars, of which 3372 billion dinars were allocated to the program to support economic development such as agriculture, rural development, and fisheries (Supplementary Growth Support Programme, 2005, p. 07) Of which 300 billion dinars have been allocated to the agricultural sector and rural development fisheries (Supplementary Growth Support Programme, 2005, p. 39) of the Economic Development Support Program, as it was expected for the period 2005–2009 to complete a program related to:

- Development of agricultural investments.
- Development of economic and rural activities, establishment of new agricultural investments, and encouragement of production.
- Neighborhood projects to combat desertification and protect and develop livestock breeding.
- Protection of sloping ponds and expansion of forest heritage.
- Framing and development of steppe protection processes.
- Administrative facilities and information equipment.

Many of the measures of the program to support economic growth have been strengthened by the adoption of the Agricultural Guidance Law 08/16 of August 3, 2008, which outlined the axes of sustainable development of agriculture and the rural world in general (Zerrougui, 2014, p. 08).

### **3- The agricultural sector during the policy of consolidating economic growth 2010-2014:**

This program is integrated within the dynamic of national reconstruction that began 10 years ago with the program to support economic recovery, which was launched in 2001 to the extent of the resources that were available at the time, and the dynamic continued with the development program 2004–2009, which was also supported by special programs allocated for the benefit of the Wilaya of the High Plateaus and the Wilayas of the South. Thus, the total cost of the development operations recorded during the past five years

amounted to approximately 17,500 billion Algerian dinars, including some structured projects that were still in progress (Salehi, 2013; p 09).

The public investment program, which was developed for the period 2010–2014, required expenditures of 21214 billion dinars, or the equivalent of 286 billion dollars, and it includes two parts: (Statement of the Meeting of the Council of Ministers, 2014, p. 16)

1: Completion of major projects under construction, especially in the railways, roads, and water sectors, with an amount of 9700 billion dinars, equivalent to 130 billion dollars.

2: Launching new projects worth 11534 billion dinars, equivalent to 156 billion dollars.

The Public Investment Program 2010-2014 is distinguished by its exceptional size and the government's keenness to stabilize it at the economic level to:

- Supporting growth.
- Deepening the diversity and competitiveness of the national economy.
- Prepare for its full integration into the world economy to a lesser extent.

#### **4- Policy of agricultural and rural renewal programs in early 2019:**

Agricultural and rural development, resource development and fisheries decisively identify capacities to meet the challenge of food security in order to cover basic needs through national production and to develop resilience in the face of external shocks resulting from successive imbalances in the international financial system as well as disruptions that periodically affect the international agricultural market.

The food crises that have occurred in recent decades have confirmed the sensitivity and complexity of the issue of food security and its close relationship with the issue of the security and national sovereignty of vulnerable countries.

This endeavour was confirmed during the National Conference on Agriculture and Rural Development organized in Biskra in February 2009, where reference was made to the strategic role of agriculture in achieving food security, while stressing the need to transform agriculture into a real engine of comprehensive economic development thanks to the intensification of production in the strategic agri-food divisions as well as thanks to the promotion of integrated development of all rural regions, and this has been embodied on the ground since 2009 by reorganizing the rural agricultural policy based on the re-correction of the established operational objectives. to the sector and test the people's approach as a productivity regulation approach for the country's food security and significant contribution to economic growth (Ministry of Agriculture and Rural Development, 2015, p02)

It was also embodied in 2014 within the framework of the program of the President of the Republic by emphasizing the need to watch over and preserve the national maritime heritage by respecting environmental standards and protecting the purchasing power of consumers, and this view was adopted in the government program in 2014 and made the

pillar of the five-year program 2015-2019 by integrating the fishing and marine resources sector with the agriculture and rural development sector, which allows for concerted new efforts and strengthens the harmony of efforts made to achieve its food security and the important role entrusted to the sector in National economy.

The agriculture and fisheries sector is called upon today more than ever to contribute more to covering our basic food needs, by a significant increase in the national supply and a wider diversification of the national economy as well as by contributing to the development of exports outside hydrocarbons. This endeavor, which was adopted within the framework of the five-year program 2015-2019, requires the strengthening and adaptation of the incentive framework and the accompaniment of both private investment and partnership (access to agricultural land, reclamation of new lands, modernization of agricultural investments, modernization of fishing units and infrastructure).<sup>(1)</sup> -Ministry of Agriculture and Rural Development , 2015, p03)

It also requires constant consultation with development actors (farmers, livestock breeders, fishermen, and economic operators) to know their aspirations and requirements and to take the necessary measures to ensure that they provide useful facilities and secure assurance for all actors. From this perspective, the Ministry of Agriculture, Rural Development, and Fisheries has launched a program aimed at overcoming legal obstacles to investment, supervising the achievement by farmers and fishermen of the infrastructure necessary for their activities, and developing the National Regulatory Agency.

## **Second: Evaluation of the outcome of agricultural development policies to support food security during the period 2000-2022.**

The state has allocated significant sums of money to the agricultural sector to modernize and develop it. Through the implementation of the National Plan to Support Agricultural Development and the Agricultural and Rural Renewal Program, which assigned the implementation of its programs special funds, each fund was allocated a huge amount of money to implement the task entrusted to it to improve and develop agricultural production to achieve self-sufficiency and food security and try to support this sector to contribute to supporting economic growth and reducing the import bill, whether related to plant production or the production of animals.

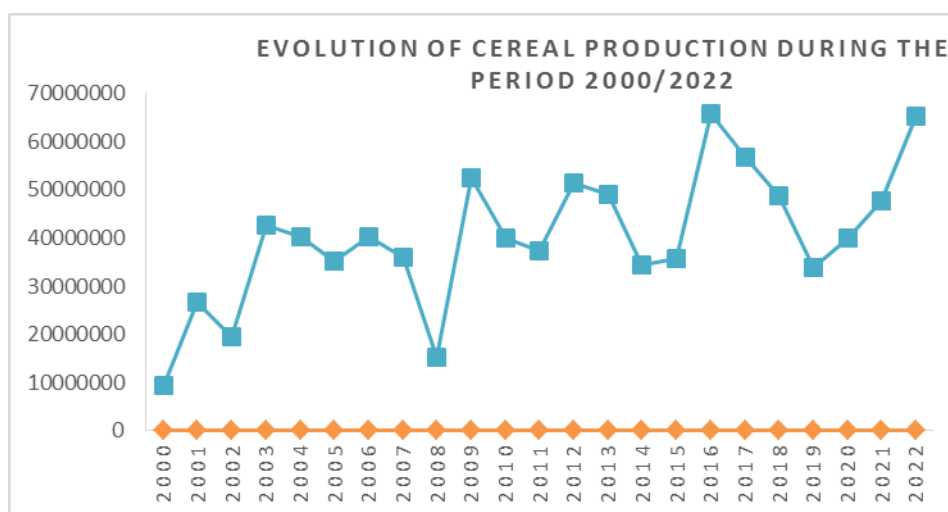
### **1- Evolution of plant production:**

We will try to address the most important crops of plant production that have received support, such as cereals, industrial crops, vegetables, and fruits.

Cereals: Considering that cereals are one of the most important agricultural products for which support was allocated during the period 2000–2022, we will present the development of cereal production during this period to see the extent to which production is affected by the support provided to it, and the following figure illustrates this.



**Fig 01: Evolution of cereal production during the period 2000-2022**  
Unit: quintal



**Source: Prepared by the researcher based on:**

**-Data of the National Office of Statistics, Statistical Summary 1962-2011, pp. 137, 139.**

**- Arab Organization for Agricultural Development, Yearbook of Statistics, vol. 35. (Statistics 2012-2022).**

Cereal production during this period fluctuated significantly, but improvement prevailed over the development of cereal production during the implementation phase of the National Plan to Support Agricultural Development, where it witnessed a significant improvement that moved from 9342190 quintals in 2000 to 40328222 quintals in 2004, due to the support provided to the agricultural sector on the one hand, the application of a policy to improve the situation of cereal production, and the adoption of a set of procedures and measures such as changes in production systems, the provision of production inputs, improved seeds, fertilizers, and herbicides, which are the same. The policy was applied during the period 2005–2009. The year 2009 witnessed the maximum levels of cereal production by 52531502 quintals due to the implementation of the agricultural and rural renewal program, which was launched from 2003 to 2008 and then re-supported again to start during the period 2008–2013, where the state allocated all material and human resources and provided financial resources, whether in the field of exploitation or investment, by providing loans and subsidies to farmers and surveying their debts to engage in the new strategy for agriculture, despite the continued implementation of support programs provided by the state during the period 2014–2022. Despite the slight improvement in production, this amount of production has not met the growing needs of the population to increase the demand for food.

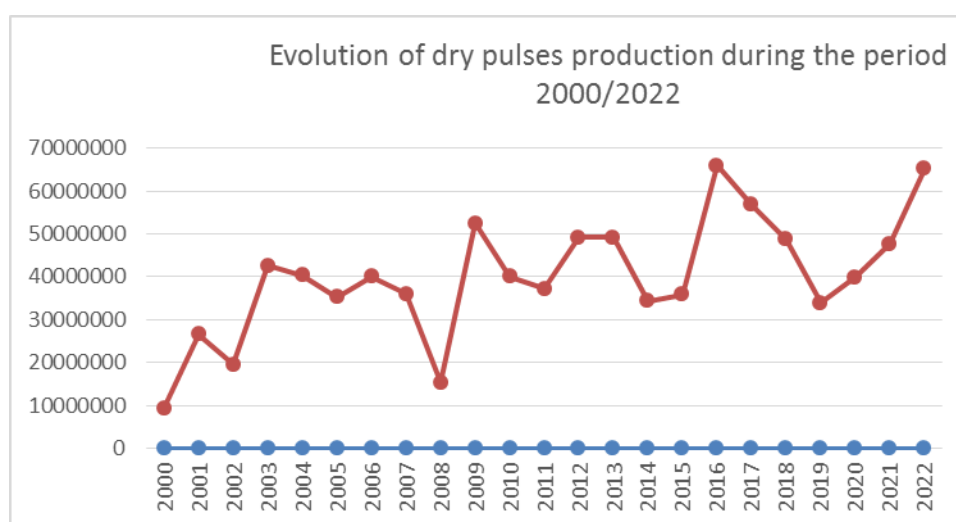
However, what we notice is that despite the support provided during the growth consolidation program, we find that the percentage of cereals declined, especially after 2012, and this is due to the misuse of the support provided and the lack of rainfall. But what must be noted is that the percentage of support provided by the state is not commensurate with the volume of production achieved, and the volume of production achieved was not in the form of production that was planned and expected to be achieved.

## B. Evolution of dry pulses production during the period 2000-2022

The development of dry pulse production during this period, which is among the most important and basic products in food, can be presented, and therefore the state has given special attention to this type of production. The following form shows the development of this production.

**Fig 02: Evolution of dry pulses production during the period 2000-2022**

**Unit: quintal**



**:Source: Prepared by the researcher based on**

**-Data of the National Office of Statistics, Statistical Summary 1962-2011, pp. 137-139 ,**

**-Arab Organization for Agricultural Development, Yearbook of Statistics, Volume 35 (Statistics from 2012 – 2022).**

From the above figure, we find that the production of dry pulses has witnessed continuous development during all development programs, and this is due to the support provided to this type and the increase in the reclamation of land allocated for pulses cultivation, where we find that the average rate of increase during the economic recovery support scheme was estimated at about 72,272 quintals per year, and this percentage became during the implementation of the supplementary program to support growth 34,366 quintals on an annual average, That is, a decrease rate of about 37,906 quintals per year was recorded, and this is due to the decrease in the percentage of production experienced in both the years 2005 and 2008, where the volume of production reached 401725 quintals in 2008 due to drought and the food crisis that the world has known, as well as because of the global economic crisis in 2008, and on the other hand, the year 2005 represents the year of the end of the implementation of the National Plan to Support Agricultural Development, and 2008 marks the end of the first part of the agricultural and rural renewal program, as for the stage 2010-2014, we note A continuous and record increase in the production of dry pulses, where the production reached 937,000 quintals in 2014 after it was 723,450 quintals in 2010, an annual increase estimated at 213,550 quintals on average annually, and this indicates the success of the policy of supporting and developing agricultural production during the implementation of the program to consolidate growth and continue to support and develop the agricultural sector through the implementation of the agricultural and rural

renewal program, whose plans are still continuing until 2022 in order to support agricultural production in the field of meeting The increasing needs of dry pulses, which have been in high demand recently due to the high cost of living and the increasing prices of most food commodities.

**C- Evolution of vegetable production and industrial crops: This is what will be presented in the following figure:**

**Fig 03: Development of vegetable production and industrial crops during the period 2000-2022**  
Unit: quintal



**:Source: Prepared by the researcher based on**  
**-Data of the National Bureau of Statistics.**

We note from the above figure that the production of vegetables has witnessed remarkable development and improvement, as we find that the increase continues and has not stopped, due to the support provided and facilities granted to farmers producing vegetables in the field of public irrigation, the provision of appropriate fertilizers and chemicals, and the provision of irrigation means of various kinds, which contributed to the increase in production and the success of countries in achieving local sufficiency during some years, which shows the success of countries in applying the policy of support directed to vegetables to achieve internal sufficiency by implementing each of the Supporting economic development and agricultural and rural renewal program.

As for industrial crops, their production fluctuated in some periods and some development, such as the period 2000–2004, and then we find that it declined during the implementation of the supplementary program to support growth in 2005–2009 due to the conditions of agricultural investment in areas other than agricultural industries. In return, this production witnessed a remarkable development during the period 2010–2014 due to the reduction of some investments granted to support young people and motivate them to invest in the agricultural field, which activated the field of industrial crops by granting contracts with some industrial institutions, and farmers to ensure the facilitation of the sale of their products, but this support did not continue at the same pace during the years 2015–2022, and the percentage of financial support in this area decreased, which reduced the

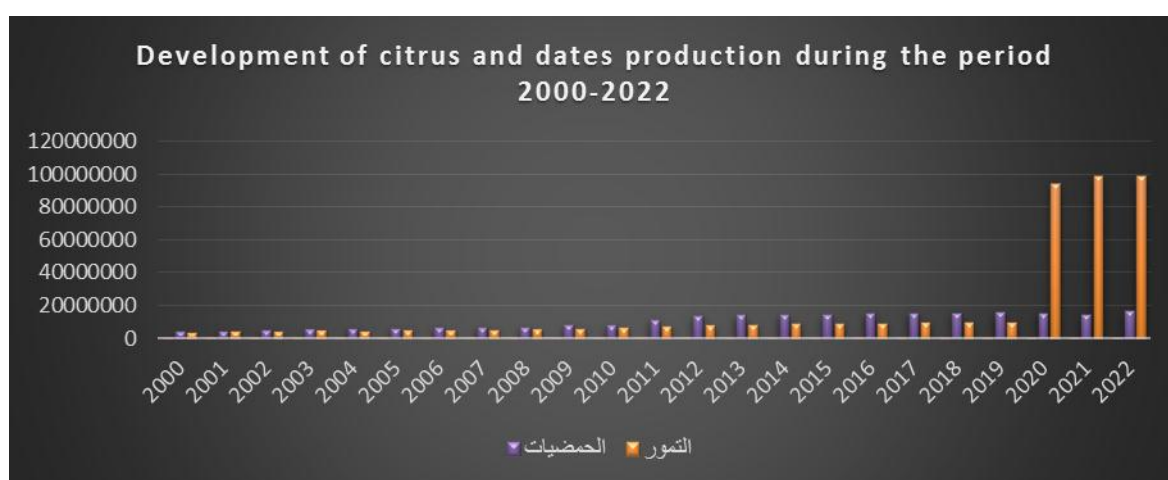
interest of young people in it, but production remained high and did not meet the needs of the population from them, and this is due to the quality of products and the high volume of demand for them.

#### D- Development of citrus and date production:

The cultivation of citrus fruits and dates was of particular importance to the state during the period 2000–2022, which allocated special funds for the development of agriculture in the south and the Sahara and granted special privileges and incentives for the production of fruits and dates. The following figure shows the development of citrus and date production during the period 2000–2022.

Fig n° 04: Evolution of citrus and date production during the period 2000-2022

Unit: quintal



Source: Prepared by the researcher based on:

#### -Data of the National Bureau of Statistics.

What is noticeable from the figure is that citrus production is constantly increasing, and this is evidence of the success of the policy of support provided towards citrus production by granting special support to citrus cultivation and providing some types of trees free of charge to encourage increased production. So we find that production increased from 4326350 quintals in 2000 to 14205100 quintals in 2014, an estimated increase of 658,583.33 quintals on average annually, a significant amount that can achieve self-sufficiency.

The same thing if we observe the development of the production of dates is in continuous increase and this is a result of the policy of support followed for the development of desert products and the continuous interest of the agricultural authorities to increase the production of dates, considering that the types of Algerian dates are of the finest types in the world, which can achieve a competitive advantage in the field of production and export of dates and for this recorded a significant increase in the volume of production, as production reached its highest levels in 2014 by 9343800 quintals after production in 2000 was estimated at 3656160 quintals, an average annual increase of 379176 quintals, which proves the volume of support provided to support and develop

agricultural production during the implementation of development plans 2000-2014, As for the development plan 2015–2019, we note an increase in the volume of production compared to the previous period, and this proves the attempt to successfully support the agricultural sector and support development policies in order to achieve self-sufficiency, but this did not work with the increasing volume of demand for citrus. As for the period 2000–2022, we notice a noticeable increase in the volume of production of citrus fruits or dates with Algeria's dependence on subsidizing products for export, and this affected the volume of internal consumption and led to misuse and failure of export policy, which affected the size of self-sufficiency.

## 2- Development of livestock production during the period 2000-2022

Animal production has known a process of support for its various types by allocating a special fund that has developed its allocation account and allocating a good amount of money to it, which is the Animal Health Promotion Fund to support animal production, including poultry breeding, support horse and camel breeding, support sheep and goat breeding and beekeeping, to achieve sufficiency in the field of red and white meat and reduce imports, and the state has also facilitated the process of animal husbandry to increase livestock through Providing support to pastures and steppes by allocating the Pastoral and Steppe Economy Development Fund, and the following table shows the development of animal production during the period of implementation of development plans 2000-2019.

**Tab 01: Evolution of livestock production during the period 2000-2019**

**Unit: Thousand Head**

Camels	Riding	Cow	Goat	Lamb	Years
234	44	1595	3027	17616	2000
245	43	1613	3119	17299	2001
250	46	1511	3281	17057	2002
253	48	1561	3325	17503	2003
273	45	1614	3451	18293	2004
269	43	1586	3590	18909	2005
287	44	1608	3755	19616	2006
291	47	1634	3838	20155	2007
295	45	1641	3751	19946	2008
301	45	1682	3962	21405	2009
314	44	1748	4287	22869	2010

319	44	1790	4411	23989	2011
340	46	1795	4595	25194	2012
344.02	45.04	1802	4910.70	26572.98	2013
354.47	42.01	1815	5129.84	27807.73	2014
355	43.09	1814	51234.76	28345.67	2015
345.87	41.50	1896	50786.56	28834.98	2016
367.81	43.03	1909	52345.34	29823.65	2017
387.56	45	1968	51984.18	29234.78	2018
386.67	44.67	1987	52346.87	30234.45	2019

:Source: Prepared by the researcher based on

**-Data of the National Bureau of Statistics.**

The development of animal production has witnessed an improvement in the level of production in its various types with a continuous increase without interruption, and this is due to the success of the support policy towards the development of animal production and the improvement of quality and breeds in order to increase the quantity of locally produced meat and reduce the import bill, especially after the start of the implementation of the program to support agricultural and rural renewal, which witnessed the establishment of the Pastoral and Steppe Economy Development Fund, which greatly motivated farmers to invest in the field of animal husbandry by supporting artificial insemination of sheep and goats by 750 Dinar for vaccines and support for the conversion of goat milk into cheese by farms, and camel breeding knew special support by supporting the establishment of farms for fattening camels and equipping them with special means of one million dinars, this led to a noticeable increase in production As for horse production, it is the only type that has fluctuated in production, and its production has not changed throughout all stages of animal production support because it did not receive special attention from the state, so its production remained fluctuating.

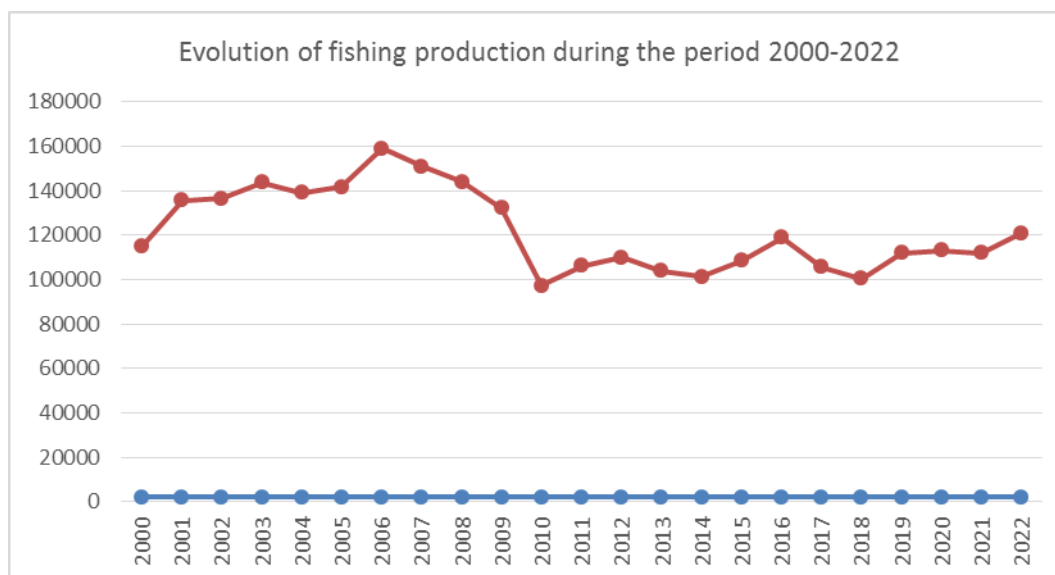
However, despite all the support provided and all this increase in production, the state has not reached the desired goal, and the production of red meat is still experiencing a decrease and the red meat import bill is still witnessing a significant increase.

**3-Evolution of fishing production during the period 2000-2022**

As for the production of marine fishing, it was known for special support and attention by the state, especially after the integration of the fishing sector with the agricultural sector by exerting more efforts to develop marine fishing and increase its production. The following figure shows the development of fishing production in Algeria during the period 2000–2022.

**Fig 05: Evolution of fishing production during the period 2000-2022**

**Unit: quintal**



**:Source: Prepared by the researcher based on  
-Data of the National Bureau of Statistics, p. 149.**

**-Arab Organization for Agricultural Development, vol. 35.**

Through our reading of the above figure, we find that the production of marine fishing has fluctuated as the stage of the National Plan for Agricultural Development increased production from 113157 quintals in 2000 to 141528 in 2003. The amount of production after that decreased to its lowest levels in 2010 by 95,168 quintals due to the decline in marine fishing and the lack of financial capabilities to support the sector with reliance on undeveloped technology in the field of fishing, and this decline in the volume of production is evidence of the ineffectiveness of the subsidy policy.

As for the period 2015–2022, the Ministry of Agriculture and Rural Development sought to raise its production capacities and double them in various types of agricultural production within the framework of the five-year program dedicated to supporting public investments, which gave great importance to raising production capacities in quantity and quality to keep pace with the rising demand internally and work to reduce the import bill, as well as exploiting the available capabilities to revive agriculture. Thus, the state tried to double the volume of grain production before the end of the quinquennium 2015–2019 to reach 70 million quintals compared to 34 million quintals in 2014. The state expected a significant increase in the production of various people during the implementation of agricultural and rural renewal programs and expected vegetable production to reach 161.3 million quintals in 2019 compared to 129.8 million quintals in 2015, especially potato production. The agriculture sector also aims to produce 67.78 million quintals in 2019 after it was 46.8 million quintals in 2014 and reached about 30.7 million quintals in 2016, by expanding the lands allocated to it and encouraging investment in this field, and for the dates division, the crop moved from 9.34 million quintals in 2014 to 57.12 million quintals

in 2019 through the support programs received by farmers towards enhancing the export side, which is of great importance, and the high production of Algeria of red meat increased from 5.13 million tons at present to 6.2 million tons in 2019, while the production of white meat increased from 4.66 million tons to 5.67 million tons, while for the milk division, production reached 57.3 billion liters in 2019.

### **Conclusion:**

The agrarian reform attempts undertaken by Algeria and the various agricultural policies have not achieved the desired results to promote agricultural development and reduce the food gap, due to several reasons, as follows:

- Weak economic efficiency in the implementation of agricultural policy.
- The failure of the agricultural research and extension policy to achieve its objectives.
- Low investments in the agricultural field.
- Lack of rationality in land reclamation.
- Scarcity of renewable water resources.
- Poor animal production.
- Inappropriateness of price policy.
- State neglect of the agro-food industries

The contemplator of the conditions of the agricultural sector in Algeria notes the relative backwardness of it, despite the relatively available land, human, water, technical, and material resources, as this sector still suffers from manifestations of neglect and underdevelopment, and the food gap, which is widening, along with other manifestations of underdevelopment in the agricultural sector, which is reflected in the low of many economic and social indicators compared to other countries and regions of the world, is a clear result of the backwardness and neglect of the agricultural sector.

The agricultural sector in Algeria is facing many problems including natural, vegetative, regulatory, managerial, and other issues. These challenges result in high production costs and low productivity levels in terms of quantity and quality, ultimately having a detrimental impact on food security. The state is compelled to ensure the sustenance of its residents by relying on imports, thereby depleting the budget earned from oil rents, which was originally intended for other investments that would benefit the entire population. To remove the obstacles and problems that hinder the path of agricultural development, the following must be done:

- Develop clear agricultural policies that enable the farmer to work within them with confidence in terms of prices, imports, exports, and subsidies, and this policy must be stable and continuous in the short and long term.



- Preserving natural resources such as forests, soil, water sources, and others; rationalizing their exploitation; and reformulating agricultural laws and legislation to protect them.
- Preserving the arable area, increasing the share of cereals, and reducing fallow areas to a minimum.
- Encouraging the reclamation of agricultural land by ensuring the provision of its requirements on concessional terms.
- Providing expertise and trained hands to implement and manage agricultural development projects to bring about quantitative and qualitative change.

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