

The Reality of Agricultural Insurance Implementation in Algeria and Its Role in Agricultural Development

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Doi Serial<https://doi.org/10.56334/sei/8.5.43>**Keywords**

Agricultural insurance, agricultural development, agricultural risks, farmers, insurance policies

Abstract

Agricultural insurance is essential for protecting farmers against risks such as fires, floods, and pests, which negatively impact production. It plays a key role in supporting agricultural development by providing financial compensation, thus allowing the continuity and expansion of agricultural activities. This study analyzes the current state of agricultural insurance in Algeria and evaluates its impact on agricultural development, focusing on its economic and social contributions. It examines the available types of insurance, their importance, the challenges faced (high costs, adverse selection, lack of information, low awareness, and an insufficient legal framework), as well as support policies. The results show that agricultural insurance promotes access to financing, income stability, and food security. The study recommends developing effective policies and appropriate insurance products to improve the sector's performance and support sustainable agricultural development in Algeria

Citation

Ridha B., Amina Kh., Hocine E. Ch. (2025). The Reality of Agricultural Insurance Implementation in Algeria and Its Role in Agricultural Development. *Science, Education and Innovations in the Context of Modern Problems*, 8(5), 431-441; doi:10.56352/sei/8.5.43. <https://imcra-az.org/archive/363-science-education-and-innovations-in-the-context-of-modern-problems-issue-5-volvi-2025.html>

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Introduction:

Insurance has become an urgent necessity in modern societies to prevent risks, as individuals and communities cannot ignore its role in economic and social life. It plays an important role in all fields, especially those exposed to many risks, serving as a means of compensation, such as in the agricultural sector.

Agricultural activity plays a significant role in economic life; however, it faces several obstacles, foremost among them being the multiple risks related to the various human and material resources involved in this vital sector. This has led to the search for ways to reduce the losses suffered by farmers in general, such as fires, floods, the recent locust phenomenon, and risks specifically related to agricultural financing. Consequently, the agricultural insurance sector has become the sole refuge for finding solutions to compensate most of the losses affecting farmers and agricultural investors.

Agricultural insurance plays an effective role in agricultural development efforts by providing financial compensation when needed, which helps to reduce potential losses that farmers may face. It is a financial tool that protects producers from probable risks in agricultural production that they cannot control. Moreover, agricultural insurance is not limited to crop

insurance only; it also covers livestock, horses, forests, aquaculture, and agricultural greenhouses.

Here arises the core problem of the study, which focuses on the progress made in this field, namely: What is the current state of agricultural insurance implementation in Algeria and its role in agricultural development?

The topic of this study is linked to the developments occurring in the agricultural sector. It addresses the application of agricultural insurance to agricultural development, which possesses important components, and its sustainable development in line with global changes, as well as understanding the achievements made in efforts aimed at developing and prospering this sensitive sector.

Through this study, we aim to identify the current reality of agricultural insurance implementation in Algeria and its impact on agricultural development, which is based on increasing the contribution of agricultural activity to both economic and social aspects.

1-Agricultural Insurance: Its Types, Importance, and Challenges

In this section, we will address agricultural insurance along with its types and importance as follows:

1-1 Concept of Agricultural Insurance

Agricultural insurance has become an effective tool in agricultural development efforts due to the financial compensation it provides when needed, which helps reduce potential losses that farmers may face. It is defined as "a financial instrument that protects producers from probable risks in agricultural production that they cannot control." It is also defined as "a means aimed at reducing losses resulting from exposure of the agricultural sector to risk factors by distributing the burden of these losses among a large group of participants." Moreover, agricultural insurance is not limited to crop insurance only; it also includes livestock, horses, forests, aquaculture, and agricultural greenhouses. (Miraj, 2003, p. 15)

Agricultural insurance is based on a fundamental principle: the producer transfers the risks to insurance companies in exchange for paying what is known as the risk premium, in return for the insurance companies compensating the producer according to the terms of the agreement (the policy) if damage occurs due to the agreed-upon risks.

Based on the previous definitions, agricultural insurance can be defined as a type of insurance that focuses on protecting agricultural producers from potential agricultural risks related to production that cannot be controlled, by paying premiums proportional to the size of the potential risk. In return, the insurance companies compensate the insured for this risk if it occurs, with the compensation being according to the contract concluded between the insurance company and the insured.

2- Types of Agricultural Insurance

Agricultural insurance includes various types as follows:

- **Yield Insurance:** This is usually available for crops and animal products. This type of insurance faces the challenge of measuring yield, which can vary greatly – for example, very quickly in products like milk production, or very slowly in livestock fattening. Since there is no fixed harvest time in animal production, insuring it becomes more difficult. Yield insurance is often named after specific risks, such as wheat insurance against frost. (Amer, 2014)
- **Price Insurance:** This insurance guarantees a minimum income for farmers and is commonly used in developed countries for crops that have a market exchange in a specific country, such as coffee and cotton, where prices are known accurately and updated daily. Sometimes, governments guarantee a minimum price and buy production from farmers at a fixed price if market prices fall below that threshold. This is practiced in grain crops in countries with significant grain shortages.
- **Income Insurance:** This type can be more attractive to farmers compared to other insurance forms, as it directly addresses losses affecting the farmer's income. However, it faces the problem of adverse selection because potential losses do not result from specific events but depend largely on how the farmer manages their operations. Additionally, farmers can influence factors affecting their income (such as workers' insurance, investments, and renewals), which makes it difficult for insurance companies to calculate the probability of low returns and therefore to set appropriate premium values. (Tahri, 2011, p. 376)
- **Revenue Insurance:** This is a hybrid of yield insurance and price insurance. It is usually cheaper than the previous two types individually, as the risks of low revenue tend to decrease—low yields may be compensated by higher prices and vice versa. (Bielza, 2008, p. 23)

1-3 The Importance of Agricultural Insurance

The importance of agricultural insurance is reflected in its central role in managing the risks faced by farmers, enabling them to expand production by facilitating access to financing through the guarantees provided by insurance. It is also used as a means of risk prevention and loss reduction, in addition to contributing to the transfer and localization of agricultural technology and providing trained technical expertise. Insurance provides farmers with a minimum income and ensures their stability. It helps encourage investment in rural areas, contributing to increasing national income. It also enhances food security, economic, social, and political stability, and absorbs shocks resulting from natural disasters that exceed the farmer's ability to cope with them. By distributing risks over the years, insurance contributes to creating a type of stability in countries that rely on agriculture as a primary source of income. Moreover, insurance reduces the financial burden on the state by lessening the amount of government funds allocated to disaster response, and it creates a suitable environment for partnership between farmers, the private sector, and the government. It also preserves the dignity of the farmer during crises and protects them from reliance on donations and subsidies. Agricultural insurance contributes to establishing a culture of data documentation by maintaining accurate records at the farm, state, and insurance company levels, forming a solid informational foundation for expanding insurance coverage and improving its methods. (Arikat, 2004, p. 24)

1-4 Obstacles to Agricultural Insurance

There are key obstacles facing agricultural insurance, which are as follows (Nawal Ahmed, 2004, p. 30):

- Lack of accurate information about production, statistics, and data related to agriculture, the methods used in agricultural production, cultivated areas, and the losses incurred over previous established time periods.
- Farmers' understanding of agricultural insurance is similar to other types of insurance oriented toward the future, which in most cases does not provide any tangible benefit (except the feeling of security arising from insurance coverage) unless a loss occurs at some point in the future or until such a loss happens. This is something understood and appreciated only by farmers capable of economic planning thinking.
- The high level of insurance premiums and the unavailability of suitable insurance products for various agricultural activities, as well as the failure to consider the nature and size of agricultural production and the specific characteristics of agricultural regions.
- The phenomenon of adverse selection of risks, where the farmer can predict the years in which the crop will be good and therefore tends to insure only the risks he truly needs coverage for, while retaining the good risk years for himself. This makes the insurance portfolio unbalanced and concentrated only on poor-risk years.
- Low levels of cultural, social, and political maturity and the absence of a suitable legal environment. The success of insurance requires sufficient political, social, and legal maturity to understand and absorb the requirements for the success of this type of insurance.

2-Concept and Importance of Agricultural Development

2-1 Concept of Agricultural Development

Agricultural development is defined as a set of procedures and methods that play a major and effective role in influencing the structure of the national economy. It is described as the process of improving agricultural production both quantitatively and qualitatively to achieve food security and reduce dependence on imports. This can be achieved by initiating a technical revolution in the methods and means of production used, alongside bringing about social, cultural, and health changes in rural society in addition to the technical revolution and the use of appropriate technology (Masmoudi T., Mansoura B., Mohamed A.A., Abdelhafid B., Abdeltif A., Francisco J. A. (2024).

Sustainable agricultural development means the conservation and productive use of living resources for both current and future generations.

According to the perspective of the Food and Agriculture Organization (FAO) of the United Nations, sustainable agricultural development is the management and conservation of the natural resource base and the guidance of technical and institutional change in a way that ensures the fulfillment and continuous satisfaction of human needs for both present and future generations. (Rashrash et al., 2010, p. 10)

It is also defined as: the process of managing growth rates, aiming to increase the average real per capita income over the long term in rural areas, either by expanding the reclaimed or arable agricultural land through government-led horizontal agricultural development by providing the necessary infrastructure for investment, or through vertical agricultural development based on introducing modern technology in farming operations with the goal of optimal land use, soil conservation, rational water use, and increasing productivity.

2-2 Objectives of Agricultural Development

The objectives of agricultural development are represented in the following points (Ghardi, 2012, p. 08) :

Ensuring Citizens' Food Needs: Human societies are subject to continuous development in terms of population growth and cultural diversity, which leads to a continuous increase in demand for agricultural goods, both plant-based and animal-based. Therefore, ensuring food security becomes the top priority. Otherwise, any failure to meet demand will consecutively result in a deficit in the balance of payments.

Maximizing the Contribution of the Agricultural Sector to GDP: GDP consists of the combined contributions of various sectors of economic activity. Given the importance of the agricultural sector, represented by the vast geographical area it covers, the number of people residing in it, and the workforce employed, it is expected that the agricultural sector should contribute significantly to GDP formation.

Raising the Standard of Living for the Largest Population Group: The fruits of development should be reaped by the people who form its core material—they are both the goal and the tool at the same time. Life in rural areas is dominated by extreme poverty and backwardness in all its forms. Thus, the task of revitalizing the agricultural sector will impact the development of human resources within this sector by increasing their awareness, culture, and health, which enhances their human contribution, thereby fulfilling the will for development.

Meeting the Needs of Light Processing Industries: Consumer processing industries are a vital backbone for the development of emerging economies because they create forward and backward linkages. They are considered an essential complement to the agricultural sector, which is the primary source of supplying processing industries with the raw materials they need.

The soil has become exposed to many pollutants that make it an unsuitable environment for human life. Therefore, one of the most important functions of agricultural development will be to repair this environmental damage.

Increasing the national income from agriculture, which in turn leads to an increase in total income, allowing for a higher share of real income per individual.

Eradicating famine and providing food by increasing agricultural production aimed at consumption to meet the needs of the continuously growing local community.

2-3 Components of Agricultural Development: We will try to identify the most important components of agricultural development, which include natural resources, human resources, and plant and animal resources briefly as follows:

Natural Resources: These refer to the gifts that God has granted to humans in nature, created to enable them to meet their needs and desires. These include (land, water, minerals, etc.). These resources are considered the starting point for the agricultural development process. Natural resources mainly consist of agricultural lands and water resources, which will be addressed below:

Agricultural Lands: Agricultural lands are considered the most important factor affecting the potential for agricultural development in any country. They form the fundamental base for agricultural production. Their availability in any state is regarded as a strategic wealth that must be protected, preserved, and developed by available means.

Agricultural lands also play a significant role in production growth and its expansion through increasing agricultural area (horizontal expansion), increasing crop area (crop intensification), or increasing productivity per unit area (vertical expansion).

Water Resources: Water represents the most vital element for life and is considered one of the essential factors controlling agricultural production and intensification. The development and growth of this sector depend on the volume of water resources available, which are used for irrigation and expanding irrigated areas. Climatic conditions also play an active role in controlling the size of irrigated land.

Human Resources: The human element is the main and essential driver for any production sector in general and the agricultural sector in particular. It is the element capable of achieving the appropriate conditions for exploiting natural resources optimally, making the best use of available capabilities, and realizing agricultural development at a level that ensures the population's food needs are met.

Plant and Animal Resources: The availability of plant and animal resources is one of the components of agricultural development. Their availability improves the living standards of the population and achieves food security and stability. In this context, some countries have worked on developing plant and animal production by providing production conditions, necessary support, and incentives, as well as the required infrastructure.

This has led to increased agricultural production in both plant and animal sectors, as follows:

- **Plant Production:** Plant production is the most important source of agricultural production due to its role in providing food supplies for the population and intermediate inputs for many processing industries, which is called the contribution of agricultural output. It also provides foreign currency through export revenues from food products or by supplying local goods that reduce the volume of food imports.
- **Animal Production:** Animal production is the second key element in agricultural development in terms of providing essential nutrients for humans. Increasing its output reduces imports and saves foreign currency that can be used to develop this type of production or agriculture in general. The traditional system, suited to small-scale farming widely spread, exists alongside modern intensive commercial breeding and production systems, which are expanding and developing notably. These have achieved significant results by reducing deficits in food products like red and white meat and eggs. Additionally, animal production provides job opportunities, reduces seasonal and disguised unemployment, and makes agricultural activity more regular and less seasonal. (Ghardi, 2012, p. 17)

3-Policies Supporting Agricultural Insurance in Algeria

Since independence, the development of the agricultural sector in Algeria has gone through several stages, the most important of which are:

3-1 The Self-Management Stage: After independence, Algerian authorities faced a harsh reality regarding agricultural lands. The French colonial authorities had implemented a scorched earth policy aimed at destroying agricultural lands in Algeria and all natural resources, so that Algerians could not benefit from them after independence. Following the nationalization of settler lands, the self-management system emerged, which states that: "Land and other agricultural production means, including funds and secured properties, are considered the foundation of agricultural independence." The self-management policy maintained the farms abandoned by settlers, which were nationalized without dividing them into small units. These farms were to be collectively managed by the workers who took them over, with administration handled by self-management committees. Self-management was considered the optimal solution for developing the agricultural sector during that period. (Ghardi, 2012, p. 30)

The number of self-managed lands during that period reached about 22,037 farms, covering an area estimated at 2.4 million hectares, with 150,000 workers working under the supervision of 2,300 self-management committees affiliated with the socialist sector.

The reason for the failure of this system was that the state granted its representative absolute authority in managing and exploiting the lands while depriving the workers of this right, which caused a conflict between the concept of self-management and the actual reality. Therefore, it was necessary to search for a new, more comprehensive policy to advance the agricultural sector, represented by the Agricultural Revolution.

3-2 The Agricultural Revolution:

The Agricultural Revolution came to change the existing situation at the time, when the former president Houari Boumediene announced the Agricultural Revolution Law consisting of 280 articles on November 8, 1971, under the slogan: "The land belongs to those who serve it, and only those who cultivate or invest it have the right to own it." Three methods of land exploitation were defined:

- Maintaining self-management as a developed management structure organized into different production units with an advanced technical level.
- The principle of participation in farming to protect the farmers working the land.
- Protecting private ownership by eliminating the exploitation of workers.

The failure of the Agricultural Revolution was due to the state's withdrawal of support to farmers because of the renewal of ownership. Also, the lack of strict follow-up in implementing the agricultural policy led to widespread neglect, carelessness, and self-consumption of lands, resulting in repeated losses and a permanent deficit in production units that came under bank supervision.

Attention to the agricultural sector returned in the 1980s with the establishment of the Agricultural Bank for Rural Development in 1982, and the Second Five-Year Plan (1985-1989), which was called the Land Reclamation Law and the Agricultural Investors Law. (Gharbi, 2008, p. 94)

3- Land Reclamation Law

This law aims to define the rules related to the possession and ownership of agricultural properties and land reclamation, as well as the conditions for transferring ownership of agricultural and arable lands. According to this law, the land becomes the property of the farmer who reclaims it. Therefore, this law was introduced to encourage farmers to reclaim land.

3-3 Agricultural Investment Law:

After the drop in oil prices in 1986 and the deterioration of the country's economic situation, it became necessary to find a solution and revive the national economy by introducing a set of reforms to move away from direct management and optimize the use of agricultural lands. Among these reforms was the Agricultural Investment Law as a new mechanism for agricultural management through the issuance of Law No. 87-19 dated December 8, 1987, which granted beneficiaries the right to permanent usufruct, transferable, assignable, or subject to seizure of agricultural lands, aiming to achieve diversified future production and develop economic activity. (Jnina, 2011, p. 10)

3-5- Agricultural Development in the 1990s:

After Algeria adopted the market economy policy in the 1990s, it became necessary to restructure the agricultural sector by enacting a set of laws and legislations, the most important of which was Law No. 90-25 dated 18/11/1990 concerning the restitution of secured properties, through which approximately 445,000 hectares were returned to about 22,000 former owners. Also, Executive Decree No. 92-289 dated 06/01/1992 set the conditions for the transfer of desert lands. In 1998, an emergency program related to land reform through concessions was issued, with the state bearing the major expenses such as water supply, electricity connection, road construction, etc. This led to the revitalization of rural areas by providing new job opportunities and encouraging reverse migration from cities to rural areas for the purpose of reclaiming agricultural lands. (Jnina, 2011, p. 15)

3-6- National Rural Development Plan (PNDA) 2000: This program marked a return to rebuilding the agricultural sector and achieved great success by restoring the soil to its previous uses, covering 3 million hectares. The ultimate goal of this program was to increase farmers' incomes by providing financial support for grain cultivation, irrigation, afforestation, land reclamation, and intensification of agriculture, among other activities. During this phase, the state spent about 40 billion Algerian dinars through the National Fund for Agricultural Organization and Development, an amount more than four times what was spent during 1995-1998 and ten times what was spent in 1993.

3-7 Economic Recovery Support Program (The Three-Year Plan) 2001-2004: This program was initially allocated a budget of 525 billion dinars, which later increased to approximately 1,216 billion dinars. The program focused on stimulating aggregate demand by strengthening public spending as a mechanism to support growth and create jobs, alongside enhancing infrastructure as a fundamental pillar for activating the national economy. The program included key areas related to promoting human development, supporting productive sectors, advancing reforms, and improving public services and basic infrastructure, as illustrated in the following figure.

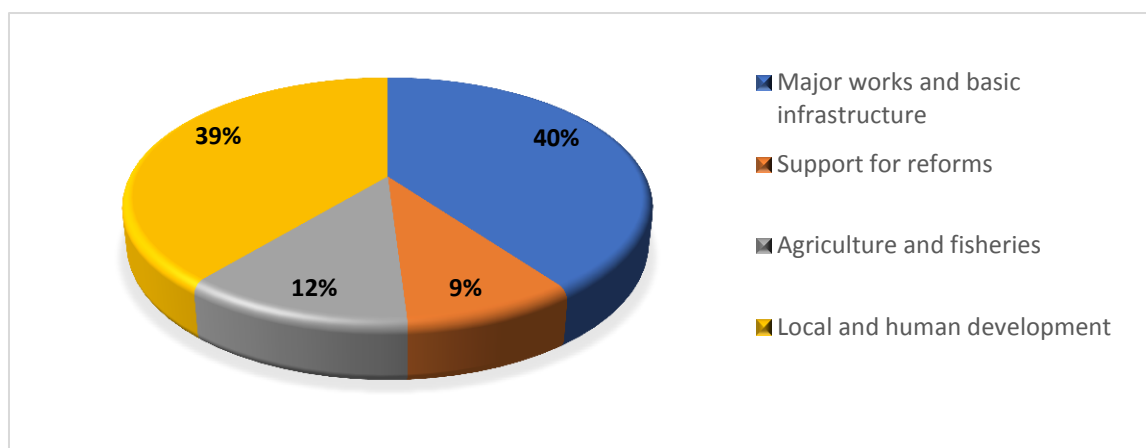


Figure 01. Sectoral Distribution of the Economic Recovery Support Program 2001-2004

Source: Prepared by the researchers based on data from the report of the National Economic and Social Council on the economic and social situation of Algeria during the second half of 2001.

From the previous figure, it is clear that the agriculture and fisheries sector received only 12% of the funds allocated to the Economic Recovery Program. This is because this sector benefited from support within the framework of the National Rural Development Program (PNDA). Therefore, this program aimed at agriculture and fisheries serves as a support for the previous program, whose goals include expanding agricultural production, promoting non-hydrocarbon exports, achieving self-sufficiency and stability for rural populations, contributing to the fight against poverty and marginalization—especially in rural areas—creating new job opportunities, expanding cultivated areas, and increasing afforestation, particularly of fruit trees. (Gharbi, 2008)

3-8 The Complementary Program for Growth Support (First Five-Year Plan) 2005-2009: Its financial allocations were estimated at 4,202.7 billion dinars, and it was divided into five sub-programs as shown in the following figure: (Allam, 2015)

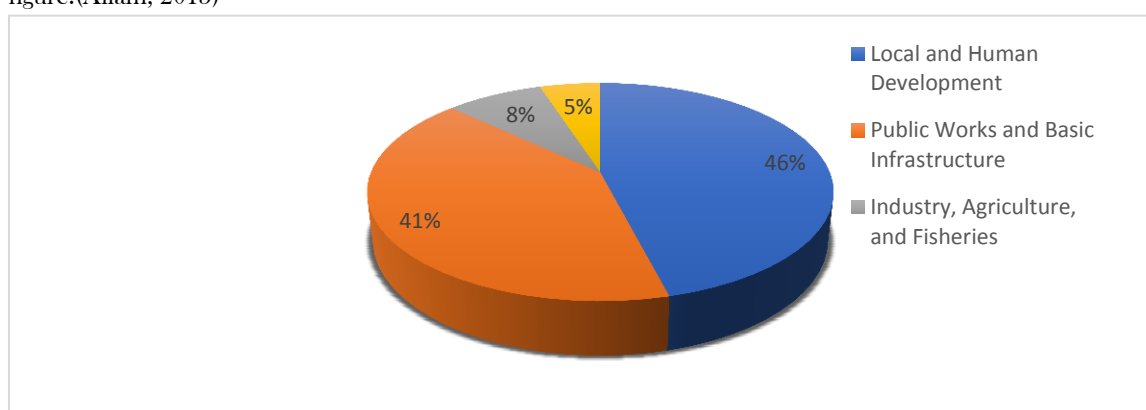


Figure 02. Financial distribution of the Complementary Program for Economic Growth Support by economic sectors. Source: Prepared by the researchers based on data from the Complementary Program for Economic Growth Support for the year 2007.

The agriculture and fisheries sector benefited from an amount of 312 billion dinars out of the total allocated to the agriculture and fisheries industry sector, which was estimated at 337.2 billion dinars — equivalent to 8% of the total amount allocated for this phase. This percentage is considered very low for such two sensitive sectors.

9-Agricultural Development After 2009

The main objective of agricultural policy after 2009 is to reaffirm the fundamental goal that Algeria has pursued since independence, which is: “Strengthening the sustainability of national food security, with an emphasis on the need to transform agriculture into a driving force of overall economic growth.” The policy of agricultural and rural renewal is based on three main pillars, which are considered tools for achieving food sovereignty. (Boufleih, 2012, p. 253)

Agricultural Renewal: Agricultural renewal is based on developing the economy and increasing the profitability of the sector to ensure the country's food security in a sustainable manner. It aims to encourage the intensification and modernization of production on farms and their integration, in order to refocus various support measures on

investments in the sector that generate added value throughout the entire chain from production to consumption. The goal is to achieve integration among actors to ensure sustainable growth and agricultural production. Particular importance was given to a wide range of consumer products, including cereals, legumes, milk, red and white meat, potatoes, industrial tomatoes, olives, dates, seeds, and seedlings.

Rural Renewal: Rural renewal is a new approach to sustainable rural development aimed at achieving social and economic balance and stability. It targets all rural households living and working in rural areas, especially those in regions where living and production conditions are difficult (mountains, plains, and deserts). It involves the participation of local stakeholders, professional associations, organizations, farmers, artisans, technical and administrative services, training institutions, banks, and more. Although agriculture remains a strong component of economic activity in rural areas, rural renewal expands its scope to other sectors of rural activities such as crafts, drinking water, electricity, cultural heritage development, etc., promoting the cross-sectoral nature of development.

Capacity Building and Technical Support for Producers: This pillar came in response to the challenges faced by stakeholders in fully integrating and implementing the new policy, due to new roles and the ongoing restructuring of various organizational forms. It includes:

- Modernizing agricultural management methods;
- Increasing investment in research, training, and agricultural extension to promote the development of new technologies and a productive environment;
- Strengthening the physical and human capacities of all institutions and agencies responsible for supporting producers and operators in the sector;
- Enhancing monitoring, veterinary services, plant protection, technical inspections, and forest fire control.

10- Economic Recovery Program (Second Five-Year Plan) 2010–2014: Also known as the Economic Growth Consolidation Program, it was allocated a financial envelope of 21,214 billion dinars. It was divided into three sub-programs, as illustrated in the following chart (Development, 2012):

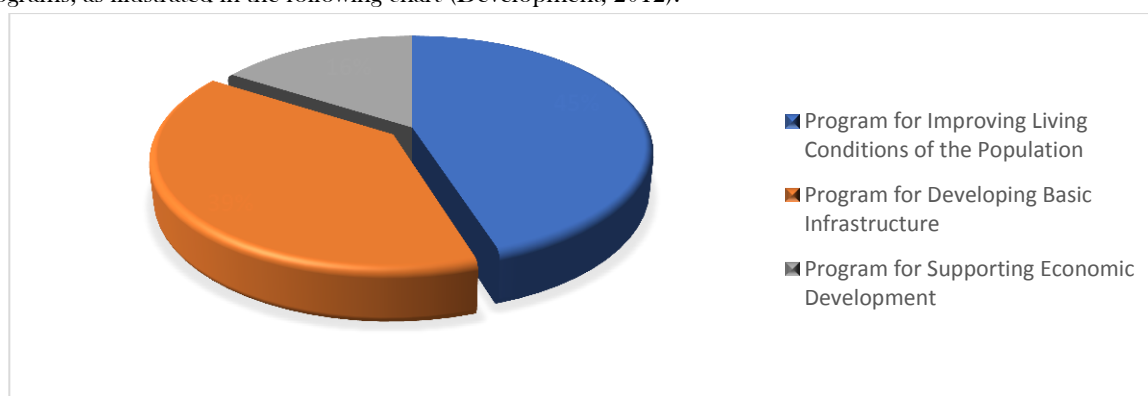


Figure 03. Economic Growth Consolidation Program 2010–2014

Source: Prepared by the researchers based on data from the Economic Growth Consolidation Program 2010–2014. The Economic Development Support Program, which was allocated a budget of 3,500 billion dinars, included support for three sectoral branches: agriculture and rural development with 1,000 billion dinars, the public industrial sector with 2,000 billion dinars, and support for small and medium enterprises and employment with 500 billion dinars.

Despite this support directed at the agricultural sector, it did not achieve the desired results. Agriculture in Algeria remains highly dependent on climatic fluctuations, which negatively impacted its development, especially during the period from 2010 to 2014. Moreover, the agricultural sector's influence on the overall economic growth rate remains very limited compared to other sectors, such as industry, services, or energy. Its contribution to the gross domestic product is very low, as indicated by agricultural development indicators in Algeria.

4-The Reality of Agricultural Insurance and Its Impact on Agricultural Development in Algeria

We conducted a study of the Algerian insurance market, focusing on the property insurance branch, specifically on agricultural risk insurance for the year 2017, and compared the results with the previous year.

A/ Turnover of the Algerian Insurance Market in 2017: In 2017, the property insurance branch achieved a turnover of 121.6 billion DZD, representing a 2% increase compared to 2016. However, the agricultural insurance branch

recorded a 22.1% decrease, mainly due to the decline in "livestock production" insurance. This was caused by the non-renewal of livestock insurance contracts by young people enrolled in the ANSEJ and CNAC programs. Additionally, there was a decline in "crop production" insurance and "multi-risk insurance for agricultural machinery and equipment" by -18.2% and -26.7%, respectively. In contrast, insurance for "other agricultural risks" and "civil liability for farmers" registered growth of 164.7% and 5.4%, respectively, compared to the same period of the previous year.

Table 01: Turnover of the Algerian Agricultural Insurance Market for 2016–2017

| Type of Insurance | Turnover 31/12/2017 (DZD) | Turnover 31/12/2016 (DZD) | Market Share 2017 | Market Share 2016 | Growth (%) | Variation (DZD) |
|---|---------------------------------|---------------------------------|-------------------------|-------------------------|---------------|---------------------|
| Crop Production | 599,353,468 | 732,436,857 | 0.5% | 0.6% | -18.2% | -133,083,389 |
| Livestock Production | 736,022,541 | 1,207,511,538 | 0.6% | 1% | -39% | -417,488,996 |
| Agricultural Civil Liability | 420,442,167 | 398,757,246 | 0.3% | 0.3% | +5.4% | +21,684,921 |
| Multi-risk for Agricultural Machinery | 716,602,706 | 978,256,304 | 0.6% | 0.8% | -26.7% | -261,653,597 |
| Other Agricultural Risks | 157,582,741 | 59,532,032 | 0.1% | 0.0% | +164.7% | +98,050,709 |
| Total Agricultural Insurance | 2,630,003,623 | 3,376,493,976 | 2.2% | 2.8% | -22.1% | -746,490,353 |

Source: Prepared by the researcher based on: *Note de conjoncture marché des assurances, 4th quarter 2017, National Insurance Council, 2017.*

B/ Compensation: The compensation paid by insurance companies for agricultural insurance in 2017 amounted to 1,276,921,113.00 DZD, reflecting a decrease of 19.4% compared to the previous year. As for claims for payment, they also showed a decline of 16.2%.

Table 2. Claims and Compensation for Algerian Agricultural Insurance during 2016–2017

| Indicator | Unit | 31/12/2016 | 31/12/2017 | Structure 2016 | Structure 2017 | Evolution 2016/2017 |
|---------------|------|---------------|---------------|-------------------|-------------------|------------------------|
| Compensations | DZD | 1,276,926,113 | 1,028,839,112 | 2.1% | 1.7% | -19.4% |
| Claims Paid | DZD | 298,709,909 | 250,335,056 | 0.4% | 0.3% | -16.2% |
| Payment Rate | % | 81% | 80.4% | — | — | -0.8% |

Source: Prepared by the researcher based on: *Note de conjoncture marché des assurances, 4th quarter 2017, National Insurance Council, 2017.*

4-1 Possible Practical Solutions to Increase the Spread of Agricultural Insurance:

Below are some proposed solutions that could serve as a foundation for the development of agricultural insurance. These measures are intended to stimulate an anticipated agricultural revival and act as a key driver in achieving several objectives, most notably the advancement of the agricultural sector in Algeria. They also aim to develop and generalize insurance coverage across the entire agricultural sector.

Government Intervention in Supporting Agricultural Insurance:

The state plays an active role in promoting agricultural insurance in the country through the following measures:

- Taking all necessary steps to increase farmers' income in order to stimulate demand for agricultural insurance.
- Focusing on agricultural activities and positioning them as a cornerstone of the national economy to encourage farmers' reliance on agricultural insurance.
- Updating legislation to provide a sound legal framework for the development of agricultural insurance.
- Given that agricultural activity is fraught with numerous risks, the state must invest significantly in the initial stages of developing agricultural insurance.
- Governments should intensify efforts to raise insurance awareness among farmers by explaining and highlighting the role, importance, and conditions for benefiting from agricultural insurance.

- Insurance professionals, in addition to understanding the fundamentals of insurance, must also be knowledgeable in farm management, agricultural techniques, and disaster prevention methods.
- The government should fully benefit from advanced foreign expertise to enhance the skills of local insurance specialists.
- Furthermore, the state should work on establishing agricultural insurance agencies in rural areas.
- Providing government support for agricultural insurance premiums.

Takaful Insurance as a Solution to the Lack of Insurance Awareness:

Experts in the insurance sector have confirmed that cooperative (Takaful) insurance is not merely a charitable donation but rather has an independent meaning based on mutual cooperation and participation in mitigating the effects of risks. They explained that the notion of donation in cooperative insurance is one of the most appropriate modern applications of Takaful, even though it is not a prerequisite for its validity as cooperative insurance.

The experts stressed the importance of separating the insurance account of policyholders from the shareholders' account, considering this one of the fundamental principles of Takaful insurance. They also noted that the insurance surplus is what remains from the resources of the participants' fund and its returns after deducting expenses and compensations. This surplus is distributed among all participants in the insurance fund according to their share of the annual contributions, and it is not given to those who have already received compensation, regardless of the compensation amount.

Thus, Takaful insurance is considered one of the proposed solutions to address the current situation of the Algerian agricultural insurance market, particularly by increasing the insurance awareness of agricultural investors.

7-3 Agricultural Microinsurance: Michael J. McCord defines microinsurance as: "It is like any other insurance in that it provides protection and precaution against losses, but it differs in terms of the target market: individuals with low incomes. As such, it requires a different set of information in how products are developed, marketed, priced, and sold." Agricultural microinsurance aims to cover the risks faced by small farmers in developing countries by insuring crops. This system allows farmers to overcome disasters and is based on the same principles as traditional insurance. However, the compensation in case of an insured risk is provided either in cash or in kind, such as grains and seeds.

Conclusion

Despite the advantages and benefits that agricultural insurance offers to the farming sector and its contribution to agricultural development, it still suffers from several shortcomings that undermine farmers' trust in insurance companies. These include complex procedures and a lack of clarity in both general and specific policy conditions, which have led to limited participation in insurance schemes. Accordingly, the study reached several conclusions, including the potential material and financial losses resulting from agricultural risks caused by specific incidents. Agricultural insurance contributes to reducing rural migration by securing farmers' property and providing psychological stability, which helps them achieve self-sufficiency and boosts agricultural development through compensation mechanisms.

The importance of agricultural insurance lies in its central role in managing the risks faced by farmers. It enables them to expand production by facilitating access to financing through the guarantees it provides. Insurance also serves as a preventive tool against risks and helps reduce losses. Additionally, it contributes to the transfer and localization of agricultural technology and provides access to trained technical expertise.

Agricultural insurance ensures a minimum income for farmers and provides them with stability. It also encourages investment in rural areas, thus contributing to national income growth. Moreover, it enhances food security and promotes economic, social, and political stability, while absorbing the shocks caused by natural disasters that exceed the farmers' capacity to cope. By spreading risks over time, insurance helps establish a form of stability in countries that rely heavily on agriculture as a primary source of income.

Furthermore, agricultural insurance reduces the financial burden on the state by decreasing the need for public funds allocated to disaster relief. It also fosters a favorable environment for partnerships between farmers, the private sector, and the government. It preserves the dignity of farmers during times of crisis and protects them from dependency on aid and donations.

In addition, agricultural insurance promotes a culture of data documentation through the maintenance of accurate records at the farm, national, and insurance company levels. This forms a solid information base for expanding insurance coverage and improving its mechanisms.

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