

# **The Impact of Bank Financing Mechanisms on Achieving Agricultural Development: Between Reality and Challenges**

## **A Case Study of the Bank of Agriculture and Rural Development in M'sila Cumulative Period up to 31/12/2025**

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Received: 10/02/2026    accepted: 30/03/2026    published: 17/05/2026

### **Abstract:**

This study aims to analyse the reality of bank financing for the agricultural sector and its impact on agricultural development, using the various financing formulas available at the Bank of Agriculture and Rural Development (BADR) – M'sila branch as a model, and to measure the efficiency of their use. The study found that there is a disparity in the usage rates of financing services across different agricultural sectors due to differences in efficiency of use. The financial weight of investment activities with long cycles exceeds that of operational activities. Bank financing is an essential process, but it faces challenges, the most important of which are the difficulty of valuing bank guarantees (often agricultural land), default risk, and the mismatch between loan repayment schedules and the agricultural cycle. The study recommends introducing an incentive system for loan repayment, linking repayment to harvest times suitable for the farmer, accepting certain movable guarantees such as storable products (crops and agricultural produce), and encouraging agricultural insurance through state subsidisation of part of the insurance premiums, especially in the early stages of agricultural projects.

**Keywords:** Agricultural development, agricultural financing, R'fiq loan, Ettahadi loan, efficiency of use.

JEL Classification : Q18; P43; P32

### **Introduction:**

The agricultural sector is one of the most important economic sectors that contributes positively to achieving a number of sustainable development goals, particularly reducing unemployment rates, achieving food security, reducing the import bill for agricultural products, and opening up future prospects for export, thereby transforming the farmer from a simple producer into a key partner in the economic process.

The importance of adopting policies to support the agricultural sector has increased recently in light of rising population growth rates and the limited availability of arable land, which necessitates channelling more financial resources to develop it and alleviate the financial burdens borne by the farmer.

Agricultural financing represents the greatest challenge to achieving the objectives of Algeria's development programme plans. In an attempt to revive the agricultural sector, Algeria has

relied on the mechanism of agricultural financing through public banks, foremost among which is the Bank of Agriculture and Rural Development (BADR), which provides technical and financial support by offering several financing formulas according to the operational and investment needs of the farmer.

From the above, the following problem can be posed:

**How do bank financing mechanisms contribute to achieving agricultural development, and what challenges do they face?**

To answer this problem, the following sub-questions can be raised:

- What are the various agricultural financing services provided by the Bank of Agriculture and Rural Development in M'sila?
- To what extent do farmers in the M'sila region use the various financing formulas of the Bank of Agriculture and Rural Development?
- Is there consistency between the amounts allocated by the bank and those used by farmers?
- Is there a balance between different agricultural sectors in terms of financing cost?
- Are there obstacles that prevent farmers from choosing bank agricultural financing over other financing mechanisms?

**Study hypotheses:**

- The type of bank agricultural financing differs according to the target category of farmers, between operational loans and investment loans.
- There is weak uptake by farmers in M'sila province of the various financing formulas of the Bank of Agriculture and Rural Development.
- There is consistency between the amounts allocated by the bank and those used by farmers.
- There is no balance between different agricultural sectors in terms of financing cost.
- There are obstacles that prevent farmers from choosing bank agricultural financing over other financing mechanisms.

**Study objectives:**

- To identify the various financing formulas for the agricultural sector allocated by the Bank of Agriculture and Rural Development.
- To analyse the developmental dimension of bank agricultural financing for the agricultural sector by measuring the cost of financing for different agricultural activities.
- To identify the main obstacles facing the agricultural sector with regard to financing.
- To propose practical solutions that help address imbalances in financing formulas and farmers' needs.

**Importance of the topic:**

- The strategic economic and social position of the agricultural sector, and the Algerian government's orientation towards supporting this sector and achieving self-sufficiency.

- The agricultural characteristics of M'sila province and the pastoral nature of the region in light of the growing need for financing given the scarcity of own resources.
- Measuring the effectiveness of the bank financing system in achieving agricultural development objectives.

### **Methodology used:**

The methodology used in this study is the descriptive analytical approach, which the nature of the subject requires, and which is suitable for analysing tables, data and various indicators.

### **1. Concept of Agricultural Development and Its Components:**

Agricultural development is one aspect of economic development; its concept hardly differs from the concept and objectives of economic development in terms of the urgent need to achieve food security and enhance the opportunities for a real economy based on natural resources. This requires the state to establish economic policies for the agricultural sector through development programmes and economic reform in order to achieve comprehensive agricultural development.

#### **1.1. Concept of Agricultural Development:**

Agricultural development means all measures likely to increase agricultural production available for the economic development process. It has also been defined as the process by which the maximum possible agricultural output is achieved, or as the reallocation of economic resources to achieve the maximum possible agricultural output. It is also an essential source for achieving countries' food security through the food supplies it provides to the population. Therefore, achieving sustainable agricultural development requires soil conservation measures, rationalisation of water consumption, use of modern technologies, and attention to specialised scientific research centres (Benali, 2019). The concept of agricultural development has evolved with technical advances in agriculture and the emergence of what is known as smart agriculture, which involves sensing, water management, determination of fertiliser needs, and identification of optimal planting and harvesting times using internet programmes, thereby contributing to increased crop productivity (Food and Agriculture Organization [FAO], 2021).

#### **2.1. Objectives of Agricultural Development:**

Since agricultural development is one of the most important elements of economic development, its objectives fall within the objectives of economic development. It aims to:

- Increase national agricultural income as a component of gross national income;
- Increase food production to meet domestic demand, increase exports and reduce imports;
- Raise the standard of living of the population by creating jobs in rural areas, especially in regions that depend on the agricultural sector;
- Expand the productive structure by creating new production units or developing existing units in various agricultural branches, whether plant or animal.

#### **3.1. Components and Potentialities of Agricultural Development in Algeria:**

Given the economic objectives of agricultural development and its social dimension, it has become one of the highest priorities of the state's economic reforms, considering Algeria's potentialities and components for agricultural development, which are as follows:

### **1.3.1. Natural Resources:**

Natural resources are the starting point and the fundamental pillar of the agricultural development process. They consist of:

**First: Agricultural land** – Agricultural land is the most important factor affecting the potential for agricultural development in any country and constitutes the basic foundation of agricultural production. Its availability in any country is a strategic wealth that must be protected, preserved and developed by all available means. The total area of Algeria is estimated at 238,174,000 hectares, of which arable land amounts to 8,445,490 hectares, representing only 3.5% of the country's total area (Ministry of Agriculture and Rural Development, 2020). This land is allocated to various seasonal crops such as pulses, cereals or industrial crops. On the other hand, it is characterised by two types of terrain: the first is known as the pre-Saharan Atlas (plains, plateaus and Tell Atlas highlands), and the second is known as the post-Saharan Atlas, consisting of the vast desert. The Mediterranean climate in the north is characterised by dense vegetation, while a desert climate prevails in the south, which determines the type of crops according to each climate. The area planted with cereals during the period 2010–2017 was estimated at 3,385,560 hectares, and the average cereal production was estimated at approximately 41.2 million quintals (National Statistics Office [ONS], 2018).

**Second: Livestock wealth** – Five main types of livestock are raised in Algeria: cattle, sheep, goats, camels and horses. The total number of head of all types during the period 2010–2017 was approximately 33.6 million head, distributed as follows: sheep (78% of total livestock) estimated at 26.4 million head; goats in second place (14%) representing 4.8 million head; followed by cattle in third place, amounting to 1.9 million head (including dairy cows at 52%), equivalent to 6% of total livestock (ONS, 2018).

### **2.3.1. Human Resources:**

Algeria is considered one of the countries that rely primarily on human labour in agricultural production, because most agricultural operations are carried out using manual methods. The agricultural sector employs approximately 2.6 million people as agricultural workers, representing more than 74% of the rural labour force and 24% of the national workforce (World Bank, 2020). Moreover, it ensures the country's food security by covering more than 74% of national needs for agricultural products (Ministry of Agriculture and Rural Development, 2021).

### **3.3.1. Contribution of the Agricultural Sector to Gross Domestic Product (GDP):**

The agricultural sector is an essential pillar upon which to rely in order to increase GDP rates and thus raise the rate of economic growth. The contribution of the agricultural sector to Algeria's GDP is linked to natural and climatic factors. In 2008, a significant decrease of 6.5% was recorded, the lowest rate recorded in the period from 2000 to 2022. The highest rate was in 2020, reaching 13.5%, thanks to agricultural renewal policies (ONS, 2022).

## **2. Agricultural Financing :**

### **1.2. Definition of Agricultural Financing:**

Agricultural financing means providing the necessary funds to carry out production, agricultural reproduction and related activities such as storage, transport, sale and marketing.

Other definitions of agricultural financing exist; some see it as a branch of agricultural economics that deals with the use of limited financial resources to meet needs (Messaoudi, 2017). Agricultural finance is a specialised banking sector in terms of project characteristics, duration and applicable interest rates. It is a high-risk sector from a micro perspective, but it contributes to achieving food security at the macro level (World Bank, 2019).

### **1.1.2. Types of Agricultural Financing :**

The type of financing differs according to the source on which the farmer-investor relies, as well as the size of the agricultural project. Own funds may be insufficient and may not yield significant returns given the technological and technical developments in the sector, so external sources are used to acquire means that keep pace with the technological revolution in agriculture. A distinction can be made between:

**First: Self-financing** – This type of financing relies on the farmer’s own resources, without resorting to external sources, by using personal savings and profits from previous seasons. This type of financing is chosen either because the farmer has sufficient financial capacity or because of difficulties in obtaining external financing. This type is generally consistent with small investments and contributes to decision-making independence and risk reduction by avoiding debt and interest repayments.

**Second: Agricultural financing through loans** – This is what the farmer obtains from external sources in the form of financial or material resources. In many cases, the farmer is unable to meet agricultural requirements. This financing takes the form of short-term or medium-term bank loans to cover seasonal operating costs (seeds or fertilisers) or investments (equipment), with facilities offered by various public banks in different forms. It faces a number of risks, including:

- The agricultural cycle is long, from planting to harvesting, which sometimes requires the loan to remain with the farmer for a long period. This does not serve some bank credit policies that seek to achieve rapid capital turnover ratios.
- The farmer’s inability to determine selling prices for products, compared to production costs that include interest on the loan, because the price is

determined according to the current market price, as agricultural products are perishable, and supply may increase causing prices to fall, thereby affecting farm income and the ability to repay the loan.

- Collateral requirements and administrative fees imposed by some banks increase the total cost of credit for farmers.

**Third: Government support** – In implementing economic policy programmes, governments allocate specific budgets to develop economic sectors under the principle of economic diversification. Government support is defined as the state’s financial contribution provided through financial institutions and planned programmes to encourage farmers to invest. Financing ratios vary according to the activities declared by the farmer and the financial value of the project (Law No. 08-16 of 2008 on agricultural orientation, Art. 25).

### **2.2. Bank Agricultural Financing:**

This consists of giving investing farmers the opportunity to exploit their land as well as reclaim desert land by enabling them to purchase various types of pesticides, fertilisers and specialised

machinery to reclaim and develop it, and to support irrigation for more than one production cycle per year. Bank agricultural financing is mainly in the form of short- or medium-term loans, with a small portion directed to long-term loans given the short agricultural cycle.

### **1.2.2. Relationship between Bank Agricultural Financing and Agricultural Development:**

Bank agricultural financing contributes to achieving agricultural development by:

- Creating and maintaining production volumes. The loan also plays a role in improving the efficiency of the farm worker. When financial resources are available, the import bill is reduced and the margin of food security is expanded.
- Increasing capital formation in agriculture by providing medium- or long-term loans to purchase agricultural machinery and establish various types of productive projects. Agricultural financing reduces the temptation to abandon farming and achieves satisfactory financial returns.
- Addressing all seasonal and annual fluctuations faced by the farmer, whether in income or expenditure. Production necessities are purchased at a specific time of year, and the sale of production also takes place at a specific time; therefore, the movement of incoming and outgoing expenses does not occur at the same time, leading to a cash deficit from the time of purchase until the time of sale for some products. Using loans to cover these fluctuations is necessary for successful operation.
- Expanding the use of technology (equipment, irrigation methods), which requires substantial financial resources but, in return, enables the harvesting of agricultural crops with international specifications, in large quantities, at lower costs and competitive in global markets.

### **3.2. Bank Financing Mechanisms for the Agricultural Sector in Algeria:**

External agricultural financing in Algeria dates back to after independence and was supported by the Treasury until 1964. It developed gradually after the establishment of the National Bank of Algeria on 13 June 1966, then the Bank of Agriculture and Rural Development (BADR) on 13 March 1982 (Decree No. 82-106 of 15 March 1982). BADR was entrusted with financing agricultural production and agricultural industries, together with agricultural mutual funds, which play a dual role of crop insurance and micro-loans and facilities for affiliated farmers. Broadly, bank financing mechanisms for the agricultural sector can be classified as follows:

#### **1.3.2. Classification by Maturity:**

This requires a precise study of the farmer's needs and matching the value of the agricultural loan to the size of the project and the policies of the financial institution:

**First: Short-term loans** – This category includes the seasonal loan, which is granted during the production cycle or the sales cycle, and is given to farmers who have a large gap between the timing of their inputs and their outputs. They are used to finance the farmer's working capital and meet normal operating needs for seeds, fertilisers, seedlings, payment of wages, ploughing, harvesting, irrigation and other production expenses, for a maximum period of 12 months, which may sometimes exceed two years.

**Second: Medium-term loans** – Used to purchase fixed assets in the form of agricultural equipment with a useful life not exceeding 7 years, under contractual terms to determine the type and value of collateral to mitigate default risk. Under this classification fall loans for

reclaiming desert land, loans granted to disaster-stricken farmers, and loans given to farmers to develop and renew agricultural machinery.

**Third: Long-term loans** – Also called investment loans. These are loans that generally exceed 7 years and extend up to 20 years. They are used to finance large projects whose investment nature requires a long period to recover the capital spent, such as purchasing land, constructing buildings and factories, digging wells and large-scale reclamation projects. They are entrusted to specialised institutions that rely on external sources to mobilise funds. They are characterised by a high degree of risk, so they require high-value real guarantees before they are granted.

### **2.3.2. Classification by Main Use:**

**First: Real estate loans** – The purpose of these loans is to purchase agricultural land or a farm for farming, reclamation or investment in irrigation projects. These loans are usually long-term.

**Second: Production loans** – Used to purchase agricultural production inputs such as seeds, seedlings, fertilisers, feed and livestock, for agricultural cooperatives and the Regional Agricultural Cooperative Fund.

**Third: Loans for agricultural cooperative organisations** – Specialised bodies provide in-kind financing to farmers. These loans are used to meet operating expenses such as commodity inventory, equipment and the purchase of real estate necessary for the cooperative.

### **3.3.2. Loans by Formula:**

**First: Conventional loans** – A monetary amount is granted in exchange for a specified interest rate.

**Second: Islamic financing**– Based on the principle of partnership, where the bank acts as a partner sharing profit and loss; or sale and purchase transactions are made in instalments without interest but with a known profit margin (\*murabaha\*); or leasing with a promise of ownership at the end of the term (\*ijara\*).

## **3. Field Study: The Bank of Agriculture and Rural Development (BADR) in M'sila:**

### **1.3. Presentation of BADR M'sila:**

The Bank of Agriculture and Rural Development (BADR) belongs to the public sector. It was established as a specialised bank for financing the agricultural sector and supporting traditional industrial and craft activities. It was created by Decree No. 82-106 of 15 March 1982, which defined its basic structure as a national company. As part of economic reforms, after 1988 BADR was transformed into a joint-stock company (Ordinance No. 88-09 of 26 January 1988). The M'sila agency is the basic building block of BADR's system, as it can be considered a mini-structure of this banking institution, seeking to realise the bank's general objectives. The M'sila agency was established in February 1983 alongside three other agencies, initially attached to the BADR branch in Djelfa. This agency seeks, like other agencies, to achieve and expand BADR's services as an integral part of it.

### **2.3. Agricultural Loans at BADR M'sila:**

BADR contributes to achieving local development by providing a range of financing services for a wide range of agricultural activities. The type of financing differs according to the target category of farmers, as follows:

#### **1.2.3. Beneficiaries of the Seasonal R'fiq Loan:**

The R'fiq loan is directed at farmers and investors under the agricultural orientation law (Law No. 08-16 of 2008), whether individually or organised into cooperatives, groups, associations, unions, agricultural units or storers of widely consumed agricultural products. It is a subsidised seasonal loan granted by BADR. The R'fiq loan includes the seasonal loan and the federal loan. The following benefit from this loan:

- Farmers and breeders, individually or in the form of cooperatives, groups, associations or unions;
- Model farms;
- Economic enterprises that contribute to the intensification, processing, recovery and storage of agricultural products.

### **2.2.3. Characteristics of the R'fiq Loan :**

- It is a loan for a period of two years;
- The Ministry of Agriculture, Rural Development and Fisheries bears the full interest (Law No. 08-16, Art. 31);
- Any beneficiary of the R'fiq loan who repays within 6 to 24 months benefits from all interest paid by the Ministry of Agriculture and also benefits from another loan under the same formula for the following period;
- Any beneficiary of the R'fiq loan who fails to repay within two years loses the right to have interest paid by the Ministry of Agriculture, Rural Development and Fisheries and loses the right to benefit from another loan.

### **3.2.3. Areas Covered by the Rafiq Loan :**

The R'fiq loan covers two types of loans according to the target categories:

#### **First: Seasonal loan:**

- Purchase of necessary inputs related to the activity of agricultural investments (seeds, seedlings, fertilisers, pesticides);
- Purchase of animal feed for livestock, irrigation equipment and veterinary medicinal products;
- Purchase of agricultural products for storage under the system for regulating widely consumed agricultural products.

#### **Second: Federal loan:**

- Directed at economic operators, economic enterprises, cooperatives and groups involved in several activities, the most important of which are (processing of industrial tomatoes, cereal production, pasta manufacturing units, packaging and export of dates, honey production).

### **3.3. Ettahadi (Tahadi) Loan:**

The Ettahadi loan is an enhanced investment loan granted by BADR for the creation of new agricultural and livestock farming investments on unused agricultural land belonging to private individuals or state-owned land. It aims to create equipment and modernise agricultural and livestock farming investments. Among the privileges related to obtaining an Ettahadi loan (Bank of Agriculture and Rural Development [BADR], 2020):

- If the repayment period is five years or less, the Ministry of Agriculture, Rural Development and Fisheries bears the interest;

- The loan beneficiary pays 1% interest upon repayment between the sixth (06) and seventh (07) year;
- The loan beneficiary pays 3% interest upon repayment from the eighth (08) to the ninth (09) year;
- If the project lasts more than ten years (10 years), the beneficiary bears the full interest costs.

#### 4. Bank Financing Formulas for the Agricultural Sector at BADR M’sila:

BADR M’sila relies on several financing formulas, including:

##### First: Rafiq loan:

**Table No. 01:** Cumulative status of the R’fiq “R’FIG” loan by activity as of 31/12/2025

Funded Activity	Number of Approved Applications	Percentage of Applications per Activity	Amount Granted (DZD)	Number of Files Used	Amount Used (DZD)	Loan Usage Percentage (%)
Cereal cultivation	1,191	83.92%	372,847,394.38	1,049	337,967,839.97	88
Potato cultivation	5	0.38%	21,171,099.30	5	21,171,099.30	100
Other field crops (other vegetables, garlic)	3	0.23%	23,050,000.00	2	8,450,000.00	36
Poultry farming	50	3.84%	1,328,525,159.68	44	1,178,580,658.32	88
Fruit trees	0	0%	0.00	0	0.00	–
Dairy cattle farming (feed)	14	1.08%	735,697,970.62	11	713,070,172.32	96
Other livestock (sheep and calf fattening)	32	2.46%	644,216,417.44	20	413,741,424.15	63

Funded Activity	Number of Approved Applications	Percentage of Applications per Activity	Amount Granted (DZD)	Number of Files Used	Amount Used (DZD)	Loan Usage Percentage (%)
Other activities (cold storage + date processing)	5	0.38%	523,193,450.00	4	263,763,700.00	50
<b>Provincial total</b>	<b>1,300</b>	<b>100%</b>	<b>3,648,701,491.42</b>	<b>1,300</b>	<b>3,648,701,491.42</b>	<b>80.20</b>

**Source:** Prepared by the researcher based on data from the Accounting Department of the Bank of Agriculture and Rural Development – M’sila branch.

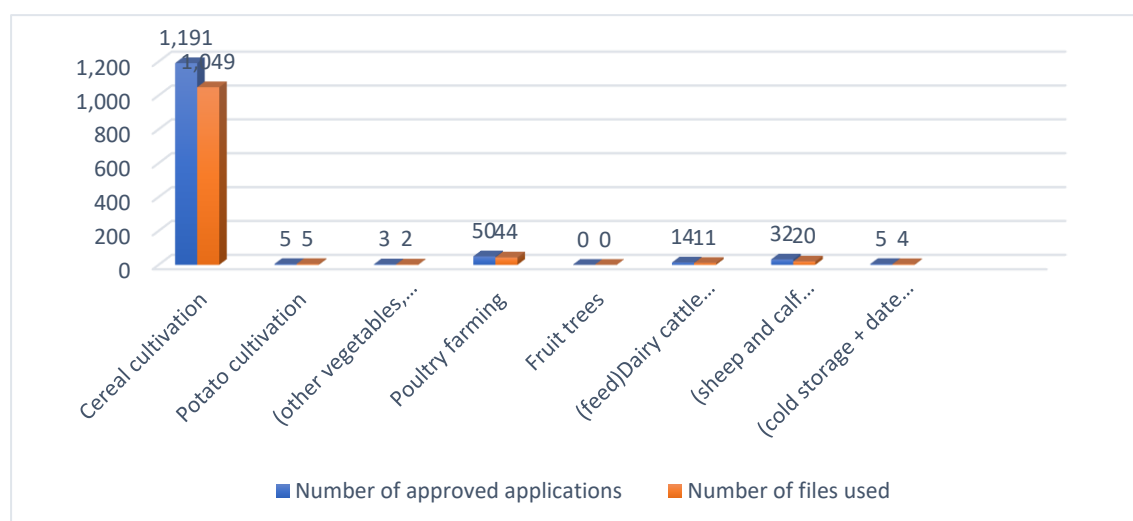
**Table No. 02:** Annual status of the R’fiq loan by activity from 01/01/2025 to 31/12/2025

Funded Activity	Number of Approved Applications	Amount Granted (1)	Number of Files Used	Amount Used
Cereal cultivation	156	96,980,640.67	147	94,255,961.84
Cereal cultivation – compensated R’fiq loan	0	0.00	0	0.00
Potato cultivation	0	0.00	0	0.00
Other field crops (other vegetables, garlic)	1	5,000,000.00	1	5,000,000.00
Poultry farming	7	305,922,070.00	8	319,922,070.00
Fruit trees	0	0.00	0	0.00
Dairy cattle farming (feed)	2	264,000,000.00	3	242,976,750.00

Funded Activity	Number of Approved Applications	Amount Granted (1)	Number of Files Used	Amount Used
Other livestock (sheep and calf fattening)	4	103,096,750.00	4	103,096,750.00
Other activities (cold storage + date processing)	1	350,000,000.00	1	100,000,000.00
<b>Provincial total</b>	<b>171</b>	<b>1,124,999,460.67</b>	<b>164</b>	<b>865,251,531.84</b>

**Source:** Prepared by the researcher based on data from the Accounting Department of the Bank of Agriculture and Rural Development – M’sila branch.

**Figure No. 01:** Number of approved and used applications for the cumulative R’fiq loan as of 31/12/2025



**Source:** Prepared by the researcher.

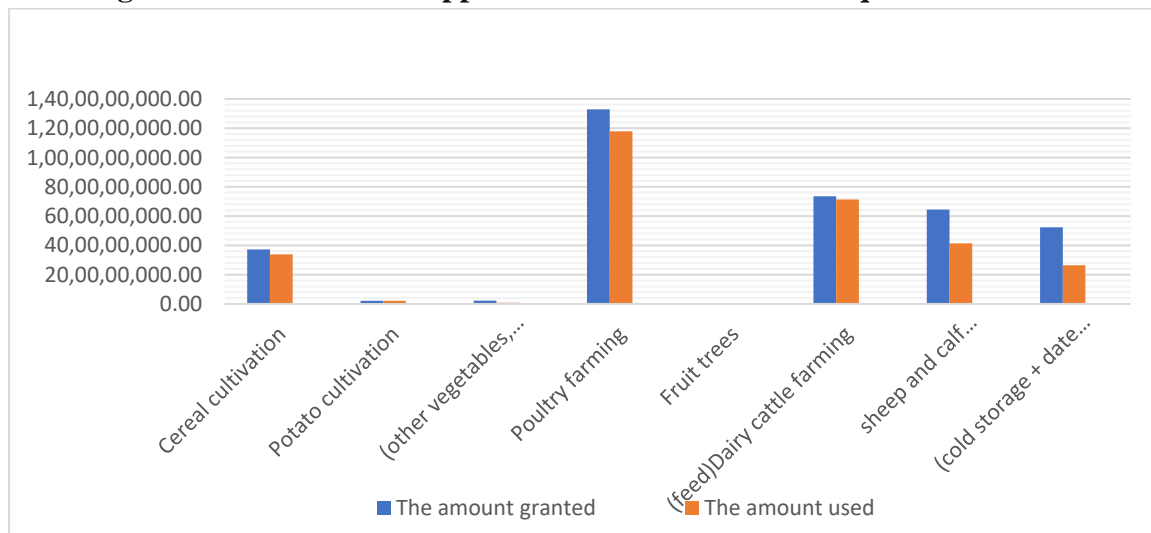
Based on Table No. 01 and Figure No. 01, it can be observed that the cereal cultivation sector occupies the first rank among activity sectors in terms of financing applications under the R’fiq loan formula, with a very large percentage reaching 83.92% of total applications. This is followed by poultry farming at 3.84%, then other livestock activities (sheep and calf fattening) at 2.46%. In contrast, financing applications for the remaining activities are very low, not exceeding approximately 1%, suggesting weak demand for these activities, particularly

regarding fruit trees, as farmers believe that the nature of the region is not suitable for this type of activity.

With respect to the usage rates of this loan formula, it is found that for potato cultivation, applications were activated at a rate of 100%, despite the small number of requested files. Usage rates vary from one activity to another, as the number of requested files is sometimes lower than the number of used files. Cereal cultivation still accounts for more than 88% of the allocated amounts, the same percentage as for poultry farming, while the rate is somewhat lower for dairy cattle farming (feed). The variation in usage rates can be explained by several reasons relating either to the bank or to the farmer, including:

- The length of bank bureaucratic procedures for files or for granting the loan, which sometimes is not made directly to the farmer but passes through specialised bodies such as cereal and pulse cooperatives, or certain conditions imposed by the bank to obtain specific loans (e.g., crop insurance guarantees, title deeds, the farmer’s card, or tax status), which are not yet available to the farmer.
- The timing of loan approval not matching the farmer’s financing needs (agricultural cycle); the loan may be granted at the end of the cycle after the farmer has already borne a number of costs.
- The farmer definitively withdrawing from receiving the loan due to expectations of default resulting from climatic or economic circumstances.

**Figure No. 02: Amounts approved and used for the Rafiq loan as of 31/12/2025"**



**Source:** Prepared by the researcher.

Figure No. 02 can be analysed from two perspectives:

**A: Cost of financing:**

It is noticeable that the financial weight of the R’fiq loan differs from the weight of the number of applications. The poultry farming activity accounts for the largest amount of financing (DZD 1,178,580,658.32), i.e., 36.14% of the total, despite the small number of applications compared to cereal cultivation (10.30%), which is less in need of liquidity and more risky in terms of

returns during drought periods. This is due to the high financing cost of a poultry house, which requires equipment (feeders, medicines, heating and cooling systems, energy), compared to financing one hectare of cereal cultivation. The same applies to dairy cattle farming, which is also characterised by high financing costs given the high price of imported dairy cows (between DZD 400,000 and DZD 600,000), in addition to the costs of building shelters, veterinary follow-up, and the high cost of feed.

It can be said that investment activities with long cycles and high costs are financially heavier than operational activities with short cycles and relatively low costs.

**B: Analysis from the perspective of financing usage (efficiency of use)**

This ratio measures the extent to which approved loans are used, the farmer’s readiness to utilise these loans, as well as the accuracy and effectiveness of the financial institution’s studies and financial forecasts.

Efficiency of use can be calculated using the following ratio:

$$\text{Usage Efficiency} = X \frac{\text{The amount used}}{\text{The amount granted}} 100$$

There is a high efficiency of use for the dairy cattle farming activity and for cereal cultivation, at 90% and 89% respectively. The slight justified difference is due to bank administrative procedures given the size of the financing. The efficiency of use is very high for potato cultivation, reaching 100%, meaning there is a match between the amounts allocated and the amounts consumed. The low percentages, however, were for other activities (cold storage + date processing), field crops, and other field crops (other vegetables, garlic), which reflects difficulties in the investment orientation in this field, for various reasons including the high cost of feed, the high prices of fattening livestock, the risk attached to crops intended for refrigeration, and the instability of field crop prices, which often do not cover production costs. It is observed that the overall percentage (80.20%) must be analysed across the various activities in order to obtain an accurate understanding of the impact of agricultural financing under the R’fiq loan and to identify future agricultural and financing policies.

**Second: The Ettahadi (Tahadi) Loan**

**Table No. 03: Cumulative status of the Ettahadi loan by activity as of 31/12/2025**

Funded Activity	Number of Approved Applications	Amount Granted (DZD)	Number of Files Used	Amount Used (DZD)	Usage Percentage (%)
Poultry farming	20	577,141,072.94	14	383,329,482.10	66%
Fruit trees	0	0.00	0	0.00	0%
Cereal cultivation	7	58,684,942.44	4	18,689,395.35	32%

<b>Funded Activity</b>	<b>Number of Approved Applications</b>	<b>Amount Granted (DZD)</b>	<b>Number of Files Used</b>	<b>Amount Used (DZD)</b>	<b>Usage Percentage (%)</b>
Cattle farming	27	395,618,144.75	14	301,279,388.82	76%
Sheep farming	73	476,369,724.36	45	305,152,889.75	64%
Vegetable cultivation	0	0.00	0	0.00	0%
Cold room storage	3	88,686,300.03	2	31,458,300.03	35%
Agricultural equipment	6	21,670,095.00	5	16,024,530.00	74%
Other activities (goat farming, feed industry processing, storage and distribution)	11	430,404,295.21	5	152,809,611.75	36%
Provincial total	147	2,048,574,574.73	89	1,208,743,597.80	–

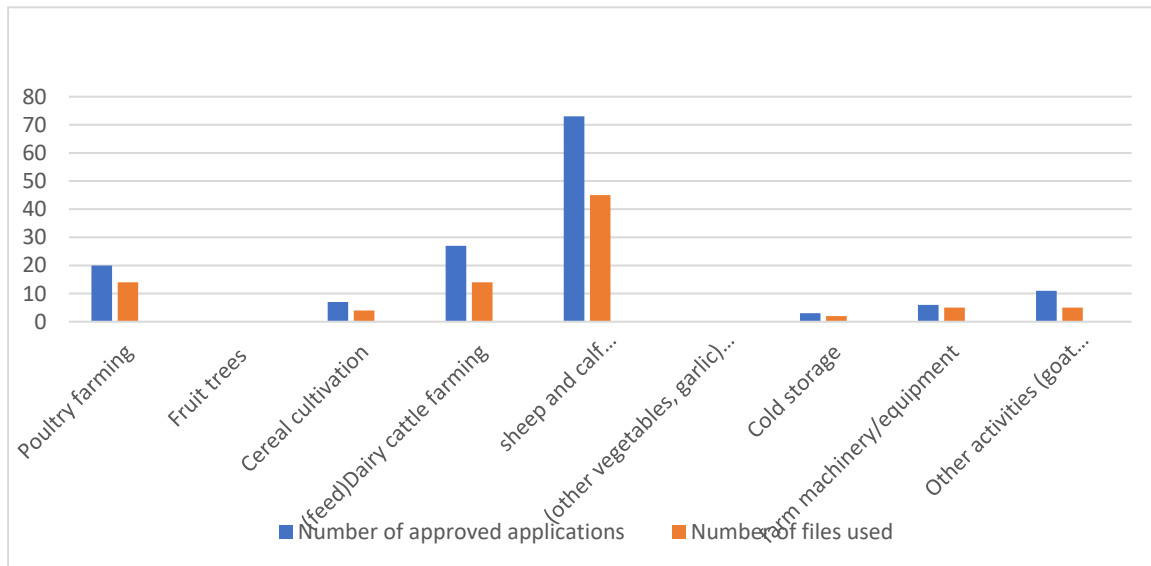
**Source:** Prepared by the researcher based on data from the Accounting Department of the Bank of Agriculture and Rural Development – M’sila branch.

**Table No. 04: Annual status of the Ettahadi (Tahadi) loan by activity for the period from 01/01/2025 to 31/12/2025''**

<b>Funded Activity</b>	<b>Number of Approved Applications</b>	<b>Amount Granted (DZD)</b>	<b>Number of Files Used</b>	<b>Amount Used (DZD)</b>
Poultry farming	1	15,600,000.00	0	0.00
Fruit trees	0	0.00	0	0.00
Cereal cultivation	0	0.00	0	0.00
Cattle farming	1	77,000,000.00	1	77,000,000.00
Sheep farming	2	17,916,000.00	1	695,856.00
Vegetable cultivation	0	0.00	0	0.00
Cold room storage	0	0.00	0	0.00
Agricultural equipment	0	0.00	0	0.00
Other activities (goat farming, greenhouses, feed industry processing, storage and distribution, slaughterhouses)	1	88,242,000.00	0	0.00
<b>Provincial total</b>	<b>5</b>	<b>198,758,000.00</b>	<b>2</b>	<b>77,695,856.00</b>

**Source:** Prepared by the researcher based on data from the Accounting Department of the Bank of Agriculture and Rural Development – M’sila branch.

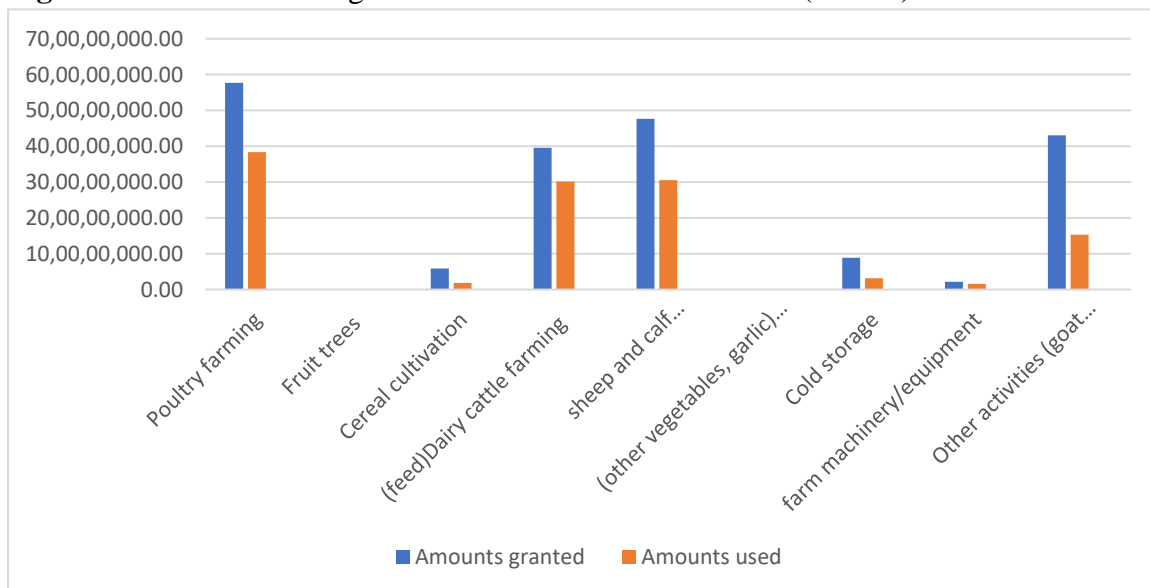
**Figure No. 03: Number of requested and used files for the Ettahadi (Tahadi) loan as of 31/12/2025"**



**Source:** Prepared by the researcher.

From Table No. 03, it can be observed that the number of applications under the Ettahadi loan formula is heavily directed towards sheep farming, cattle farming and poultry farming activities, compared to other activities, due to the investment nature of these activities, which require a large volume of fixed assets, in addition to the state's economic orientation in an attempt to reduce import costs and encourage these activities.

**Figure No. 04: Amounts granted and used for the Ettahadi (Tahadi) loan as of 31/12/2025**



**Source:** Prepared by the researcher.

From Figure No. 04, it can be observed that the efficiency of use of the Ettahadi loan for cattle farming activity ranks first (DZD 301,279,388.82) with a rate of 76.00%, while poultry farming and sheep farming have similar rates (66% and 64% respectively). It is noted that the amounts allocated to agricultural equipment are very small, for several reasons, including:

- The high cost of equipment and concerns about the return on agricultural activity on the one hand, and the cost of guarantees on the other hand, due to the issue of agricultural land ownership.
- The tendency of cooperatives to use lease loan formulas for acquiring large equipment such as combine harvesters.

**Third: The Federal Loan**

**Table No. 05: R’fiq Federal Loan**

Funded Activity	Number of Approved Applications	Amount Granted (DZD)	Number of Files Used	Amount Used (DZD)	Number of Recovered Files	Amount Recovered (DZD)	Number of Unrecovered Defaulted Files	Amount Outstanding (DZD)
Provincial total	0	0	0	0	0	0	0	0

**Source:** Accounting Department of the Bank of Agriculture and Rural Development – M’sila branch

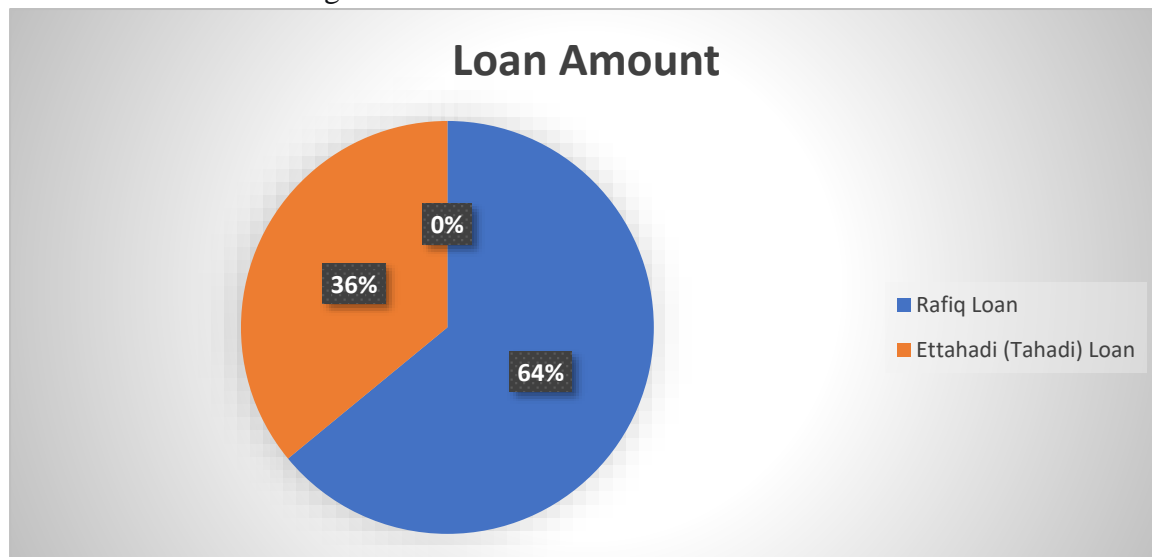
**Table No. 06: Ettahadi (Tahadi) Federal Loan**

Funded Activity	Number of Approved Applications	Amount Granted (DZD)	Number of Files Used	Amount Used (DZD)	Number of Recovered Files	Amount Recovered (DZD)	Number of Unrecovered Defaulted Files	Amount Outstanding (DZD)
Provincial total	0	0	0	0	0	0	0	0

**Source:** Accounting Department of the Bank of Agriculture and Rural Development – M’sila branch

Regarding the federal loan, whether R’fiq or Tahadi, which is directed at economic operators, economic enterprises, cooperatives and groups participating in activities, it can be observed that there is a complete reluctance to submit applications in this area due to the weak economic fabric of the province with respect to processing industries, which require substantial financial resources, as well as the problem of industrial land in the province. On the other hand, this is also due to the cautious financing philosophy of BADR Bank, which relies on short- and medium-term financing.

**5. Comparison between the Tahadi loan and the R’fiq loan in terms of financing amounts:** The following figure illustrates a comparison between the Tahadi loan and the R’fiq loan in terms of financing amounts.



**Source: Prepared by the researcher.**

Financing under the two formulas, R’fiq and Tahadi, differs in terms of financing amounts. The R’fiq loan represents 64% of the approved amounts, i.e., an amount exceeding DZD 3.6 billion, while financing through the Tahadi loan amounts to 36%, i.e., an amount exceeding DZD 2 billion. They converge in the types of activities financed, which are generally directed towards operational activities with relatively short to medium agricultural cycles, such as poultry farming, cereal cultivation and livestock rearing. It is also noted that there is a disparity in farmers’ uptake of the two financing formulas during the year 2025 (171 files for the R’fiq loan and only 5 files for the Tahadi loan), which necessitates incentive policies for medium-term investment loans.

**Conclusion:**

The current economic stage requires the expansion of economic diversification, by turning towards sectors that achieve self-sufficiency in food, protect the national product, and exploit the natural and human resources available to the agricultural sector. Algeria finds itself

compelled to promote the sector by providing sufficient financial support to transform these resources into products that meet the domestic market and target external markets, to move from traditional seasonal agriculture to modern agriculture, to turn towards agricultural investment, and to create a favourable environment for enhancing agricultural financing by encouraging the use of various financing formulas offered by commercial banks.

**Study results:** The study reached the following conclusions:

- The Bank of Agriculture and Rural Development (BADR), through its various available mechanisms (R'fiq and Tahadi), contributes to supporting the agricultural sector.
- The cereal cultivation sector occupies the first rank among activity sectors in terms of financing applications under the R'fiq loan formula, due to the nature of the region and the absence of in-depth agricultural studies to direct towards fruit cultivation.
- There is a disparity in the usage rates of financing services. Cereal cultivation accounts for a large proportion of the amounts allocated by the Agricultural Development Bank. The variation in usage rates can be explained by several administrative reasons related to the bank (collateral guarantees), legal reasons (title deeds), and other reasons related to the farmer (expectations of default due to climatic or economic circumstances, and the mismatch between the loan and the agricultural cycle).
- It is observed that the financial weight of the R'fiq loan differs from the weight of the number of applications, as the poultry farming activity accounts for the largest financing amount. It can be said that investment activities with long cycles and high costs are financially heavier than operational activities with short cycles and relatively low costs.
- The number of applications under the Tahadi loan formula is heavily concentrated in livestock rearing activities, compared to other activities, due to the investment nature of these activities, which require a large volume of fixed assets, in addition to the state's economic orientation in an attempt to reduce import costs, preserve local breeds, and encourage these activities.
- There is complete reluctance to submit applications under the federal loan formulas (R'fiq and Tahadi) due to the weak economic fabric of the province with respect to large-scale agricultural industries, owing to limited financial resources.
- Financing under the two formulas, R'fiq and Tahadi, differs in terms of financing amounts. The R'fiq loan represents 64% of the approved amounts, i.e., an amount exceeding DZD 3.6 billion, while financing through the Tahadi loan amounts to 36%.

### **Challenges of bank agricultural financing:**

The bank financing process is essential for achieving the desired development, but it faces dual challenges relating to both parties to the financing, mainly:

- Default on repayment, due to natural risks such as drought and weather fluctuations, and certain widespread diseases, as well as economic reasons represented by the volatility of agricultural product prices and high production costs.
- The difficulty of valuing bank guarantees, which are often agricultural land. Moreover, when such land exists, the farmer's fear of losing it does not encourage him to request bank financing.
- The mismatch between the agricultural cycle and the farmer's financing needs on the one hand, which reduces the effectiveness of these loans, and the harvest period and repayment process on the other hand.
- A lack of awareness among some categories of farmers regarding the repayment of agricultural debts within the specified periods.

### **Recommendations:**

In order to achieve efficiency and effectiveness in bank financing for the agricultural sector, the following recommendations can be made, relating to the banking system in particular and the economic system in general:

- Creditworthiness assessment and risk management: The bank should carry out effective monitoring of the loan granting process at times appropriate to the farmer's needs, monitor loan usage and the borrower's financial situation to detect cases of financial distress in order to address them, and follow up on loan collection on time.
- Introduce an incentive system for loan repayment to avoid falling into default, and link the repayment process to harvest times suitable for the farmer.
- Accept certain movable guarantees, such as storable products (crops and agricultural produce).
- Provide advisory services and agricultural extension services, and conduct research in the field of agricultural product development by the bank.
- Rely on the principle of sustainability: rely on permanent sources of funds by encouraging farmers' savings in commercial banks.
- Provide a database for banks that enables accurate tracking of debt trajectories, and determination of operating costs and profitability.
- Encourage agricultural insurance through state subsidisation of part of the insurance premiums, especially in the early stages of agricultural projects.
- Necessity of creating and expanding rural banks and credit cooperatives, and bringing farmers closer to financing sources and agricultural extension.
- Remove bureaucratic and administrative obstacles facing farmers, and accelerate the transition to agricultural digitalisation.
- Create and expand rural markets to enable farmers to market their crops, while paying attention to improving and reducing the costs of seeds, transport, marketing and storage, which contributes to agricultural productivity.
- Study and monitor the prices of agricultural products to avoid falling into depression, and protect the national product.



- Coordinate between the various relevant sectors to develop and diversify the agricultural sector, meet domestic needs, and promote agricultural exports.
- Stimulate youth entrepreneurship in the agricultural field by activating and monitoring support programmes on the one hand, and following up on tax incentive policies to direct investments towards the agricultural sector on the other hand.