African Scientific Journal
ISSN : 2658-9311
Vol : 03, Numéro 31 Aout 2025

La finance participative comme alternative à la finance conventionnelle : une comparaison des produits financiers pour le financement Agricole

Participatory finance as an alternative to conventional finance: a comparison of financial products for agricultural financing.

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<u>Déclaration de divulgation :</u> L'auteur n'a pas connaissance de quelconque financement qui pourrait affecter l'objectivité de cette étude.

<u>Conflit d'intérêts :</u> L'auteur ne signale aucun conflit d'intérêts.

<u>Pour citer cet article :</u> KAMAL .B & ZAHID .A (2025) « La finance participative comme alternative à la finance conventionnelle : une comparaison des produits financiers pour le financement Agricole », African Scientific Journal « Volume 03, Numéro 31 » pp: 0950 – 0961.

DOI : 10.5281/zenodo.16937675

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ISSN : 2658-9311
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Résumé

Le financement agricole joue un rôle crucial dans le développement économique et social, en particulier pour les petits agriculteurs qui n'ont souvent pas accès à des ressources financières appropriées. Traditionnellement, le financement agricole repose sur des produits financiers conventionnels basés sur les intérêts, les garanties et la spéculation. Cependant, ces modèles s'avèrent souvent mal adaptés aux besoins spécifiques des agriculteurs, notamment dans des contextes où les risques sont élevés et les ressources limitées. Cet article examine la finance participative islamique en tant qu'alternative crédible à la finance conventionnelle. Fondés sur les principes du partage des profits et des pertes, de l'interdiction du riba (intérêt) et de la transparence, les produits de financement participatif tels que la Murabaha, la Mudarabah, et les Sukuk offrent des solutions éthiques et appropriées pour le financement de l'agriculture. À travers une comparaison détaillée des produits financiers participatifs et conventionnels, l'article analyse leur impact sur le développement du secteur agricole. La problématique qui guide cette recherche est la suivante : En quoi la finance participative peut-elle être une alternative efficace à la finance conventionnelle pour le financement agricole ? L'hypothèse formulée est que les produits de la finance participative offrent des solutions plus adaptées aux besoins des agriculteurs, notamment grâce à l'alignement sur des principes éthiques et le partage des risques.

Pour répondre à cette problématique, l'étude s'appuie sur une recherche documentaire et comparative, mobilisant des travaux académiques et des études empiriques menées dans différents contextes (Maroc, Tunisie, Pakistan, Inde). Aucun échantillon direct n'a été collecté ; l'analyse repose sur des sources secondaires fiables. Les résultats montrent que la finance participative répond mieux aux spécificités agricoles en raison de sa flexibilité, de son alignement avec des valeurs éthiques et de ses mécanismes de partage des risques.

L'objectif est de démontrer que la finance participative peut offrir des alternatives viables pour le financement de l'agriculture, en particulier dans les pays en développement, tout en respectant les valeurs éthiques et sociales.

Mots clés : financement participatif, financement conventionnel, financement de l'agriculture, produits de financement.

Abstract

Agricultural finance plays a crucial role in economic and social development, particularly for small farmers who often lack access to appropriate financial resources. Traditionally, agricultural finance has relied on conventional financial products based on interest, guarantees and speculation. However, these models often prove ill-suited to the specific needs of farmers, particularly in contexts where risks are high and resources limited. This article examines Islamic participatory finance as a credible alternative to conventional finance. Based on the principles of profit and loss sharing, the prohibition of riba (interest) and transparency, participatory finance products such as Murabaha, Mudarabah and Sukuk offer ethical and appropriate solutions for financing agriculture. Through a detailed comparison of participatory and conventional financial products, the article analyses their impact on the development of the agricultural sector. The issue guiding this research is as follows: How can participatory finance be an effective alternative to conventional finance for agricultural financing? The hypothesis put forward is that participatory finance products offer solutions that are better adapted to farmers' needs, in particular thanks to their alignment with ethical principles and risk sharing.

To address this issue, the study relies on a documentary and comparative approach, drawing on academic works and empirical studies carried out in different contexts (Morocco, Tunisia, Pakistan, India). No primary sample was collected; the analysis is exclusively based on reliable secondary sources. The findings show that participatory finance is more suited to agricultural specificities due to its flexibility, ethical orientation, and risk-sharing structures.

The aim is to demonstrate that participatory finance can offer viable alternatives for financing agriculture, particularly in developing countries, while respecting ethical and social values.

Keywords: participatory finance, conventional finance, agriculture financing, financing products.

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Introduction

Agricultural finance plays an indispensable role in the development of rural economies, particularly in developing countries where farming is the primary source of livelihood. Access to appropriate financial resources is essential for boosting agricultural productivity and improving farmers' livelihoods. However, conventional financial systems, which rely heavily on interest-based loans, collateral, and rigid repayment schedules, have consistently failed to meet the needs of smallholder farmers (Khan and Nomani, 2021; Beck et al., 2010). These systems are often ill-suited to address the cyclical and high-risk nature of agricultural activities, where seasonal income, price volatility, and unpredictable weather patterns exacerbate financial vulnerability (Ahmed et al., 2007; Waseem et al., 2020). The evolution of Islamic finance offers a potential solution by providing more equitable and risk-sharing approaches. The first modern Islamic bank was established in Mit Ghamr, Egypt, in 1963, to provide interest-free savings and loans to rural farmers (Etude Finance Islamique, 2011). Since then, Islamic finance has expanded globally, finding success in Muslim-majority countries and financial hubs like London and Luxembourg (Waseem et al., 2020). In contrast, the evolution of Islamic finance offers a potential solution by providing a more equitable and risk-sharing approach. This initiative marked the beginning of Islamic finance as we know it today. Since then, Islamic finance has expanded globally, finding success not only in Muslim-majority countries but also in financial hubs like London and Luxembourg, where Islamic bonds (Sukuk) have been issued to tap into the growing market for ethical finance. The adaptability of Islamic finance to different regulatory environments has contributed to its rapid growth Participatory finance, rooted in Islamic finance principles, offers a promising alternative by promoting fairness, transparency, and risk-sharing. Key Islamic finance products such as Murabaha, Mudarabah, and Sukuk avoid interest (riba) and speculative transactions (gharar), focusing instead on ethical and equitable transactions. This study seeks to address the question: Can participatory finance serve as a viable and effective alternative to conventional finance for agricultural financing?

In countries like Morocco, Pakistan, and Tunisia, conventional finance models that require high collateral have excluded small-scale farmers from accessing formal credit systems (Determinants of Solidarity Financing of Agriculture, 2021; The Impact of Agricultural Extension, 2019). Farmers, particularly in rural and remote areas, face difficulties because of limited access to banks and financial services (Everett et al., 1995). The hypothesis posited is that participatory finance, through its profit-sharing mechanisms, ethical principles, and flexible

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ISSN : 2658-9311
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financial products, provides more sustainable and suitable solutions for smallholder farmers, particularly in regions where conventional finance has proven inadequate (Everett, 1995; Beck et al., 2010).

1. Literature Review

1.1. Conventional Finance in the Agricultural Sector

Conventional finance has long dominated agricultural finance systems, relying on products such as interest-based loans, credit lines, and guarantees. These products typically require collateral such as land or machinery along with fixed repayment schedules and high-interest rates, making them inaccessible to many smallholder farmers (Beck et al., 2010; Acceptance of Islamic Banking, 2016). For instance, in countries such as India, Morocco, and Pakistan, the reliance on collateral and stringent loan terms has excluded many small-scale farmers from the formal financial system (Waseem et al., 2020; Khan and Nomani, 2021). Moreover, conventional financial institutions do not account for the cyclical and volatile nature of agricultural work. Farmers must repay loans based on fixed schedules that often do not align with the timing of harvests or market sales, leading to high default rates and further credit restrictions. This mismatch between repayment schedules and agricultural cycles has been a major factor limiting the success of conventional finance in rural areas. The inability of banks to offer flexible terms tailored to the unique needs of the agricultural sector has long been criticized by development economists and policymakers alike.

Farmers in countries like Morocco and Pakistan often struggle to meet the collateral and creditworthiness requirements imposed by conventional financial institutions (Khan and Nomani, 2021). These rigid terms are poorly suited for agriculture, which requires more flexible repayment structures (Beck et al., 2010).

Conventional loans are further constrained by their rigidity. They often require fixed repayments regardless of the farmer’s income cycle, which can be disrupted by weather conditions, price fluctuations, or harvest delays (Awo et al., 2022). As a result, many farmers struggle to make timely repayments, leading to high default rates and further reluctance among financial institutions to lend to agricultural borrowers (Ahmed et al., 2007). Such inflexibility represents one of the key explanatory variables in this study, as it directly affects farmers’ access to credit and productivity. This variable justifies our hypothesis that the rigidity of repayment schedules is a significant barrier to agricultural development.

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1.2. Limitations of Conventional Finance for Agriculture

The primary limitation of conventional finance lies in its inability to manage the unique risks associated with agricultural activities. The agricultural sector is inherently risky due to its dependence on unpredictable factors such as weather, pests, and market fluctuations (Etude Finance Islamique, 2011). Conventional financial products, which often involve fixed repayment schedules and collateral-based lending, are ill-equipped to accommodate these risks, especially for smallholder farmers with limited assets (Beck et al., 2010). In countries such as Pakistan and Morocco, studies have shown that farmers face significant challenges in meeting the collateral and creditworthiness requirements imposed by conventional financial institutions (Khan and Nomani, 2021). This lack of access to formal credit prevents farmers from investing in modern technologies and practices that could improve productivity, creating a cycle of low productivity and poverty (Waseem et al., 2020; Fnitiz and Zarrouk, 2022). Here, collateral emerges as another explanatory variable: we hypothesize that reliance on collateral explains farmers' exclusion from formal credit, and that participatory finance, which minimizes collateral requirements, provides a more inclusive
alternative. So, Table 1 summarizes the main limitations of conventional agricultural finance identified in the literature. The rigidity of collateral requirements, the mismatch between repayment schedules and agricultural cycles, and the lack of risk coverage emerge as recurrent constraints. These limitations justify the search for alternative financing models better adapted to the specific needs of farmers.

Table1: Limitations of Conventional Finance in the Agricultural Sector

Author(s) / Year	Context	Main Limitations Identified	Explanatory Variable	Associated Hypothesis
Beck et al. (2010)	Developing countries	High collateral requirements and loan rigidity	Collateral	Collateral requirements limit access to agricultural credit
Ahmed et al. (2007)	Agricultural sector (global)	Mismatch with agricultural cycles	Repayment rigidity	Fixed repayment schedules exclude small farmers
Awo et al. (2022)	Sub-Saharan Africa	Limited risk coverage in agricultural lending	Risk coverage	Lack of risk management increases default rates
Waseem et al. (2020)	Pakistan	Exclusion of smallholders	Structural exclusion	Smallholder farmers are disproportionately excluded

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1.3. Participatory Finance and Its Principles

Participatory finance, based on Islamic finance principles, offers an alternative that is better aligned with the needs of the agricultural sector. Islamic finance prohibits interest (riba) and speculative activities (gharar), promoting transparency, ethical investment, and profit-sharing (Beck et al., 2010). Key Islamic financial products include:

- Murabaha: A cost-plus financing model where the financial institution purchases goods on behalf of the farmer and resells them at a predetermined profit margin. Unlike conventional loans, Murabaha transactions do not involve interest, making them more suitable for financing agricultural inputs such as seeds, fertilizers, and machinery (Fnitiz and Zarrouk, 2022). This is linked to the explanatory variable of risk-sharing. Our hypothesis is that the availability of risk-sharing mechanisms increases farmers' willingness to adopt participatory finance.
- Mudarabah: A profit-sharing partnership in which the financial institution provides the capital, and the farmer contributes labor and expertise. Profits are shared according to an agreed-upon ratio, while the financier bears the risk of loss. This model reduces the financial burden on farmers, making it particularly well-suited to the high-risk nature of agriculture (Everett, 1995; Waseem et al., 2020).
- Sukuk: Islamic bonds that are used to raise capital for large-scale agricultural projects. Sukuk offer a Shariah-compliant alternative to conventional bonds, attracting both local and international investors (Etude Finance Islamique, 2011). Sukuk structures provide long-term investment opportunities that avoid interest, making them suitable for financing sustainable agricultural projects. This corresponds to the variable of long-term investment opportunities, supporting the hypothesis that participatory finance encourages sustainable agricultural financing.

These products focus on risk-sharing, which ensures that both the financial institution and the farmer are jointly invested in the success of the agricultural venture (Acceptance of Islamic Banking, 2016).

In addition to the core principles of profit and loss sharing, Islamic finance emphasizes the avoidance of excessive uncertainty (gharar) in contracts. This is particularly relevant to agriculture, where risks related to weather, pests, and market prices are often unpredictable. Islamic financial contracts such as Salam, a forward sale agreement used in agriculture, allow farmers to sell their produce in advance at a fixed price. This reduces uncertainty for both the farmer and the financier. By ensuring that all parties have a clear understanding of the transaction, Islamic finance creates a more balanced financial relationship, which is critical for

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farmers operating in high-risk environments. This relates to the variable of risk reduction in relation to price volatility. We hypothesize that reducing uncertainty through Salam contracts fosters adoption of participatory finance.

Table 2: Participatory Finance Products and Their Contribution to Agricultural Financing

Participatory Product	Principle	Advantage for Agriculture	Explanatory Variable	Hypothesis
Murabaha	Cost-plus financing	Transparency in costs of inputs	Transparency	Transparency enhances adoption
Mudarabah	Profit and loss sharing	Reduces farmers' financial burden	Risk sharing	Risk-sharing increases adoption
Salam	Forward sale contract	Reduces price uncertainty	Risk reduction	Lower uncertainty encourages adoption
Sukuk	Islamic bonds	Provides long-term investment for agriculture	Sustainable investment	Sukuk facilitate sustainable agricultural finance

As shown in Table 2, participatory finance products provide innovative mechanisms that directly address the shortcomings of conventional finance. Murabaha ensures transparency in the cost of inputs, Mudarabah reduces the financial burden through profit and loss sharing, Salam mitigates price uncertainty, and Sukuk supports long-term sustainable investment. These principles highlight the potential of participatory finance to align ethical values with practical solutions for agriculture.

2. Methodology

2.1. Documentary approach

This study adopts a documentary research approach, drawing on a broad array of academic sources, industry reports, and case studies on both conventional and Islamic finance in agriculture. The data were gathered from reports and studies in countries such as Morocco, Tunisia, India, and Pakistan, which have explored the adoption of Islamic financial products and the challenges of conventional finance in the agricultural sector (Ahmed et al., 2007; Fnitiz and Zarrouk, 2022). Additionally, the study examines literature on the barriers faced by smallholder farmers in accessing formal finance (Waseem et al., 2020).

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Table 3: Empirical Studies Comparing Conventional and Participatory Finance

Author(s)	Country	Methodology	Main Finding	Implication for Hypotheses
Khan & Nomani (2021)	Morocco & Pakistan	Comparative analysis	Conventional finance excludes small farmers	Supports need for participatory alternatives
Fnitiz & Zarrouk (2022)	Morocco	Empirical study	Religious motivation and transparency foster adoption	Confirms role of transparency & religious values
Waseem et al. (2020)	Pakistan	Quantitative study	Strong exclusion of smallholders	Highlights importance of risk-sharing mechanisms
Acceptance of Islamic Banking (2016)	Global	Innovation analysis	Acceptance depends on clarity and adaptation	Confirms role of items: clarity, risk reduction

Table 3 presents a synthesis of empirical studies comparing conventional and participatory finance. The findings confirm that conventional mechanisms tend to exclude small farmers, while participatory products when adapted to local contexts encourage adoption through transparency, religious compatibility, and risk-sharing. These results form the basis for the explanatory variables and hypotheses tested in this research

This research adopts a documentary and comparative approach, drawing on academic studies, institutional reports, and previous empirical research on participatory finance and agricultural financing. This choice is justified by the exploratory nature of the topic and the scarcity of primary data available on the implementation of participatory finance in the Moroccan agricultural sector. The aim is to analyze, based on reliable secondary sources, the limitations of conventional financing and the potential contributions of participatory instruments.

From an epistemological perspective, the study is positioned within a positivist framework, seeking to explain observed phenomena through established and verifiable concepts. The reasoning adopted is hypothetico-deductive: we start from a general hypothesis — that participatory finance represents a more suitable alternative for agricultural financing — which is then confronted with a corpus of theoretical and empirical works.

The comparative method is justified, on the one hand, by the need to highlight the structural differences between conventional and participatory finance, and, on the other hand, by the interest in identifying the mechanisms that make the latter more appropriate to the specificities of the agricultural sector. This methodological choice thus provides a rigorous theoretical

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ISSN : 2658-9311
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analysis and opens avenues for future empirical investigations with field actors (farmers and financial institutions).

2.2. Comparative analysis of financial products

Convetional financial products

Conventional financial products, such as agricultural loans, short-term credits, and guarantees, are typically structured around interest-based repayments and collateral requirements. These products are designed to protect the lender from risk but place the full burden on the borrower, often leading to high default rates in the agricultural sector (Beck et al., 2010). In addition, fixed repayment schedules make it difficult for farmers, whose income is subject to seasonal fluctuations, to meet their obligations (Khan and Nomani, 2021).

Studies in Morocco and Tunisia reveal that the majority of smallholder farmers are excluded from conventional finance due to the inability to provide collateral or meet creditworthiness standards (Fnitiz and Zarrouk, 2022; Etude Finance Islamique, 2011).

Participatory Financial Products

Participatory financial products, grounded in Islamic principles, offer a more flexible and ethical solution to agricultural financing.

- Murabaha : allows farmers to purchase agricultural inputs without incurring interest. The cost-plus structure ensures that the farmer is fully aware of the total cost upfront, avoiding the uncertainty and risk associated with conventional loans (Ahmed et al., 2007; Waseem et al., 2020).
- Mudarabah : provides a profit-sharing arrangement in which the financial institution and the farmer both share in the profits, while the financier bears the risk of loss. This reduces the financial burden on the farmer and provides a more equitable financial solution, particularly in high-risk agricultural ventures (Everett, 1995).
- Sukuk : is a Shariah-compliant bond that provides ethical investment opportunities for large-scale agricultural projects. Sukuk structures enable farmers to raise capital without the need for interest payments, making them particularly attractive for investors seeking ethical financial products (Etude Finance Islamique, 2011).

One of the key advantages of Islamic finance is its adaptability to different financial systems, even in non-Muslim countries. Islamic bonds (Sukuk) have been issued in non-Muslim countries such as the UK, showing their global appeal (Cizakca, 2011). They are increasingly used for financing large agricultural projects and align well with ethical investment goals (TheCityUK, 2015). The use of Sukuk for financing large-scale agricultural projects provides

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a Sharia-compliant way for farmers and agribusinesses to access long-term capital without resorting to interest-bearing loans. This adaptability is especially important in today's globalized economy, where investors are increasingly seeking ethical investment opportunities that align with sustainable development goals.

Comparison: Efficiency, Ethics, and Risk Management

Islamic financial products offer greater efficiency and ethical alignment in managing agricultural risks due to their risk-sharing structures (Beck et al., 2010). Unlike conventional loans, which place the entire burden of risk on the borrower, participatory finance distributes the risks between the financier and the farmer. The ethical foundations of Islamic finance, particularly its prohibition of riba and gharar, further enhance its suitability for smallholder farmers in regions where conventional finance has failed to deliver (Acceptance of Islamic Banking, 2016; Awo et al., 2022).

3. Discussion

3.1. Relevance of Participatory Finance for the Agricultural Sector

Participatory finance provides significant advantages for the agricultural sector, particularly in developing regions where smallholder farmers struggle to access conventional credit. The flexibility and ethical foundations of Islamic finance products, such as Murabaha and Mudarabah, make them more suitable for financing agricultural activities, especially in high-risk environments (Khan and Nomani, 2021). The emphasis on transparency, fairness, and risk-sharing ensures that both the financier and the farmer have a stake in the success of the agricultural venture (Fnitiz and Zarrouk, 2022).

3.2. Challenges in implementing participatory finance

Despite its potential, several challenges remain in implementing participatory finance on a larger scale. These challenges include regulatory hurdles, insufficient awareness among farmers, and a lack of infrastructure to support Islamic financial institutions (Beck et al., 2010). Additionally, there is a need for collaboration between governments, financial institutions, and Islamic scholars to strengthen the regulatory frameworks that govern Islamic finance (Awo et al., 2022).

Conclusion

This study demonstrates that participatory finance offers a viable and effective alternative to conventional finance for agricultural financing. The ethical foundations, risk-sharing mechanisms, and flexibility of Islamic financial products such as Murabaha, Mudarabah, and Sukuk make them particularly well-suited to the needs of smallholder farmers, especially in regions with limited access to formal credit (Waseem et al., 2020). Moving forward, the role of Shariah boards will be critical in ensuring that Islamic financial products remain compliant with Islamic law while continuing to innovate and adapt to new market conditions. Shariah boards must work closely with financial institutions to develop new products that meet the evolving needs of farmers, particularly as the global demand for sustainable and ethical finance grows. Governments should also play a role in creating regulatory frameworks that support the integration of Islamic finance into mainstream financial systems, ensuring that it remains a viable option for agricultural development

To successfully integrate participatory finance into the agricultural sector, governments and financial institutions must work together to strengthen regulatory frameworks, raise awareness about the benefits of Islamic finance, and develop tailored financial products for farmers (Acceptance of Islamic Banking, 2016). Additionally, educational campaigns should target farmers to ensure they understand the advantages of Islamic finance (Fnitiz and Zarrouk, 2022). Future research should explore the long-term impacts of participatory finance on agricultural productivity and rural development. Additionally, further studies should investigate how Islamic finance can contribute to broader sustainable development goals, such as poverty reduction and environmental sustainability (Everett, 1995; Ahmed et al., 2007).

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