

INNOVATION SCIENCE AND TECHNOLOGY

ISSUE 9, PART I / SEPTEMBER 2026

 Acceptance of papers



**Acceptance of
papers**

Published monthly



Topics

economics,
technology, social
sciences



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JOURNAL **"INNOVATION SCIENCE AND
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UNDER THE NUMBER **C-5669633** BY THE
AGENCY FOR INFORMATION AND MASS
COMMUNICATIONS (AOKA) OF THE
REPUBLIC OF UZBEKISTAN, EFFECTIVE
FROM OCTOBER 9, 2024.

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The scientific electronic journal "Innovation Science and Technology" has been included in the list of scientific publications recommended for the publication of main scientific results of dissertations for the award of PhD and DSc degrees in economics and technical sciences, in accordance with the Resolution No. 370 of the Presidium of the Higher Attestation Commission of the Republic of Uzbekistan, dated May 8, 2025.

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IMPROVING THE EFFICIENCY OF STATE FINANCIAL SUPPORT FOR FARMS: A RESULTS- AND RISK-ORIENTED APPROACH

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Abstract. The article examines the efficiency of state financial support for farms. It argues that assessing support solely on the basis of the volume of loans, subsidies, and other financial resources provided does not fully reflect its actual economic outcomes. Therefore, it is proposed that state support be evaluated in terms of additional private investment, production and income outcomes, risk reduction, water and energy efficiency, and payment discipline. The study also proposes differentiating farms according to their financial stability, credit history, production risks, water availability, and project cycles, with appropriate financial instruments applied to each group. The results- and risk-oriented model integrates legal safeguards, targeted financing, risk-sharing mechanisms, digital monitoring, and environmental conditionality within a unified support framework.

Keywords: farm, state financial support, subsidy, credit, risk, financial stability, private investment, performance, digital monitoring, environmental efficiency.

Annotatsiya. Maqolada fermer xo'jaliklarini davlat tomonidan moliyaviy qo'llab-quvvatlash samaradorligi o'rganilgan. Davlat ko'magini faqat ajratilgan kreditlar, subsidiyalar va boshqa moliyaviy resurslar hajmi asosida baholash uning haqiqiy iqtisodiy natijalarini to'liq aks ettirmasligi asoslangan. Shu sababli davlat moliyaviy qo'llab-quvvatlashini qo'shimcha xususiy investitsiyalar, ishlab chiqarish va daromad natijalari, risklarning kamayishi, suv va energiya samaradorligi hamda to'lov intizomi bilan bog'liq holda baholash taklif etilgan. Tadqiqotda fermer xo'jaliklarini moliyaviy barqarorligi, kredit tarixi, ishlab chiqarish risklari, suv bilan ta'minlanganlik darajasi va loyiha sikliga ko'ra tabaqalashtirish hamda har bir guruhga mos moliyaviy instrumentlarni qo'llash taklif etiladi. Natija va riskka yo'naltirilgan model huquqiy kafolatlar, maqsadli moliyalashtirish, risklarni taqsimlash mexanizmlari, raqamli monitoring va ekologik shartlilikni yagona qo'llab-quvvatlash tizimida birlashtiradi.

Kalit so'zlar: fermer xo'jaligi, davlat moliyaviy qo'llab-quvvatlashi, subsidiya, kredit, risk, moliyaviy barqarorlik, xususiy investitsiya, natijadorlik, raqamli monitoring, ekologik samaradorlik.

Аннотация. В статье исследуется эффективность государственной финансовой поддержки фермерских хозяйств. Обосновано, что оценка государственной поддержки исключительно по объёму предоставленных кредитов, субсидий и других финансовых ресурсов не в полной мере отражает её фактические экономические результаты. В связи с этим предлагается оценивать государственную финансовую поддержку с учётом привлечения дополнительных частных инвестиций, результатов производства и доходов, снижения рисков, эффективности использования водных и энергетических ресурсов, а также платёжной дисциплины. В исследовании также предлагается дифференцировать фермерские хозяйства по уровню финансовой устойчивости, кредитной истории, производственным рискам, обеспеченности водными ресурсами и циклу реализации проектов с применением соответствующих финансовых инструментов для каждой группы. Модель, ориентированная на результат и риски, объединяет правовые гарантии, целевое финансирование, механизмы распределения рисков, цифровой мониторинг и экологическую обусловленность в рамках единой системы поддержки.

Ключевые слова: фермерское хозяйство, государственная финансовая поддержка, субсидия, кредит, риск, финансовая устойчивость, частные инвестиции, результативность, цифровой мониторинг, экологическая эффективность.

INTRODUCTION

Farms play an important role in agricultural production, employment generation, and the support of regional economic activity. At the same time, the seasonality of agricultural production, exposure to natural and climatic risks, dependence on water resources, and relatively long investment payback periods complicate the maintenance of financial stability.

State support for farms is provided through loans, subsidies, guarantees, insurance, tax incentives, and other financial instruments. However, assessing the effectiveness of this support solely on the basis of the

amount of funds allocated or the number of beneficiaries does not fully capture its actual economic impact. More important is the extent to which state support influences farmers' investment activity, production efficiency, and financial stability.

For this reason, it is appropriate to assess state financial support through outcomes such as growth in private investment, changes in yields and income, risk reduction, water and energy savings, loan repayment performance, and payment discipline.

In addition, farms do not operate under identical financial conditions or face the same levels of risk. Differences in credit history, water availability, production specialization, and project cycles require a differentiated approach to the selection of financial support instruments.

The purpose of this article is to assess the efficiency of state financial support for farms using results- and risk-based criteria and to develop recommendations for aligning support instruments with the financial condition and risk profile of farms.

LITERATURE REVIEW

State financial support for farms is studied in close connection with agricultural finance, credit markets, and institutional economics. Seasonal cash flows, natural risks, and limited collateral in agriculture complicate access to financial resources.

J.E. Stiglitz and A. Weiss demonstrated that, under conditions of information asymmetry, the allocation of financial resources in credit markets may be subject to rationing [5]. This approach helps explain the importance of state guarantees and risk-sharing mechanisms in financing promising farms that lack sufficient credit history or collateral.

O.E. Williamson's institutional approach emphasizes the importance of contracts, accountability, and control mechanisms in financial relationships [6]. In relationships among farmers, banks, insurance organizations, and buyers, contractual clarity and the rational distribution of risks among the parties directly affect financial stability.

FAO studies identify the development of agricultural finance infrastructure and broader access for farmers to diverse financial instruments as important policy priorities [7]. The principles of responsible investment in agriculture also emphasize the efficient use of natural resources and long-term sustainability alongside economic outcomes [8].

Based on the existing approaches, loans, subsidies, guarantees, insurance, and other instruments should be applied in accordance with the farm's financial cycle and risk profile, while their outcomes should be evaluated using a comprehensive set of criteria.

RESEARCH METHODOLOGY

The study employs systems analysis, comparative assessment, and grouping methods. The primary emphasis is placed not only on the volume of state financial support provided to farms but also on the economic and financial outcomes achieved through such support. Artificial intelligence tools were used for up to 10 percent of the process of systematizing research materials, editing the text, and improving the academic presentation.

The efficiency of state financial support is assessed using key criteria such as additional private investment, changes in yields and income, loan repayment performance, water and energy efficiency, and contractual and payment discipline.

When selecting support instruments for farms, their financial stability, credit history, production and yield risks, level of water availability, and project cycles are taken into account. These characteristics are used to classify farms into appropriate groups and identify the financial instruments best suited to each group.

At the final stage, a results- and risk-oriented institutional model is developed that integrates legal safeguards, targeted financing, risk-sharing mechanisms, digital monitoring, and environmental conditionality.

ANALYSIS AND RESULTS

Financial instruments used to provide state support to farms perform different functional roles. Therefore, their effectiveness should not be assessed using a single indicator.

Table 1. Functional Areas of Financial Support Instruments for Farms

Financial instrument	Primary function	Expected outcome
Working capital loan	Financing seasonal expenditures	Continuity of the production cycle
Investment loan and leasing	Renewal of machinery and fixed assets	Modernization and productivity growth
State guarantee	Partial coverage of insufficient collateral	Expanded access to credit
Agricultural insurance	Sharing natural and production risks	Reduction of financial losses
Subsidy	Incentivizing a specific outcome	Lower costs and increased investment activity
Tax incentives	Temporary reduction of the financial burden	Increase in internal financial resources
Grants	Support for innovative and environmental projects	Adoption of new technologies

Source: systematized by the author.

When evaluating state support, the relationship between the function of each financial instrument and its resulting outcomes should be taken into account. For example, the effectiveness of a loan may be assessed through repayment performance and the additional income generated; insurance through the reduction of financial losses; and subsidies for water-saving technologies through the actual volume of water saved.

The analysis shows that applying identical interest rates and standardized conditions to all farms fails to account for differences in their risk profiles. In particular, the production and financial risks faced by a farm located in an area with a stable water supply differ from those of a farm operating under conditions of water scarcity. Therefore, it is appropriate to differentiate interest rates, grace periods, insurance coverage, and guarantee shares according to region, agricultural subsector, and project cycle.

Table 2. Financial Support Instruments Tailored to Farm Conditions

Farm condition	Main problem	Recommended instrument
New or collateral-constrained but promising farm	Limited access to credit	Partial state guarantee, advisory support, concessional financing
Financially stable farm	Need for modernization	Market-based credit, leasing, results-based compensation
Area with high natural and climatic risk	Volatility of yield and income	Agricultural insurance and climate-adapted investment
Water-scarce area	Resource constraints and high production costs	Results-based subsidy for water-saving technologies
Farm with a long investment cycle	Delayed revenue generation	Long-term loan with a grace period

Source: developed by the author.

This segmentation makes it possible to direct public resources toward the actual financial constraints faced by farms. A partial guarantee may be more effective for a new farmer or one with insufficient collateral; market-based credit combined with results-based compensation may be more appropriate for a financially stable farm; while insurance combined with a climate-adapted investment package may be preferable for farms operating in high-risk areas.

The environmental outcomes of state support should also be linked to measurable indicators. A subsidy for water-saving technologies should be assessed not merely by the installation of equipment but by verified water savings based on monitoring data. Likewise, agricultural insurance tariffs and state subsidies for insurance premiums should be differentiated by region, crop type, and level of risk.

Overall, state financial support should shift from a system of universal benefits toward a system tailored to farmers' actual needs, risk levels, and expected outcomes.

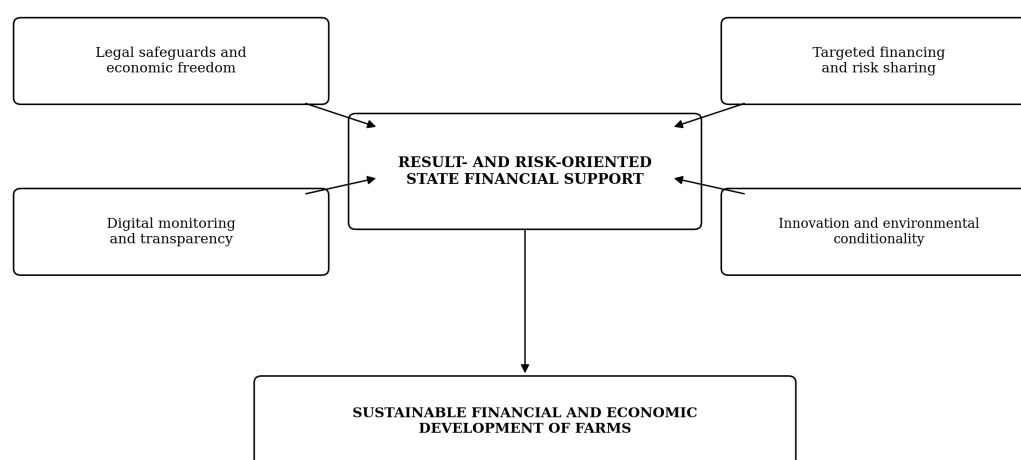
Results- and Risk-Oriented Model of State Financial Support

Under the proposed model, the objective of state support is not to increase the volume of financial resources as such, but rather to remove specific financial constraints faced by farms and generate measurable economic outcomes. The model integrates interrelated blocks covering legal safeguards and economic freedom, targeted financing and risk-sharing mechanisms, digital monitoring and transparency, and innovation and environmental conditionality.

Table 3. Core Blocks of the Results- and Risk-Oriented State Financial Support Model

Model block	Main content	Outcome evaluation criteria
Legal safeguards and economic freedom	Securing rights to land, property, contracts, and decision-making	Contract stability and payment discipline
Targeted financing and risk sharing	Aligning credit, subsidies, guarantees, and insurance with the risk profile	Loan repayment, private investment, reduced losses
Digital monitoring and transparency	Tracking support and outcomes in a unified system	Transparency, oversight, and administrative efficiency
Innovation and environmental conditionality	Linking support to actual technological and environmental outcomes	Water and energy savings, productivity, reduced losses

Source: systematized by the author based on the result-oriented institutional model proposed in the dissertation.

Figure 1. Result- and Risk-Oriented Institutional Model of State Financial Support for Farms

Source: developed by the author.

Under the proposed model, the efficiency of state support is evaluated by comparing additional private investment, innovation outcomes, risk reduction, environmental efficiency, and digital transparency with the associated budgetary and administrative costs. Support instruments that fail to generate measurable results, involve high administrative costs, or produce significant market-distorting effects should be reviewed, while those demonstrating high economic and social returns should be expanded.

It is also advisable to establish a unified registry of state support measures and define in advance the target group, duration, budget ceiling, and performance indicator for each instrument. The digital monitoring system should operate in an integrated manner with land, tax, banking, insurance, and agrometeorological databases, while ensuring mechanisms for protecting farmers' data and appealing administrative decisions.

CONCLUSION AND SUGGESTIONS

The findings show that the efficiency of state financial support for farms cannot be adequately assessed solely on the basis of the volume of loans, subsidies, or other financial resources allocated. The primary criterion should be the changes in farms' financial condition, investment activity, and production efficiency resulting from state support.

Because farms differ in their financial conditions and risk profiles, interest rates and maturities, guarantee shares, insurance terms, and subsidies should be differentiated according to region, production specialization, water availability, and project cycle.

Each type of state support should be linked to predetermined performance indicators. In particular, actual water savings may serve as a core criterion for support provided for water-saving technologies; additional income and production growth for investment loans; and expanded access to credit for state guarantees.

The proposed model integrates legal safeguards, targeted financing, risk-sharing mechanisms, digital monitoring, and environmental conditionality into a unified system. This approach can transform state financial

support from a permanent source of income for farmers into an instrument that strengthens their financial independence and capacity for private investment.

From this perspective, a gradual shift in agricultural financial policy from the principle of “granting benefits” to the principle of “managing results and risks” represents an important direction for improving the efficiency of public fund utilization.

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Proofreader: Zokir ALIBEKOV

Layout and Designer: Oloviddin Sobir ugli

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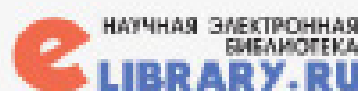
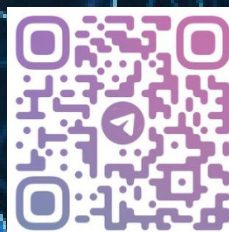
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