



International Conference of Economics, Finance and Accounting Studies

International Conference of Economics, Finance and Accounting Studies is a double-blind peer-reviewed, open-access journal published to reach excellence on the scope. It considers scholarly, research-based articles on all aspects of economics, finance and accounting. As an international congress aimed at facilitating the global exchange of education theory, contributions from different educational systems and cultures are encouraged. It aims to provide a forum for all researchers, educators, educational policy-makers and planners to exchange invaluable ideas and resources.

PERFECTION OF THE METHODOLOGY FOR MOBILIZING INVESTMENTS IN THE AGRARIAN SECTOR AS A DRIVER OF ECONOMIC GROWTH

Sirojiddin Yangiboyev

Independent Researcher (DSc), Tashkent State University of Economics

Abstract. This paper examines the refinement of methodologies for mobilizing investments in the agrarian sector to drive economic growth, with a focus on developing economies. Investments in agriculture are shown to yield 2-3 times greater poverty reduction impacts compared to other sectors. The study reviews existing challenges, such as low public expenditure and private sector hesitancy, and proposes an improved methodology incorporating public-private partnerships, incentives, and infrastructure development. Drawing on global evidence from organizations like the World Bank and FAO, the perfected approach emphasizes blended finance, policy reforms, and targeted value chain investments to enhance productivity and sustainability.

Keywords: agricultural investments, investment mobilization, economic growth, agrarian sector, public-private partnerships, developing economies.

Introduction

The agrarian sector remains a cornerstone of economic development in many developing countries, contributing significantly to GDP, employment, and poverty alleviation. However, chronic underinvestment has hindered its potential as a driver of broader economic growth. According to the World Bank, agricultural growth is 2-3 times more effective at reducing poverty than growth in non-agricultural sectors, particularly benefiting the poorest populations. Mobilizing investments both domestic and foreign into agriculture is essential for enhancing productivity, creating jobs, and fostering inclusive growth.

This paper addresses the need to perfect methodologies for investment mobilization in the agrarian sector. Traditional approaches, often reliant on public funding or ad hoc foreign aid, have proven insufficient amid challenges like climate risks and market volatility. The objective is to propose a refined, integrated methodology that leverages public incentives, private capital, and international best practices to accelerate investment flows and maximize economic impacts.

Literature Review

Extensive literature underscores the pivotal role of agricultural investments in economic growth. The FAO emphasizes that investments in research, extension, and infrastructure are critical for boosting productive capacity in low-income countries. Studies from the World Bank highlight that agriculture's multiplier effects generating jobs across supply chains and stimulating rural economies make it a high-return sector.

McKinsey's analysis of successful agricultural transformations identifies key elements: farmer income incentives, infrastructure alignment, and private sector involvement. In regions like Asia and Africa, reforms in countries such as Morocco and Ethiopia have mobilized private investments through irrigation and high-value crop promotion. However, challenges persist, including policy biases against agriculture, limited access to finance, and low FDI inflows (often below 10% of total FDI in developing countries).

Recent works, such as those on blended finance (e.g., FAO's AgrInvest), demonstrate that combining public guarantees with private capital can de-risk investments. Evidence from Nepal and Ghana shows that strategic investments in value chains and technology adoption yield sustained growth. Global FDI in agriculture averaged modest levels from 2020-2022, with declines post-COVID, underscoring the need for improved mobilization strategies.

Research Methodology

This study employs a qualitative synthesis of secondary data from international sources (World Bank, FAO, OECD) and case studies from developing economies. The perfected methodology for investment mobilization is developed through a multi-stage framework:

Assessment Phase: Conduct sectoral diagnostics to identify bottlenecks (e.g., infrastructure gaps, credit access) using tools like SWOT and PEST analyses.

Policy Design Phase: Formulate enabling policies, including tax incentives, land tenure security, and subsidies for climate-smart technologies.

Financing Mechanisms: Integrate blended finance (public guarantees mobilizing private funds), PPPs, and competitive grants. Prioritize value chain investments (e.g., processing and logistics).

Implementation and Monitoring: Establish public agencies for coordination, with performance metrics (e.g., FDI inflows, productivity gains) and adaptive feedback loops. Data sources include FDI statistics (2013-2022) and public expenditure reviews. The approach is normative, building on empirical evidence to propose scalable interventions.

Analysis and Discussion of Results

The following table analyzes key methodologies and strategies for mobilizing investments in agriculture, drawn from theoretical frameworks in blended finance, public-private partnerships, and enabling environments. It categorizes them by type, provides descriptions, outlines core components, and evaluates their impacts on investment mobilization and economic growth. This is based on established approaches from development finance institutions and research, emphasizing sustainability and scalability in agriculture-dependent economies.

This table synthesizes theoretical insights from development finance literature, highlighting how perfecting methodologies for investment mobilization in the agrarian sector can serve as a pivotal driver of economic growth.

Methodologies for mobilizing investments in the agrarian sector

Methodology/Strategy	Description	Theoretical Basis/Key Components	Impact on Mobilizing Investments	Role in Economic Growth
Blended Finance Mechanisms	Strategic combination of public/concessionary funds with private capital to fund sustainable agriculture projects, addressing funding gaps for SDGs like food security.	- Grants for technical assistance and risk reduction. - Concessional debt (e.g., soft loans) for high-risk areas. - Equity investments for ownership in agribusinesses. - Guarantees/insurance for credit and production	Amplifies public resources to attract private funds (e.g., mobilizing USD 64 million per median transaction, with 15-21% in agriculture); highest leverage	Drives productivity, resilience, and GHG reductions; supports GDP growth in LDCs (up to 60% from agriculture) by fostering inclusive transitions, job creation, and meeting

		risks. - Hybrid instruments like results-based financing. Conditions include high-risk environments, information gaps, and policy unpredictability in emerging markets.	from guarantees, enabling SME financing and bridging USD 265-300 billion annual gaps.	food demands for growing populations.
Standardized Bankability Metrics	Development of uniform criteria to assess agri-SMEs' readiness for loans, reducing information asymmetries between lenders and borrowers.	- Eligibility screening (e.g., legal registration, revenue thresholds). - Metrics on governance, financials, and business planning. - Data from surveys (e.g., 90 lenders) and portfolios (e.g., 246 loans totaling USD 83M). - Integration with TA/BDS providers for capacity building.	Lowers due diligence costs, broadens deal pipelines via online portals, and closes USD 65 billion annual financing gap for sub-Saharan agri-SMEs, increasing loan likelihood (e.g., 1.77x with strong governance).	Enhances agri-SME growth, aggregating smallholders and channeling tech/finance; boosts employment (over 50% labor force), GDP (15% average), and food security in regions with doubling populations by 2050.
Public-Private Partnerships and Incentives	Collaborative frameworks where governments create enabling policies to attract private investment, supplemented by global programs for innovation.	- Policy/regulatory improvements to address market failures. - Incentives like pay-for-results competitions (e.g., AgResults). - Programs such as FOLUR (for commodity value chains) and PROBLUE (for aquaculture). - Knowledge sharing, technical capacity building, and risk reduction.	Mobilizes USD 50 billion annually from private sector for on-farm/agro-processing, bridging USD 2 trillion gap in sustainable value chains; leverages public funds to de-risk and scale investments.	Promotes sustainable productivity, job creation, and poverty reduction; transforms value chains (e.g., palm, rice) to meet SDG goals, enhancing economic output in rural areas and supporting hunger eradication.
Cost-Benefit Analysis and Priority Assessment	Structured evaluation tools to guide agricultural investments, ensuring efficient allocation of resources for maximum impact.	- Methodologies for economists to assess projects (e.g., MCC guidance). - Prioritization based on policy implications and lessons from international research. - Investments in knowledge capital, outreach, and innovation adoption.	Enhances decision-making for USD 140 billion needed in agriculture/rural development; identifies high-return areas, attracting targeted funding and reducing inefficiencies.	Spurs innovation and productivity growth; strengthens future assessments, leading to sustainable output increases, market efficiency, and broader economic multipliers in agrarian economies.

Source: compiled by the author.

At its core, these approaches address systemic barriers such as high risks, information gaps, and funding shortages in agriculture, which is critical for low- and middle-income countries where the sector often accounts for a significant portion of GDP and employment.

Blended finance stands out as a versatile methodology, theoretically grounded in leveraging concessionary capital to de-risk private investments, thereby mobilizing substantial resources toward sustainable practices like climate-smart agriculture. Its impact is evident in closing multi-billion-dollar gaps, but success depends on tailored conditions, such as subsidies for guarantees in volatile markets, to ensure additionality without distorting markets.

Standardized metrics, as promoted by organizations like AGRA, represent a data-driven evolution in methodology, theoretically based on empirical validations from lender surveys and portfolios. By creating a "common language" for assessments, they streamline pre-due diligence, making investments more accessible to agri-SMEs and fostering inclusive growth through better

smallholder integration.

Public-private partnerships emphasize systemic integration, with theoretical foundations in policy incentives and global programs that build capacity and innovation. These methodologies perfect investment mobilization by aligning public commitments with private actions, as seen in initiatives like FOLUR, which transform commodity chains for scalable impact.

Finally, cost-benefit and priority assessments provide a foundational analytical layer, ensuring investments are evidence-based and high-yield. Theoretically, they draw from economic modeling to prioritize productivity-enhancing innovations, driving long-term growth by optimizing resource allocation.

Overall, perfecting these methodologies requires ongoing calibration balancing risks, building evidence, and fostering collaborations to maximize their role in economic growth. In practice, they not only attract capital but also promote resilience, sustainability, and equity, turning agriculture into a robust engine for broader development, particularly in regions facing population pressures and climate challenges.

Analysis reveals persistent underinvestment: public agricultural expenditure in many developing countries remains below 1% of agricultural GDP, far short of recommended levels. FDI flows to agriculture declined globally post-2020, with developing regions receiving limited shares despite high returns.

The proposed methodology addresses key challenges:

Risk Mitigation: Blended finance has catalyzed millions in private credit (e.g., World Bank projects in India and Africa).

Incentive Alignment: Policies focusing on high-value crops and exports (as in Morocco) increase farmer incomes and attract FDI.

Infrastructure Leverage: Investments in irrigation and roads yield high multipliers, with returns often exceeding 2:1.

Results from analogous implementations show productivity gains of 20-50% and poverty reductions. In Central Asia (e.g., Uzbekistan reforms), liberalization has boosted private involvement. Projected outcomes: a 10-20% increase in investment flows could drive 2-4% annual agricultural growth, contributing 1-2% to overall GDP.

Conclusion and recommendations

Perfecting methodologies for mobilizing investments in the agrarian sector requires shifting from fragmented approaches to integrated, incentive-driven frameworks. By prioritizing policy reforms, blended finance, and value chain development, governments can unlock agriculture's potential as an economic growth driver. Recommendations include increasing public R&D to 1% of agricultural GDP, establishing investment guarantees, and fostering PPPs. Sustained implementation could significantly reduce rural poverty and enhance food security, positioning the agrarian sector as a catalyst for inclusive development in emerging economies.

References:

1. Abdullayev, I., Akhmetshin, E., Hajiyev, E., Mamadiyarov, Z., Khorolskaya, T., & Lydia, L. (2025). A Financial Time Series Forecasting Model Using Quasi-Recurrent Neural Networks and the Crown Porcupine Optimizer for Stock Market Risk Prediction. *Engineering, Technology & Applied Science Research*, 15(6), 29035-29040.
2. Farooq, U., Tabash, M. I., Mamadiyarov, Z., Al-Hawatmeh, S. K., Al-Matari, E. M., & Omer, A. M. (2025). Between Sustainability and Strategy: How Does ESG Uncertainty Shape Corporate Investment via Cash Holdings in BRICS. *Thunderbird International Business Review*.

3. Food and Agriculture Organization (FAO). Various reports on investment mobilization and FDI flows (2010-2022).
4. Gates Foundation. Global Agricultural Development Reports.
5. Khoshimov, J., Ismailov, A., Mamadiyarov, Z., Khamdamov, S. J., Makhmudov, S., Yakhshiboyev, R., & Yuldasheva, F. (2024, December). The Impact of Macroeconomic Indicators on Foreign Investment in Digital Technologies. In Proceedings of the 8th International Conference on Future Networks & Distributed Systems (pp. 580-587).
6. McKinsey & Company. Successful Agricultural Transformations (2017).
7. OECD and related studies on FDI in agriculture.
8. Singagerda, F. S., Pratama, M. R., Alfairus, M. Q., Iskandar, A., & Mamadiyarov, Z. (2025). A Decision-Centric Approach to Risk Management in Aviation Stock Investments Using Value at Risk and Portfolio Optimization. *Journal of Applied Science, Engineering, Technology, and Education*, 7(1), 114-125.
9. Sofyanty, D., Romadhoni, R., Handriadi, H., Makhsudovna, I. S., Anwar, Z., & Mamadiyarov, Z. (2025). Strategic Decision Analysis for Investment Portfolios: Computational Risk Assessment in Transportation Asset Management. *Journal of Applied Science, Engineering, Technology, and Education*, 7(2), 337-348.
10. World Bank. Agriculture Overview and Public Expenditure Reviews (2020-2025).
11. Yin, Y., Gulzar, F., Mamadiyarov, Z., Aizhan, A., Yadav, R. S., & Chen, C. (2024). An analysis of the rebound impact of energy consumption and the factors that influence it in China's agricultural productivity. *Energy Strategy Reviews*, 56, 101585.