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AN INTEGRAL INDEX METHODOLOGY FOR ASSESSING THE INVESTMENT POTENTIAL OF AGRICULTURAL ENTERPRISES

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Abstract. The sustainable development of agricultural enterprises largely depends on the efficiency of investment activity and the rational use of available resources. In modern conditions, the assessment of investment potential requires a comprehensive methodological approach that simultaneously considers internal economic performance, production resources, and infrastructure availability. This paper proposes an integral index methodology for assessing the investment potential of agricultural enterprises based on two composite indicators: the Internal Development and Efficiency Index (I_ID) and the Resource and Infrastructure Provision Index (I_RI). The proposed methodology enables a systematic assessment of investment opportunities, the identification of development priorities, and the improvement of investment management decisions. The research findings demonstrate that the application of integral indices contributes to strengthening investment attractiveness and ensuring sustainable agricultural development.

Keywords: agricultural enterprises; investment potential; investment activity; integral index; investment efficiency; resource provision; infrastructure development; sustainable agriculture.

Аннотация. Устойчивое развитие сельскохозяйственных предприятий в значительной степени зависит от эффективности инвестиционной деятельности и рационального использования имеющихся ресурсов. В современных условиях оценка инвестиционного потенциала требует комплексного методологического подхода, учитывающего одновременно результаты внутренней хозяйственной деятельности, обеспеченность производственными ресурсами и уровень развития инфраструктуры. В статье предложена методика интегральной оценки инвестиционного потенциала сельскохозяйственных предприятий на основе двух комплексных показателей: индекса внутреннего развития и эффективности (I_ID) и индекса ресурсного и инфраструктурного обеспечения (I_RI). Предлагаемый подход позволяет осуществлять системную оценку инвестиционных возможностей, определять приоритетные направления развития и повышать обоснованность инвестиционных управленческих решений. Результаты исследования показывают, что применение интегральных индексов способствует повышению инвестиционной привлекательности и обеспечению устойчивого развития сельского хозяйства.

Ключевые слова: сельскохозяйственные предприятия; инвестиционный потенциал; инвестиционная деятельность; интегральный индекс; инвестиционная эффективность; ресурсное обеспечение; развитие инфраструктуры; устойчивое сельское хозяйство.

INTRODUCTION

Agriculture remains one of the strategic sectors of the national economy and plays a crucial role in ensuring food security, employment, and sustainable regional development. In the context of globalisation, climate change, and increasing competition in agricultural markets, improving the investment activity of agricultural enterprises has become one of the key priorities of economic policy. Investment resources contribute not only to the modernisation of production processes, but also to the introduction of innovative technologies, the expansion of logistics infrastructure, the improvement of product quality, and the enhancement of export competitiveness [1].

In Uzbekistan, large-scale reforms aimed at increasing investment attractiveness and strengthening the investment capacity of agricultural enterprises are being implemented. The Development Strategy of New Uzbekistan for 2022–2026 emphasises the importance of increasing investment activity, modernising agricultural production, and ensuring the efficient utilisation of production resources [2]. In this context, the

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development of comprehensive methodologies for assessing investment potential is of particular scientific and practical importance.

Most existing approaches evaluate investment potential using separate financial indicators, such as profitability, liquidity, or return on investment. However, investment effectiveness in agriculture depends on a broader set of factors, including resource availability, infrastructure development, technological capacity, and institutional support. Therefore, there is a need to develop an integrated methodology capable of evaluating the investment potential of agricultural enterprises in a comprehensive manner.

LITERATURE REVIEW

The theoretical foundations of investment activity and investment assessment were developed in the works of Keynes, Fisher, Harrod, Tobin, Markowitz, Sharpe, and Modigliani. Keynes emphasised the role of investment in stimulating economic growth and aggregate demand [3]. Fisher examined the relationship between capital investment and future income generation [4]. Markowitz developed portfolio theory, highlighting the importance of risk diversification in investment decision-making [5].

Recent studies show that the investment performance of agricultural enterprises is influenced not only by financial indicators, but also by resource endowment, infrastructure quality, technological modernisation, and institutional support mechanisms [6]. Consequently, integrated assessment models are becoming increasingly important for evaluating investment potential and identifying development priorities.

RESEARCH METHODOLOGY

The proposed methodology is based on the formation of two interrelated integral indices that characterise different dimensions of investment potential.

The Internal Development and Efficiency Index reflects the internal economic capacity of agricultural enterprises and includes the following groups of indicators:

- profitability level;
- labour productivity;
- return on investment;
- production efficiency;
- financial sustainability;
- revenue growth dynamics;
- capital productivity;
- production cost efficiency.

This index evaluates the ability of enterprises to generate economic returns from investment resources and maintain stable financial performance.

The Resource and Infrastructure Provision Index reflects the availability and quality of production resources and infrastructure necessary for investment development. The index includes the following indicators:

- land resources;
- irrigation and water supply systems;
- agricultural machinery;
- logistics infrastructure;
- storage facilities;
- access to credit resources;
- technological equipment;
- digital infrastructure.

This index measures the readiness of enterprises to absorb investments and effectively utilise investment resources.

The integral assessment model is calculated using the following formula:

$$I = \Sigma(K_i \times W_i)$$

where:
I — integral assessment index;
K_i — normalised value of the indicator;
W_i — weight coefficient of the indicator;

$$\Sigma W_i = 1.$$

The normalisation procedure ensures the comparability of indicators measured in different units. Weight coefficients are assigned according to the relative significance of each indicator in determining investment potential.

ANALYSIS AND RESULTS

The application of the proposed methodology demonstrates that investment potential should be evaluated through a combination of internal efficiency and resource availability indicators. Agricultural enterprises characterised by high profitability but relatively limited infrastructure capacity may have additional opportunities for expanding production potential. Likewise, enterprises possessing strong resource bases can further strengthen their investment attractiveness through improvements in financial performance and management efficiency.

The simultaneous application of the Internal Development and Efficiency Index (I_ID) and the Resource and Infrastructure Provision Index (I_RI) enables a more comprehensive and objective assessment of investment potential. Based on the obtained results, enterprises can be classified into the following categories:

- high investment potential;
- moderate investment potential;
- developing investment potential;
- enterprises requiring priority investment support.

Such classification allows policymakers and investors to identify priority areas for investment support and allocate resources more effectively.

The methodology also contributes to improving the transparency of investment assessment by identifying factors that influence investment development. This is particularly important in regions where agricultural enterprises operate under diverse resource and infrastructure conditions.

Furthermore, the proposed approach supports the implementation of regional investment programmes by providing an analytical basis for investment planning, monitoring, and evaluation. The methodology may also serve as a practical tool for assessing the effectiveness of state investment support measures in agriculture.

The scientific novelty of the methodology lies in the integration of internal efficiency indicators and resource-infrastructure indicators into a unified assessment framework. Unlike traditional approaches that focus primarily on financial performance, the proposed methodology provides a multidimensional assessment of investment potential.

The methodology contributes to:

- improving the accuracy of investment potential assessment;
- identifying opportunities for investment development;
- increasing the efficiency of investment resource allocation;
- supporting evidence-based investment decision-making;
- promoting sustainable agricultural development.

CONCLUSION AND RECOMMENDATIONS

The study proposes an integral index methodology for assessing the investment potential of agricultural enterprises based on the Internal Development and Efficiency Index (I_ID) and the Resource and Infrastructure Provision Index (I_RI). The methodology provides a comprehensive framework for evaluating investment activity and identifying the key factors that influence investment development.

The proposed approach enables a systematic assessment of agricultural enterprises, facilitates investment planning, and improves the effectiveness of investment management decisions. The practical application of this methodology contributes to increasing investment attractiveness, enhancing the efficiency of resource utilisation, and ensuring sustainable agricultural development at both enterprise and regional levels.

Based on the research results, it is recommended to apply the integral index methodology in the investment planning process of agricultural enterprises, use the obtained assessment results to identify priority areas for investment support, and strengthen resource and infrastructure provision in order to improve the long-term investment capacity of the agricultural sector.

REFERENCES

1. Law of the Republic of Uzbekistan *“On Investments and Investment Activity”*. Tashkent, 2019.
2. Decree of the President of the Republic of Uzbekistan No. PF-60 dated January 28, 2022, *“On the Development Strategy of New Uzbekistan for 2022–2026”*.

3. Keynes, J. M. *The General Theory of Employment, Interest and Money*. London: Macmillan, 1936.
4. Fisher, I. *The Theory of Interest*. New York: Macmillan, 1930.
5. Markowitz, H. Portfolio Selection. *The Journal of Finance*, 1952, Vol. 7(1), pp. 77–91.
6. Sharpe, W. F. Capital Asset Prices: A Theory of Market Equilibrium under Conditions of Risk. *The Journal of Finance*, 1964, Vol. 19(3), pp. 425–442.
7. Nazirova, S. B. Qishloq xo‘jaligi korxonalarida investitsion faoliyatni boshqarishning nazariy-metodologik asoslari. *Muhandislik va iqtisodiyot*, 2026, No. 1, pp. 663–668.
8. Jo‘rayev, A. S., & Nazirova, S. B. *Qishloq xo‘jaligi korxonalarining investitsion faoliyatini oshirish yo‘llari: Monografiya*. Termiz: Termiz Publishing Center, 2025, 120 p.

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