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Management of Personnel Competence in the Development of Agricultural Clusters: From Theory to Practice

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Annotation: This article comprehensively analyzes the modern system of personnel potential management in the development of agro-clusters in Uzbekistan. Based on Presidential decrees, the priority directions for human capital development in the agricultural sector are highlighted.

Keywords: agro-cluster, personnel potential, human capital, digital management, innovative system, HR technologies.

Introduction

In order to modernize the agricultural sector in the Republic of Uzbekistan, increase production efficiency and expand export potential, the introduction of an agrocluster system has become a priority area of state policy[1]. In particular, the Strategy for the Development of Agriculture for 2020–2030, adopted by Shavkat Mirziyoyev, set the tasks of developing the agricultural sector on an innovative basis, effectively using resources, and strengthening human capital [2]. The agrocluster model is an economic mechanism that combines processes from raw material production to the sale of finished products into a single integrated system. The effectiveness of this system largely depends on the level of human resources[4]. In the modern economy, human capital is recognized as the main strategic resource. Therefore, the formation of a modern, innovative and digital system for managing human resources in agroclusters is one of the urgent issues [5].

Methodology

1.Theoretical basis of human resource management.

The theory of human capital was formed in the second half of the 20th century and allowed for a deeper explanation of the factors of economic growth[6]. Theodore Schultz scientifically substantiated that investments in human capital (education, health care, professional development) increase economic efficiency. Gary Becker, on the other hand, assessed human capital as an economic resource and extensively covered its investment nature [7].

- Human resource potential consists of the following structural elements:
- Professional knowledge and skills;
- Innovative thinking;
- Digital literacy;
- Management competencies;
- Organizational culture and responsibility[8].

Results and Discussion

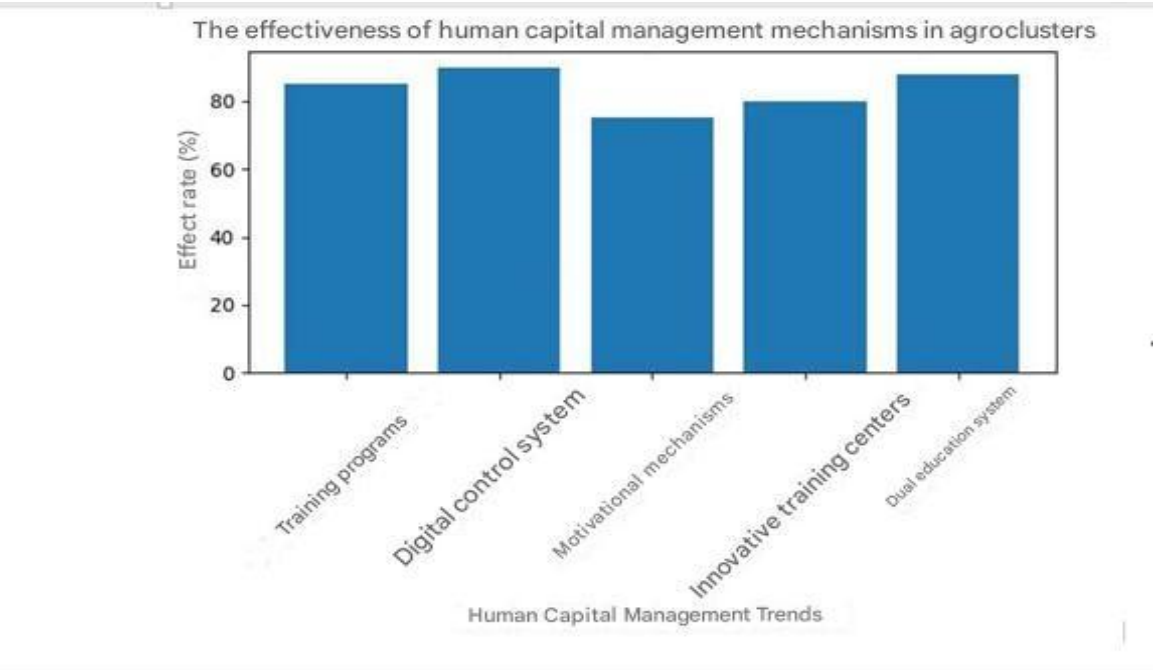
In the agrocluster system, these components are important in increasing production efficiency, accelerating technological modernization, and ensuring competitiveness [9].

2. Institutional foundations for the development of agroclusters.

The regulatory and legal framework for the Picture 1. development of agroclusters is being strengthened in our country [10]. The agricultural development strategy identifies:

- Effective use of land resources;
- Introduction of innovations;
- Widespread use of digital technologies;
- Modernization of the personnel training system

as a priority task [11]



Picture 1. The effectiveness of human capital management mechanisms in agroclusters.

Agroclusters operate in cotton and textile, fruit and vegetable growing, livestock breeding and other areas. In this process, the issue of training qualified personnel and their effective management remains relevant [12]

3. Existing problems.

The following problems are observed in managing human resources in agroclusters:

1. Lack of qualified agronomists and managers;

2. Low skills in the use of digital technologies;

3. Weak integration between science and production;

4. Insufficiently formed motivational mechanisms;

5. Regional personnel imbalance [13].

These problems negatively affect the efficiency of agroclusters.

4. Modern management system.

Digital HR platforms Digital management systems: Electronic personnel database; KPI-based assessment; Online monitoring; Allows Table 1. for forecasting based on artificial intelligence [14].

Economic Efficiency Analysis

Table 1. Economic impact of innovation mechanisms.

№	Indicator	Traditional model	Innovative model	Growth (%)
1	Labor productivity	100	135	+35%
2	Cost effectiveness	100	120	+20%
3	Export volume	100	150	+50%
4	Personnel stability	100	140	+40%

Competency-based management

Developing a competency model for each position and implementing an assessment system increases efficiency.

Dual education system: Cooperation between higher education institutions and agroclusters allows for the integration of theory and practice.

Innovative training centers: Continuous professional development courses and a system of international exchange of experience strengthen human resources.

Strategic Directions

- Digital transformation;
- Introduction of international experience;
- Principles of sustainable development;
- Support for young professionals;
- Research integration.

Proposal:

1. Create a single national agro-HR platform;

- 2. Increase the share of practical education in agricultural universities;
- 3. Form a regional personnel reserve;
- 4. Introduce mandatory training courses in digital agrotechnologies;
- 5. Improve the mechanism for commercializing scientific developments [15].

Conclusion

In the context of the effective development of agroclusters, the formation of a modern system of human resource management is one of the priority strategic directions. Globalization, digital transformation and deepening market relations in the agricultural sector require a radical renewal not only of the material and technical base, but also of human capital. In this regard, the process of human resource management in agroclusters should move from a traditional administrative approach to a competency-based, innovative and performance-oriented system. The modern management model involves organizing the processes of planning, selecting, placing, training, retraining and improving the skills of personnel, assessing their labor efficiency and motivating them on a single strategic platform. In particular, the introduction of digital HR technologies, electronic management systems, KPI and assessment mechanisms based on the competency model will help increase labor productivity in agroclusters, facilitate rapid and reasonable adoption of management decisions.

Also, the development of human resources in agroclusters should be based on the principle of continuous education. By creating effective integration mechanisms between higher education institutions, research institutes and production enterprises, the opportunity to train specialists with modern knowledge and skills will expand. This will accelerate the pace of innovation, create the basis for the implementation of advanced agrotechnologies in practice. In addition, improving the motivation system, harmonizing material and non-material incentive mechanisms, developing social protection and corporate culture will form a stable working environment in agroclusters. Increasing the initiative, responsibility and innovative activity of employees has a positive impact on overall production efficiency. In general, the introduction of a modern system of human resource management in the process of developing agroclusters is an important factor in increasing economic efficiency, expanding export potential and strengthening the competitiveness of the agricultural sector. A strategic approach focused on human capital ensures the long-term and sustainable development of agroclusters.

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