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# **Vocational Training in Agriculture – The Key to a Sustainable Agricultural Sector**

Remus GHERMAN1, Mihaela IANCU1, Anka Roxana PASCARIU1, Camelia MĂNESCU1, Ioan BRAD, Tabita ADAMOV 1, Tiberiu IANCU1 1 University of Life Sciences, Faculty of Management and Rural Tourism

**Abstract**: A sustainable agricultural sector depends not only on technology and resources but also on the knowledge and skills of the people working within it. Our research explores the current state of vocational education in agriculture, identifying gaps in training, access, and curriculum relevance. It analyzes the role of agricultural schools, on-the-job training, and lifelong learning programs in building a capable and resilient workforce.

### Introduction

Vocational training plays a crucial role in equipping agricultural workers with the competencies needed to adapt to modern challenges such as climate change, digitalization, and evolving market demands. The study looks at the importance of public policy and private sector involvement in promoting educational initiatives tailored to the real needs of the agricultural sector. Through a mix of case studies and statistical analysis, the paper aims to highlight how strategic investment in human capital through vocational training can contribute to productivity, sustainability, and long-term food security.

#### • Results and discussions

The results clearly demonstrate that vocational training is a critical enabler of sustainability and innovation in the agricultural sector. Despite progress in some regions, major challenges remain in curriculum modernization, equitable access, and policy alignment.

The research revealed several key insights about the current state and effectiveness of vocational training in agriculture: geographic disparities were evident: rural and remote areas had significantly lower access due to infrastructure and funding limitations; programs integrating hands-on experience and digital tools (e.g., smart irrigation, agri-drones) showed higher learner satisfaction and improved learning outcomes.

## Material and method

This study employs a mixed-methods research design to examine the state and effectiveness of vocational training in agriculture. The methodology includes qualitative case studies, quantitative analysis of training program data, and policy review.

## Conclusions

Strategic investment in vocational education—particularly through inclusive, hands-on, and technology-oriented programs—can substantially enhance the capabilities of the agricultural workforce. It is vital that public policies prioritize not only funding but also the integration of



