



Practice-Integrated Study Programs in Agriculture Sciences for A Better School to Work Transition in Albania and Kosovo: A Stakeholders Overview

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Abstract

The quality of study programs in higher education plays a crucial role in helping graduates transition from university to the labor market. There is a risk of losing qualified human resources in a knowledge-based society and economy if the education provided does not meet the needs of the labor market. This has led governments and higher education institutions in Albania and Kosovo to reconsider their academic offerings and study program curriculums to better integrate graduates into the labor market. This study examines how stakeholders, both private and public institutions, perceive the practical orientation of higher education study programs in agricultural sciences. A structured questionnaire with closed-ended questions using a Likert rating scale was used to analyze the views and expectations of employees in the public and private sectors about the practical skills that graduates in agricultural sciences should possess. The total number of analyzed questionnaires was 294. Employers in the labor market consider work-based placements, continuous training, and international training of students as "very important" to meet the demand for skills in the labor market. More than 91% of public institution executives stressed the importance of "practice" in reducing the practical skills gap for students, compared to 78% of private sector employees. The findings revealed that public employees are more aware than private sector employers that close cooperation between HEIs and work-life partners is crucial for producing a "university product" that meets future society's needs.

Keywords: competencies, work-based placement, labor market, stakeholders, Higher Education Institution

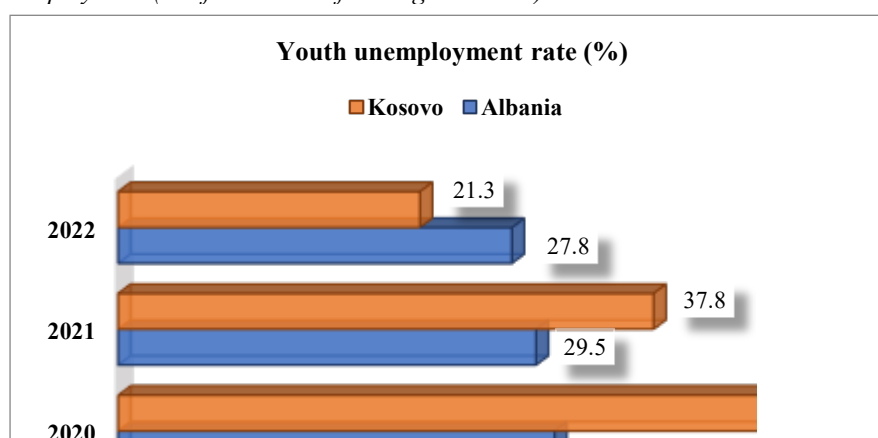
1. Introduction

To maximize its potential, all sectors of the economy must have a skilled and productive workforce. One of the contexts for developing human capital is through formal education, acquiring specific skills on the job, or firm-based learning (OECD, 2001). Higher education institutions (HEI) in Albania strive to effectively link study programs with the professional qualifications required in the labor market. Consequently, one of the main challenges is to educate a high-quality "university product", graduates with a high level of theoretical and practical skills that are competitive in the labor market and suitable for employment in various subsectors of agriculture and food. Although young people today are the most educated generation ever, both industrialized and developing countries are failing to increase employment opportunities for them due to issues related to the general state of the economy but also as a result of the mismatches between the skills young people possess and the skills required by the labor market (International Labor Organization, 2011). Accordingly, Shi & Wang (2021) conclude that horizontal skill mismatches influence employers' hiring decisions, while Rathelot et al. (2023) define that the mismatch is an important determinant of productivity and wages.

Due to global population growth prospects, the agriculture sector requires a skilled workforce to produce sustainably enough food to meet the increasing demand. In this line, Bennel (2010) defines that students in agriculture are expected to be the next generation of agro-food scientists, i.e., in all the fields of agricultural and food sciences. However, there is a concerning trend of declining interest among students in studying agricultural sciences.

Despite the attempts of the Albanian government to reform the education system during the last decade, a large number of students could not master the appropriate competencies needed after graduation (Maghnouj et al., 2020). The employment rates of young adults are influenced to a great extent by their educational attainment levels. The data provided by the "Labor Force Statistics Database" (LFS) indicate a high unemployment rate among youth in Albania and Kosovo (Figure 1).

Figure 1: Youth unemployment (% of total labor force ages 15 – 24)



Source: International Labor Organization. "Labor Force Statistics Database (LFS)"

In 2022, the unemployment rate for young people aged 15–24 was 27.8% in Albania and 21.3% in Kosovo, (Figure 1). The data indicate a significant decrease in the number of unemployed young people in Kosovo, while in Albania, the decrease has been more gradual. However, compared to other countries in the region, the unemployment rate among young people remains one of the highest. Related to these issues, the World Bank indicators on enterprise surveys (Enterprise Survey Data, <https://www.enterprisesurveys.org/>), reinforce the fact that enterprises in the Western Balkans, particularly Albania and Kosovo, face

difficulties finding workers and professionals with the appropriate mix of skills. Accordingly, the World Bank (2019a) argues that the majority of recruiting firms in Kosovo find hiring new workers challenging due to a lack of skills and work experience, while the skills gaps are rooted in issues of quality and equity within the educational system. Moreover, the data provided by the European Training Foundation for Albania, highlight that the educational and training systems suffer from low educational attainment and performance, leading to an unsuitable qualified labor force, skills shortages, and soaring youth unemployment (ETF, 2021).

Table 1: Key obstacles experienced by private sector firms in Balkan countries

Balkan countries	% of businesses pointing out the lack of educated workers	The proportion of workers offered formal training (in %)
Albania	24.8	46.2
North Macedonia	19	39
Serbia	20.3	38.3
Bosnia	24.3	37.9
Kosovo	44.2	20.4
Montenegro	16.3	15.8

Source: The World Bank "Enterprise Surveys" (<http://www.enterprisesurveys.org>)

According to the indicators of Table 1, inadequate education is considered a major obstacle toward innovation and success for enterprises in Albania and Kosovo, (The World Bank "Enterprise Surveys 2019").

Given this background, the research investigates the needs that are required by the private sector and public institutions in agriculture and food in terms of the technical and practical skills of graduates for increasing the scientific and professional quality of students and therefore their employment opportunities. Moreover, the study provides valuable cognition on the level of cooperation between higher education institutions and employers and contributes to the scarce literature on education and skills mismatch in the labor market for university graduates.

2. Methodology

2.1 Research Method

The applied research method in this study is a combination of qualitative and quantitative research. The qualitative instruments used in this study consisted of a participatory approach that emerged through the engagement of academic staff from six partner universities as part of the DualAFS project consortium (2 Albanian universities, 2 universities from Kosovo, Germany, and Finland), work-life partners from the private sector, and representatives from public institutions in several workshops organized in each partner university. Through the participatory approach, the main obstacles that influence the quality of study programs in agricultural sciences were addressed. Jagosh et al., (2012), identify this approach as appropriate for prioritizing co-constructing research through partnerships between researchers and stakeholders, community members, or others with insider knowledge and lived expertise. During the meetings, a wide range of ideas and observations from all participants were assembled regarding the integration of work-based placement in higher education programs in agricultural sciences. Since dual curricula (in-company training as part of university studies) are quite unknown in Albania and Kosovo, the aim was to explore the potential for introducing this approach as part of the higher education system.

After this process, to assess the mismatch between the skills of study programs in HEIs and the required skills from work-life partners, structured questionnaires were created and distributed to stakeholders of the agri-food labor market (employers of the private and public sector) in Albania and Kosovo. The data obtained from respondents was analyzed through quantitative testing.

2.2 Statistical analysis and sample

In total were considered valuable 294 questionnaires, distributed to private and public enterprises that operate in the agriculture sector and subsectors in Albania and Kosovo. The sample of distributed questionnaires according to the target groups is as follows:

- Private sector target group (150 responses)
- Public sector target group (144 responses)

The data obtained from this survey sample were statistically analyzed using the Webropol package and the SPSS program. For the analysis of variance, two main fixed factors were used, namely the factor “country” (Albania and Kosovo) and the factor “labor market stakeholders” (enterprises of the private and public sector). The statistical parameters were calculated, and subsequently, a variance analysis was conducted. The effects were assessed for each target group and quantified based on various parameters examined in the survey.

3. Results

3.1 Main Obstacles to Implementing Integrated Study Programs

The agriculture sector in Albania and Kosovo faces challenges such as the structure of farms, low levels of investments, lack of state support, and outdated technology. One of the most important current and future challenges for both countries is to ensure a sufficient level of knowledge and well-trained human resources. Additionally, higher education teaching methods rely on traditional forms of instruction and outdated curricula, providing few opportunities for practical studies.

The main question that universities, enterprises, and government policies should address is: What are the practical skills that graduates in agricultural sciences should possess to be successful in the labor market and contribute to the country's wellness? The answer to this question relies on the curriculum design and revision in HEIs, proclaiming that the successful alignment of higher education with workforce needs can be reached based on careful actions by educational institutions to embed skills within instructional programs (Yorke & Harvey, 2005).

Through a detailed literature review and workshops organized in the framework of the DualAFS project with representatives from HEIs in Albania, Kosovo, Germany, and Finland, as well as enterprises and public institutions operating in the agriculture sector, the set of obstacles to be addressed by universities, policymakers, and enterprises in Albania and Kosovo for raising the practical skills of young graduates was identified.

Table 2: Identified obstacles through multi-actor approach for practice integrated curriculums

Higher Education Institutions	State	Private & public enterprises
Theoretical orientation and fragile practical training of existing curriculums (lack of work-based placement & internships)	Dual system in Vocational Schools and HEI-s not yet a real policy priority	Low level of awareness of the benefits of students' in-company training
Absence of working units for the provision of life-long learning & extension services	Lack of framework regulations governing practical training of students	Not willing to support also financially work-based placement of students.
Prevailing traditional teaching methods (lack of project involvement, group work & discussions)	Lack of incentives for firms/companies supporting student internships	Absence of trained and dedicated staff for training of students
Peripheral role of career centers	Passive labor market programs	
Low level of cooperation with private and public institutions		

Through the multi-actor approach, representatives from HEIs in the respective countries, company representatives operating in the agriculture sector, and employers of public institutions identified the need to enhance the practical skills of graduates through joint efforts between HEIs, government institutions, and employers (table 2).

In addition to all of these problems, employers in the private sector continue to lack a thorough understanding of the work-based learning approach, and specific government policies do not endorse it. Parallely, the European Commission (2016) underlines the limited opportunities for students to engage in internships or relevant work experience during their studies, the lack of cooperation between HEIs and employers, and the lack of assistance from university Career Centers and National Employment Services as factors that limit the chances of graduates finding a job.

3.2 Assessment of Practical Skills and Cooperation Level of Private and Public Stakeholders

Despite the growing demand for practical competencies, employers often find that graduates are not adequately prepared for the labor market, leading to challenges in recruitment and productivity.

Due to globalization and demographic trends observed in Albania and Kosovo, companies are reshaping the need for new skills, putting more emphasis on the green economy and practical skills. This has raised questions related to the effectiveness of the education system in Albania and Kosovo. Related to these challenges, the OECD (2016) emphasizes that persistent skill shortages have led to substantial costs for individuals, firms, and society, which can be reduced through a better assessment of changing skill needs. Likewise, Novakova (2020) and Viganego et al., (2022), highlight that without skill development, there is a risk of skill obsolescence and an emerging gap, which can arise as a result of education and training issues. To identify the needs in terms of the practical skills that young graduates should possess, employers from the private and public sectors were asked to provide their opinion on the relative importance of practical skills gained during the study period, (Table 3).

Table 3: Assessment of practical skills by stakeholders of private and public sector

Observations from private enterprises (n = 142)							
Skills	None	Low	Moderate	High	Very high	Mean	Median
In-company training during studies	12.2%	10.1%	23.7%	42.5%	11.5%	3.3	4
Studies, practical training abroad	9.2%	20.4%	24.6%	37.3%	8.5%	3.2	3
Continuous training (LLL)	5%	16.6%	19.4%	48.2%	10.8%	3.4	4
Observations from public enterprises (n = 140)							
In-company training during studies	2.3%	6.2%	21.7%	52%	17.8%	3.8	4
Studies, practical training abroad	4.7%	1.6%	19.5%	48.4%	25.8%	3.9	4
Continuous training (LLL)	0.8%	3.9%	22.1%	56.7%	16.5%	3.8	4

The results of the survey indicated that managers from private companies and executives from public institutions articulate the significance of enhancing students' practical skills through work-based placement as an important component for preparing young graduates with the hands-on skills relevant to the job market in Albania and Kosovo. Even more assertive appear the executives of public institutions, with more than 91% highlighting "practice" as a priority for reducing the existing gap in practical skills, as indicated by the mean values (3.8 – 3.9). Furthermore, the responses received from the stakeholders underline continuous training and training abroad for students as crucial for responding to the ever-changing demands in terms of skills in the labor market. Employers from the public sector assign a higher significance to the skills acquired through continuous training (95.2%), compared to the expectations from private sector employers.

The results provided in Table 3 are similar to the observations of other related surveys for Albania (Honorati et al., 2018), indicating that work-life partners value the skills acquired through continuous training as an important component influencing their decision-making when hiring new employees. Moreover, the OECD (2015), emphasizes that an education system that combines time spent in the classroom on theoretical learning, with on-the-job training putting into practice the knowledge, can be an efficient mechanism to provide students with more work experience and therefore offer an affordable workforce that could be trained to meet the needs of the company at a lower expense.

HEIs in Albania and Kosovo are approaching the so-called "third mission," defined by Secundo et al., (2017) as "the generation, use, application, and exploitation of knowledge with external stakeholders. In addition, company managers and representatives from public institutions were asked to provide their opinions on the importance of cooperation with HEIs and support from government institutions. The results indicate that stakeholders should stand "closer" to the university environment, participate in the development of the new curricula, and get support from the state.

Table. 4 Assessment of cooperation with work-life partners

Observations from private enterprises (n = 142)							
Skills	None	Low	Moderate	High	Very high	Mean	Median
Participation of WLP in the development of curricula for practical training.	13.6%	26.4%	28.6%	28.6%	2.8%	2.8	3
Acceptance of students into the company for practical training	13.5%	10.6%	28.4%	37.6%	9.9%	3.2	3
Supervision of practical training of students	19.6%	17.4%	31.1%	26.8%	5.1%	2.8	3
Identify and publicize companies for practical training of students.	17%	24.8%	22%	31.9%	4.3%	2.8	3
Financial incentives for companies for practical training of students	9.1%	27.5%	19%	33.8%	10.6%	3.1	3

Observations from public enterprises (n = 140)							
Participation of WLP in the development of curricula for practical training.	2.4%	7.8%	40.6%	36.7%	12.5%	3.5	3
Acceptance of students into the company for practical training	2.5%	8.3%	36.3%	34.7%	18.2%	3.6	4
Supervision of practical training of students	3.2%	5.6%	32.8%	44.8%	13.6%	3.6	4
Identify and publicize companies for practical training of students.	4.2%	5%	33.6%	47.1%	10.1%	3.5	4
Financial incentives for companies for practical training of students	5.5%	4%	22.8%	48.8%	18.9%	3.7	4

The results of Table 4 provide evidence that, compared to the employers of the private sector, the public employees are much more aware of the fact that close cooperation between the HEIs and work-life partners is crucial for producing a “university product “that will address future society's needs. This is reflected in the score ratings (higher than average), with a mean score between 3.5 and 3.7, which are about 0.7 points higher than the values received from the private sector. Analogously, Hilpert (2020), after identifying the main issues of work-based learning in the Albanian VET system, points out the insufficient collaboration between the “world of education” and the “world of work” as a major obstacle that leads to a skills gap in the Albanian labor market.

4. Conclusion

The results emphasized the existence of a mismatch between graduates' qualifications and the labor market needs in the agriculture and food sectors, implying that the traditional, i.e., theoretical-oriented higher education study programs in HEIs should be upgraded toward being more practical-oriented and encouraging continuous training as part of the solutions for addressing skills shortages among young graduates in the labor market.

Between all the stakeholders in the labor market, there is a broad understanding that graduates from agricultural sciences lack solid practical and applied skills. Accordingly, work-based placement is perceived as an important tool for enhancing the skills of the future workforce and also enriching private and public organizations with talented young people, providing new opportunities for further development.

Even though collaboration between HEIs and enterprises has become more frequent recently, it still seems as though these actors “live in two different worlds”. Therefore, it is required that all actors (universities, enterprises, and governments) join forces and focus on the public goods obtained from the cooperation between them.

Implementation of dual curricula can be instrumental in improving the practical skills of graduates that better meet the demands of a modern workforce capable of addressing future challenges in the agriculture sector.

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