

Erasmus +**STEPS**

WP 1

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December 2019



WP1 Objectives

Overall objective is to provide the background and support the design of the STEPS programme in order to meet labour market and society's need and expectations.



WP1 Objectives

- Explore partner countries' needs in terms of skilled engineers and managers;
- Identify and analyse relevant MSc programmes at national, regional, European and international level;
- Provide best practices by highlighting the role of the education in the sustainable development of food production systems.

WP 1 Key information

Tasks

1.1 Assessment and analysis of stakeholders' needs

1.2 Research on STEPS relevant programmes

1.3 Review and analysis of best practices

1.4 Development of mechanisms for continuous stakeholders input

Assessment and analysis of stakeholders' needs

In depth interview (Food safety sector at the Ministry of Agriculture and Rural Development, Institute of Food Safety and Veterinary services, National food authority, Veterinary service, Academia, etc).

On line survey (approximately 80 subjects dealing with the food sector in Albania has completed the questionnaire during June-August,2019).

Focus group



Deliverable	Albania	Kosovo	<u>BiH</u>	EU Partners	Deadline	Indicators
Dev.1.1 Report - Assessment and analysis report on stakeholders' needs	UET and AUT	UC and UNHZ	UNSA and UNBI, assisted by MESCS USK	CULS, USAMVB, TEISTE and <u>ReadLab</u> will record Western Balkans problems and needs of education in MSc level, by reviewing EU and international organisations' archives and publications. They will also record forecasts regarding the needs of the labour market in the Western Balkans region and the objectives the educational strategies in relation to the development of food production systems	15-Jun- 19	a) Organisations/stakeholders contacted in total 200 = surveys completed 200 / AL = 70; Kosovo = 60; <u>BiH</u> = 70 surveys / organisations
						b) in-depth interviews / semi-structured interviews with over 40 stakeholders in total or 15 interviews per country: AL, Kosovo, <u>BiH</u>
						c) roundtables and visits in total 30 / or 10 visits and roundtables per country

In depth interview was structured in three main parts:

1. It included the assessed the dynamic of food productions systems, the perceived changes in the last years, its comparison with the EU and regional level and the general context of its development taking in consideration social and environmental issues.
2. It was deal with the perspectives and the market needs, it was focused on the actual qualifications, challenges that the work force is facing and the needed skills to better perform the activities while achieving the objectives, and the level of collaboration with the academia and policy sector.
3. It was focused with the future of the sector, how this sector will be developed in the future, what is the role of EU integration, universities and other research bodies in this process.

Online survey was structured:

1. It is collected demographic data and the issues they deal with, and also their perceptions related to their training needs and challenges in food system (**questions 1-9**).
2. It is collected perceptions on sustainability. These questions help to project the skills for the future Msc program and to understand if stakeholders are aware of the sustainability and if the concept of the later is considered in their business (organisation) objectives (questions 9-12).
3. The questions 13, 14, 15 deal with the actual needs and future needs.

Findings-Albania

- Weak enforcement of the food safety and environmental legislation;
- Lack of knowledge on sustainability and the links with the food systems in Albania;
- Outdated technologies and production facilities;
- Poor waste disposal and treatment practices/facilities and technologies and low by-product utilisation.
- Small scale farming, lack of adequate facilities, specialised vehicles and laboratory equipment;
- Weak links among actors in the value chain, especially between farmers and processors (milk collection systems)

Findings-Bosnia Herzegovina

- Qualifications gaps due to population migration to EU countries and aging populations on farms;
- Lack of interest and motivation of young people for agricultural production;
- Incompetence and lack of knowledge in the existing workforce;
- Workload of workers with additional jobs for which they are neither competent nor paid;
- Lack of physical - ordinary labor;
- Insufficient information and skills on modern farm management, national and EU standards

Findings-Kosovo

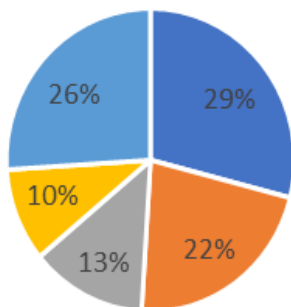
- Key findings of the study show that food production system in Kosovo is in its early development phase, where the companies still face challenges,
- The problem is the capacity building process;
- MSc is necessary to have a better quality and more competitive products in the market;
- Harmonization of national legislation and policies with those of the European Union.



Findings - Online survey

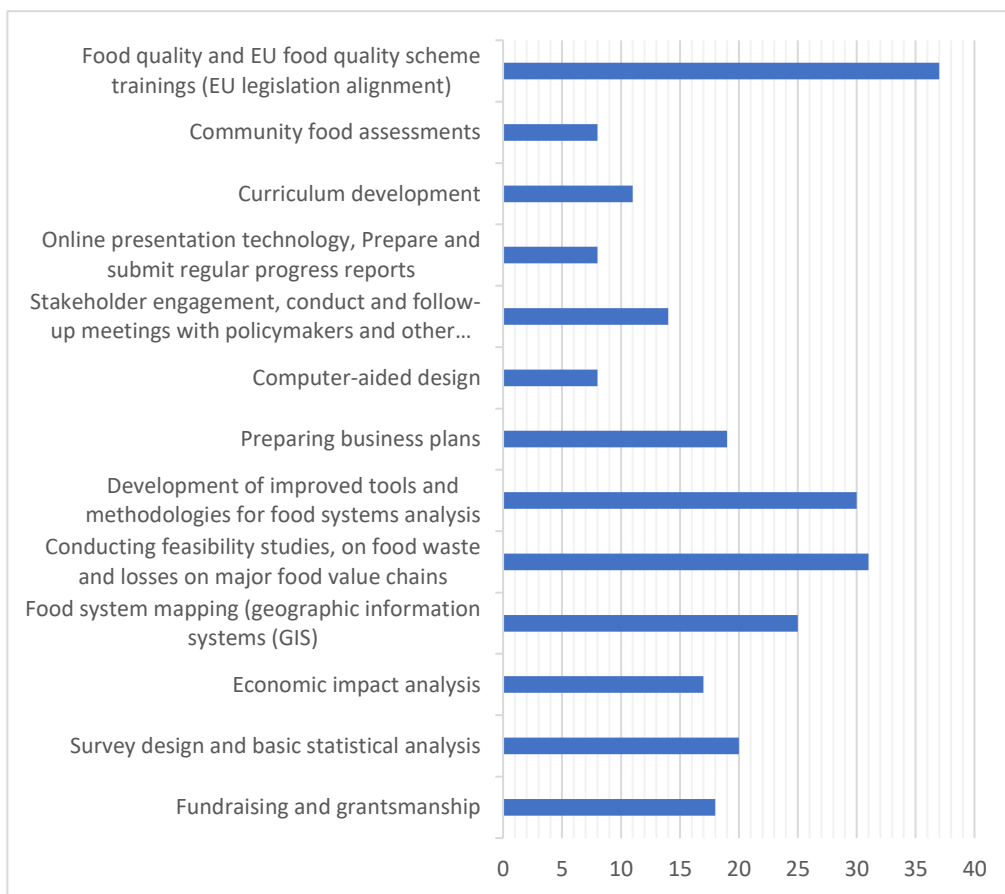
Albania:

Current situation in the food sector



- A staff member of a profit business
- Farmer or business active in the local or regional food projects
- Food processing employee
- Extension services
- other

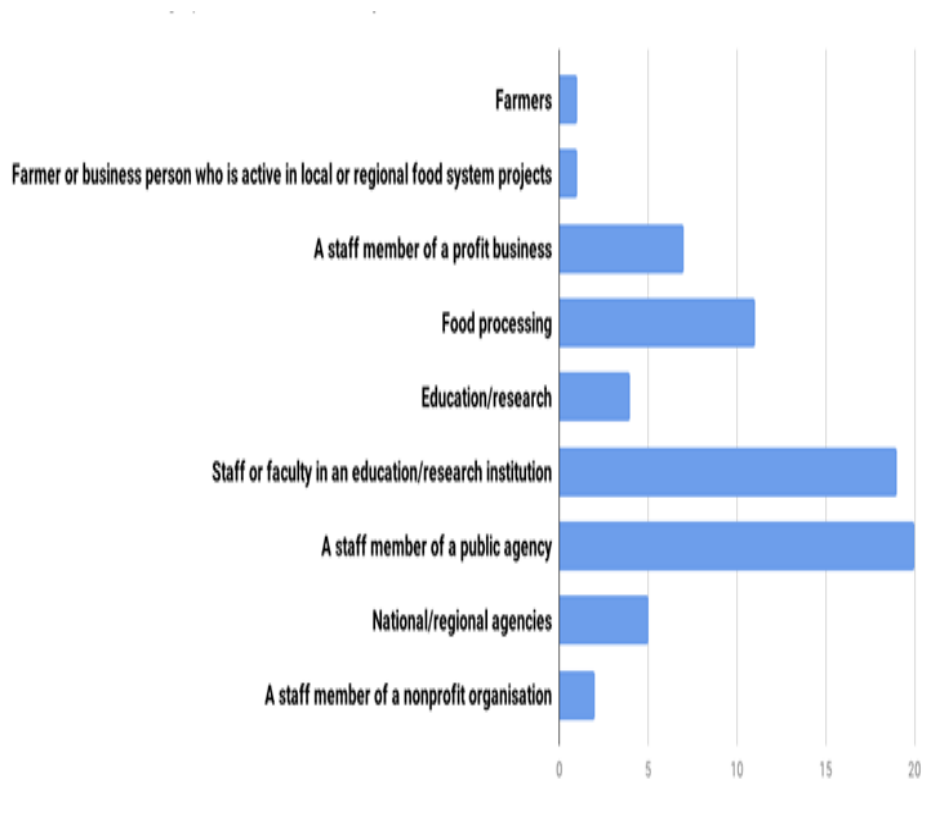
Current employee needs



Findings - Online survey

Bosnia Herzegovina:

Current situation in the food sector



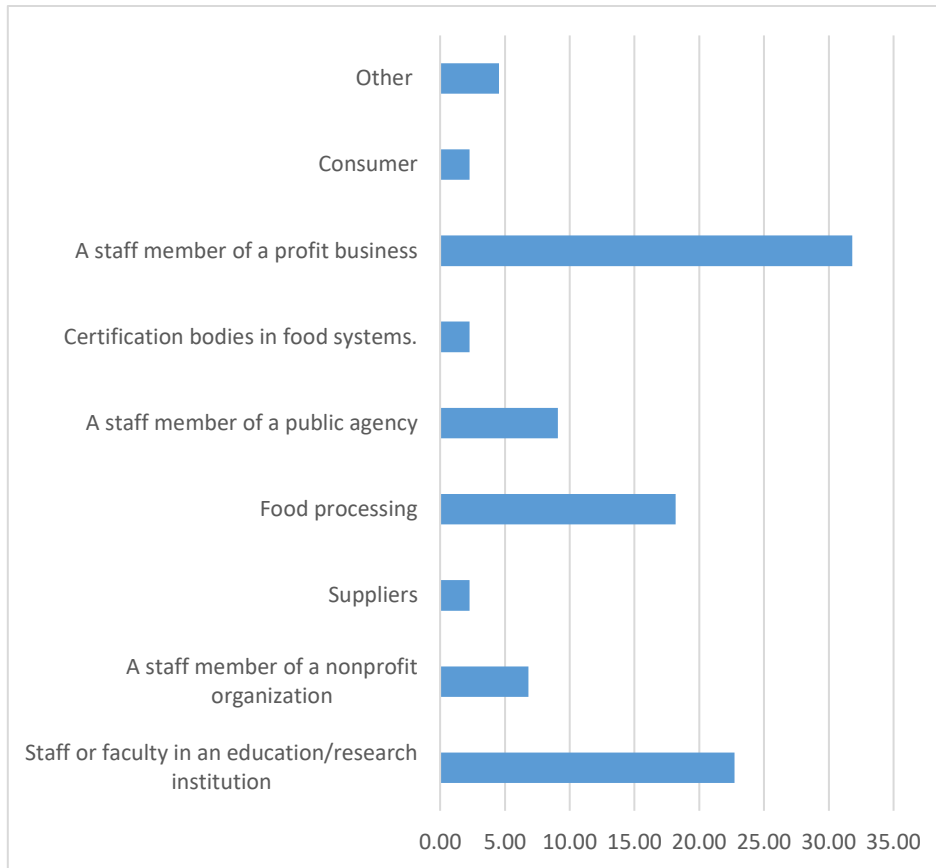
Current employee needs



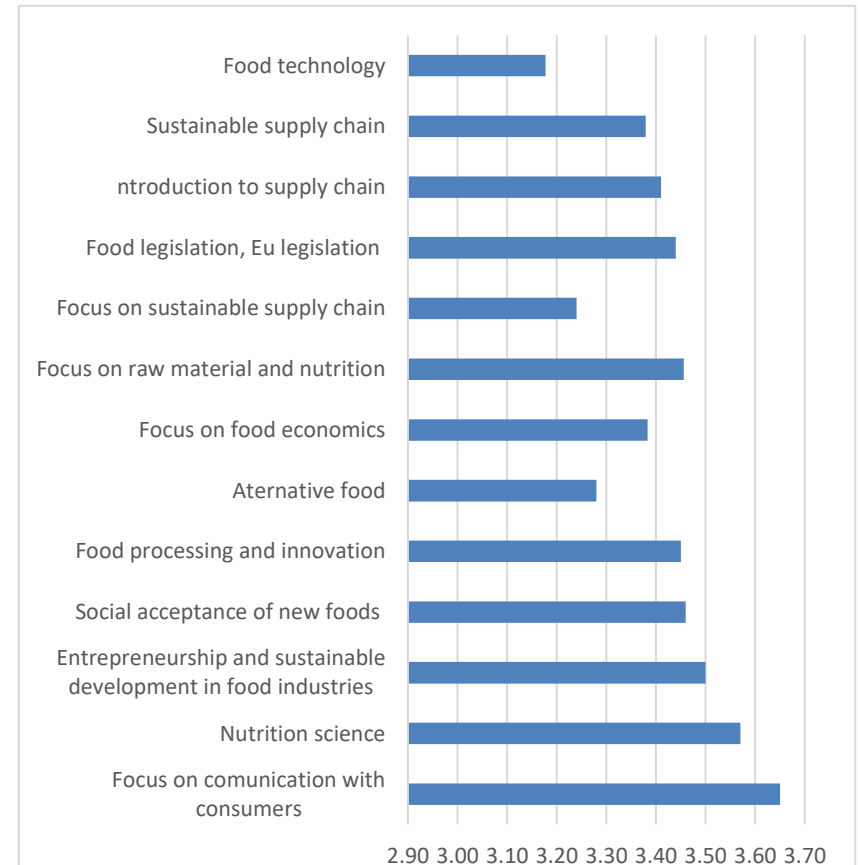
Findings - Online survey

Kosovo:

Current situation in the food sector



Current employee needs





SEMINAR & LECTURE, 10-14 DEC, UNSA, SARAJEVO

Round tables and study visit -Albania- Bosnia Herzegovina-Kosovo

- The idea of introducing the new MSc course “Sustainable food system“ is warmly welcomed by all participants. They all agreed that such a study program should be organized at the master/MSc level and could be accessed by students from different undergraduate profiles.
- Most important modules to be incorporated into course participants are:
 - ✓Waste management, food package issues (plastic, heavy packages in relation to CO₂ emission).
 - ✓Food policy, food law, and food regulation
 - ✓Food process engineering, including "smart" and "environmentally friendly" design of food processing premises and technological lines
 - ✓Economic issues such as management, marketing, planning, analysis, project planning and proposals writing.



Co-funded by the
Erasmus+ Programme
of the European Union

Project number: 598963-EPP-1-2018-1-AL-EPPKA2-CBHE-JP



Research on STEPS relevant programmes (Albania)

- Agrifood Engineering, Profile: Food Technology (AUT-FBF) – 120 Cr
- Agrifood Engineering, Profile: Enology, Technology of Beverages (AUT – FBF) – 120 Cr
- Quality and Safety of Food Products (AUT – FBF) – 90 cr
- Food Analyzes (AUT – FBF) – 90 cr
- Food Science and Technology (UT-FNS) -120 Cr
- Food Quality and Safety (UFNK) – 60 Cr



Research on STEPS relevant programmes (Bosnia Herzegovina)

University	Title of the MA program	Duration (months)	ECTS
Banja Luka	Food Engineering – Technology of Plant Origin Food	12	60
Banja Luka	Food Engineering – Technology of Animal Origin Food	12	60
Banja Luka	Industrial Bioprocesses	12	60
Banja Luka	Quality Management and Quality Control of Food and Beverages	12	60
Bihać	Food Technology	12	60
Bihać	Food Safety and Quality	12	60
East Sarajevo	Food Technology	12	60
Mostar	Food Engineering	24	120
Sarajevo	Technology of Animal Origin Food	24	120
Sarajevo	Technology of Plant Origin Food	24	120
Sarajevo	Food Quality Control	24	120
Tuzla	Food Engineering	12	60

Research on STEPS relevant

University/Faculty	ECTS
University "Isa Boletini"	
Bsc. Food Engineering and Technology	180 ECTS
Msc. Food Engineering and Technology	120 ECTS
University "Haxhi Zeka" Peja	
Bsc. Food Technology	180 ECTS
Bsc. Agro environment and Agro Ecology	180 ECTS
Bsc. Plant Production Technology	180 ECTS
University "Ukshin Hoti"	
Bsc. Agrobusiness	180 ECTS
University "Hasan Prishtina"	
Bsc. Business Management in Zootechny	180 ECTS
Bsc. Crop Production (180 ECTS)	180 ECTS
Msc. Agriculture and Food Economics	120 ECTS
Msc. Applied Sciences in Zootechny	120 ECTS
Msc. Field Crops and Vegetables	120 ECTS
Msc. Plant Protection-Phytomedicine	120 ECTS
Msc. Pomology and Viticulture	120 ECTS
International Business College Mitrovica	
Professional Bachelor in Environment and Agriculture Management	210 ETCS
University of Business and Technology	
Bsc. Food Science and Biotechnology	180 ECTS

Review and analysis of best practices

Different universities have organised "Msc" in different ways.

1. Teaching methodology can be:
 - a. Organising the summer schools
 - b. Terrain practice
 - c. Preparing thesis
2. Students organized in group work.
3. An efficient method is interactive teaching when students present the specific topics for food safety during the learning process.
4. Including the elective subjects in teaching structure.
5. Organizing the students conference where students present their master thesis.
6. Using the collaboration with food production companies focusing on problematics that concern companies.

Development of mechanisms for continuous stakeholders input

Creating the database with all stakeholders and it is needed to update



