

# AGRI-FOOD CHAIN – – CHALLENGES AND PERSPECTIVES

## POTRAVINOVÉ REŤAZCE – – VÝZVY A PERSPEKTÍVY

Pavol SCHWARCZ\* - Norbert FLORIŠ\* - Loreta SCHWARCZOVÁ\*

### I. Introduction

The CAP is applied at European level i.e. in all Member States thus giving the project an international dimension. The main focus will be on university students as potential future actors in agriculture and food processing in rural areas. To comprehend the nature of problems in agriculture and rural areas and to be able to find appropriate solutions it will be necessary for students to understand essentials of the CAP, its two pillars and its importance for agriculture and rural development. Our main effort focuses on the creation of the Centre of Excellence providing students with best conditions for satisfying their needs concerning studies of the CAP and its influence on all actors in agriculture and rural areas – from large agricultural holdings farming thousands of hectares of agricultural land to small local producers providing their products on local market places. As indicated previously, the CAP will be the central topic of the project, providing the complex expert information on the CAP including an introductory section on EU policies,

the system of the CAP, its reforms, legislation, funding, pillars, implementation on the EU level and in Slovakia, too.

### II. Objective and methodology

In order to provide smart solutions of problems in agriculture and rural areas, it will be necessary to go beyond the topic of the CAP and to explain some effective concepts and approaches starting from the rural development principles – the complementary element to the first pillar of the CAP. Therefore, we plan to involve the topic of short food supply chains as an innovative component – from the methodological point of view – within the CAP issues, as this concept is relatively new in Slovakia and its incorporation into existing topic will be supported by international experts. The concept of short food supply chains is considered to be an appropriate tool for achieving objectives defined by the Slovak Government for implemen-

#### Abstract (EN)

Agri-food sector is one of the biggest and most supported economic sectors in the EU. It is a key sector for sustainable economic development and food safety and security. The EU Common Agricultural Policy (hereinafter CAP) is its backbone – it helps farmers with income support and market measures on the one hand and, on the other hand, it ensures sustainable rural development in individual EU countries. Despite of the huge support agricultural sectors in Member States are facing serious problems – in Slovakia it is especially the low level of domestic agricultural production, low quality of food products, high unemployment rate especially among young people, ageing of population and abandonment of rural areas. Looking for solutions for these problems mentioned there is a great challenge for relevant public authorities and for the academic sector, as well. Based on these facts the initiative to submit a project proposal has arisen within the Jean Monnet Centre of Excellence – which would respond on challenges in this field. The project (Centre of Excellence for European Agri-Food Chain – CEEAG 611446-EPP-1-2019-1-SK-EPPJMO-CoE) has been granted and its main focus will start from important and irreplaceable role of agriculture and food industry in national economies of (not only) Member States via ensuring their food security under conditions given by the EU Common Agricultural Policy (CAP) – one of the most supported policies in the EU.

#### Abstrakt (SK)

Agropotravinárstvo patrí k najväčším a najviac podporovaným odvetviam v rámci EÚ. Ide o kľúčový sektor z pohľadu rozvoja udržateľnej ekonomiky a zabezpečenia potravinovej bezpečnosti. Nosným pilierom tohto sektora je Spoločná poľnohospodárska politika EÚ (SPP) – tá na jednej strane pomáha poľnohospodárom podporou ich príjmov a trhovými opatreniami a na strane druhej zabezpečuje udržateľný rozvoj vidieka v jednotlivých členských štátoch EÚ. Napriek značnej podpore čelia poľnohospodárske odvetvia v členských štátoch vážnym problémom - na Slovensku je to najmä nízka úroveň domácej poľnohospodárskej výroby, nízka kvalita potravín, vysoká miera nezamestnanosti najmä medzi mladými ľuďmi, starnutie obyvateľstva a opustenie vidieckych oblastí. Hľadanie riešení uvedených problémov predstavuje veľkú výzvu pre príslušné verejné orgány a akademickú sféru. Na základe týchto skutočností vznikla iniciatíva na predloženie návrhu projektu v rámci centra excelentnosti Jean Monnet - ktorá by reagovala na výzvy v tejto oblasti. Projekt (Centrum excelentnosti pre európsky agropotravinársky reťazec – CEEAG 611446-EPP-1-2019-1-SK-EPPJMO-CoE) bol schválený a zameriava sa na štúdium nezastupiteľnej úlohy poľnohospodárskeho a potravinárskeho sektora v národnom hospodárstve (nielen) členských štátov, a to v oblasti zabezpečenia potravinovej bezpečnosti za podmienok stanovených Spoločnou poľnohospodárskou politikou- ako jednou z najviac podporovaných politík EÚ.

#### Keywords (EN)

Common Agricultural Policy, agri-food chain, food security

#### Kľúčové slová (SK)

Spoločná poľnohospodárska politika, agropotravinový reťazec, potravinová bezpečnosť

\* Slovak University of Agriculture in Nitra, Slovakia

tation of the Rural Development Programme SR 2014–2020, moreover, there is a high level of support in the Rural Development Programme dedicated to measures encouraging farmers to associate into short food supply chains. The concept of short food supply chains is directly connected with providing and distribution of quality and safe food, therefore risk factors of the food chain will be the another focus area of the project, together with the specific part focus on the food legislation, agro environmental legislation (from the point of view of environmental protection) and land law (from the point of view of protection of soil). Marketing activities are an important factor for distribution and placing food products on the market and for assuring their sales. Therefore, marketing of agri-food products will be the last part we will focus on in the project. Integration of economic, social, legal and biological aspects in the project implementation will assure a multidisciplinary character of the project.

An experienced staff of faculties of the SUA in Nitra – Faculty of European Studies and Regional Development, Faculty of Biotechnology and Food Sciences and Faculty of Economics and Management will carry out activities towards to implementation of the intended Jean Monnet Centre of Excellence, using experiences from the previous Lifelong Learning Programme 2007–2013 and Erasmus+ projects. One of the main outputs of these projects – an e-learning platform – will be used for teaching the courses within the newly created Centre of Excellence. The e-learning platform will thus be another innovative component (from the technological point of view) which will contribute together with the short food supply chains concept to creation of an added value to an academic environment for students to be able fully to use benefits provided by the Centre of Excellence. Thus, the methodology will involve the combination of classical teaching methods with modern methods using the ICT in the teaching process, completed with debates and discussions during project events. Based on findings from the study visit in the DG Agri in Brussels, expert knowledge and target group needs we will prepare syllabuses of new courses which will be offered to students of all faculties. Although the targeted PhD. students do not directly deal with the project focus areas, they all practically deal with agricultural studies and therefore creating the synergy between various disciplines provided in the teaching process within the project will complement their expertise and enhance knowledge necessary for their studies. Content of courses will be prepared by high quality experts and subsequently placed in the e-learning platform.

### III. Expected results

When creating the methodological part of the Jean Monnet Centre of Excellence, both the academic aspects as well as requirements of agricultural practice has been considered to form an appropriate study environment for students. Academic aspects will be especially based on adapting particular courses for students of the PhD. studies:

- Challenges and Impacts of the EU Agricultural Policy,
- Risk Factors of the Food Chain,
- Agri-Environmental and Food Legislation of the EU,
- EU Agrarian Marketing.

In order to achieve expected results within the project there is a need to introduce into existing curricula an approach which starts from needs and requirements of agricultural practice and which contributes to achievement of objectives defined by the Slovak Government for implementation of the Rural Development Programme SR 2014–2020 (e.g. to increase the direct sale on farm from current 3% to 7% until 2020 and to establish 15 farmers' markets in addition to current five). Support of small farmers and producers is thus considered to be the best solution, as they are considered to be a basic building stone of rural areas and their organisation into short food supply chains is considered to be a key prerequisite for increasing the added value of agricultural products, improving social situation of farmers and the quality of life in rural areas. The concept of short food supply chains will be transferred into an academic environment and will be incorporated as a new subtopic into the structure of adapted course Challenges and Impacts of the EU Agricultural Policy. Production of food requires certain procedures and activities towards the safety of food, therefore identification of risk factors of food distributed in the food chain will be an important part of academic activities and will be incorporated in the newly created course Risk Factors of the Food Chain. Knowledge of legal environment is an important factor in relation to any activities connected with farming or food production, processing and distribution. Therefore, this expertise will be provided within the adapted course Agro-Environmental and Food Legislation of the EU. Good marketing assures the sales of any products and can be this way the basis for success of the farmer or food producer. Therefore, the expertise on agrarian marketing will be incorporated into the course EU Agrarian Marketing.

Such innovated courses will be offered to students of the PhD. studies at all faculties by experienced teachers of the SUA in Nitra with an expertise from previous Lifelong Learning Programme 2007–2013, Leonardo da Vinci Transfer of Innovation project “New European Standards in the Context of Reformed EU Common Agricultural Policy – NEWCAP” No. 2012-1-SK1-LEO05-04199, the Erasmus+ KA2 Capacity Building in Higher Education project “Enhancing Competencies of Central Asian Universities in Agricultural Policy focused on Environmental Protection & Land Management – ECAP” No. 561590-EPP-1-2015-1-SK-EPPKA2-CBHE-JP and a TEMPUS project “Higher Education Structures to Enhance Public Health Learning and Teaching in the Republic of Uzbekistan (UZHELTH)” No. 544445-TEMPUS-1-2013-1-IT-TEMPUS-SMHES. However it is necessary to perceive the CAP as a complex issue with an impact on agricultural sectors and rural areas in the whole EU, therefore gathering the expertise, professional knowledge and skills of experts from other European HEIs will be the basic prerequisite for preparation of students to be able to enhance their knowledge and skills by expert information gained from foreign experts and apply this information in their future occupation. The teaching process will be therefore supported by various accompanying events with participation of foreign experts, directing students to complete their knowledge and expertise gained in the teaching process and teachers to broaden their professional profile with further information they will later interpret to students. There are 2 types of events planned for this purpose:

- type - events for students at all levels of university degree and young researchers organised at the SUA in Nitra with participation of experts from abroad and of representatives of public authorities from agricultural sector - workshops, seminars roundtable debates and a conference for students to exchange information and to get the new knowledge on the CAP, its impact on agriculture and rural areas and European food policy in selected EU countries and on possible preconditions of its continuation after 2020;
- type- events such as conferences or study visits organised abroad attended by members of the Centre of Excellence to broaden their expertise and knowledge which will be provided to students within the teaching process. This also involves the study visit at the EC DG for Agriculture and Rural Development.

Farming activities significantly influence an environment in which we live. The CAP therefore integrates mechanisms for environmental protection, food safety and animal protection and welfare. The CAP is thus tightly interconnected with further policies, such as environmental policy, food policy, land policy and also cohesion policy and rural development policy. Considering this, implementation of the Centre of Excellence will require gathering expert information from several resources and their appropriate processing into the form which will be easily comprehensible for students. In the same time the information provided to students must preserve its scientific value so that students will be able to use their knowledge and skills not only in agricultural practice, but even in case they decide for the career in academic environment. We expect gathering the expert information from the following fields:

- a) the field of agriculture and rural development will provide resources for the topic of the Common Agricultural Policy; the subtopic of short food supply chains will acquire information from the field of rural development, regional development and from the field of food hygiene;
- b) the field of food safety, food legislation, land law and environmental legislation - farmers and food producers must comply with some standards regarding the food safety, protection of and environmental protection. Therefore, an expert information within these fields will be provided to students as potential farmers or food producers in terms of above mentioned courses and to farmers during specific events organised within the project;
- c) the field of marketing will offer students with actual problems of enterprise marketing in relation to reach successfulness on market.

Creation of an appropriate synergy between the mentioned fields will be necessary when incorporating the subtopic of short food supply chains into the main topic of the CAP and subsequently in the teaching process. Finally, this approach will be needed when processing results of events organised within the project. These can be categorized in the following thematic activities:

1. *Teaching activities at the home university (SUA)* - Centre of excellence will create new courses related to challenges and impacts of the EU Agricultural Policy, risk factors in the food

production and distribution in the food chain, agri-environmental and food legislation of the EU and in EU agrarian marketing. They will be taught by the SUA in Nitra experts in the field so that the target group will be provided with the most comprehensive view on the subject field.

2. *Research activities* - Centre of excellence will introduce complex research activities related to the subject field of the project and will fully support teaching activities for the target group. Similarly, to teaching activities, research will be conducted within the 2 main areas:

- a) an area of the CAP where we will focus on:
  - Current changes within the CAP and on the outline of the post-2020 period,
  - Synergies between the CAP and other EU policies,
  - Impact of the CAP regulations on direct local sale,
  - An area of short food supply chains - direct local sale contributes to creation of relationships between farmers and consumers within the short supply chain. This way we will focus our research on how regulations of the CAP together with requirements for support of short food supply chains from the Rural Development Programme influence functioning of farmers associated in the short food supply chain.
- b) area of risk factors in the food chain - the research will focus on:
  - analysis of EU and Slovak legal documents in terms related to risk factors of food chain in Slovak and EU conditions;
  - collection and ex post evaluation of data on food/feed quality and safety as well as risk factors of food chain in Slovakia and EU; data will be compared with another EU countries, resources: EFSA, State Veterinary and Food Administration of the Slovak Republic etc.
  - creation of the questionnaire and its distribution to producers;
  - processing collected data, comparison with the situation in other EU countries, proposal of possible changes and improvements.

The importance of the research is in its complementary function towards the teaching activities, i.e. results of the research will be continuously incorporated into the teaching process, and so target groups will be continuously acquainted with impact of one researched area on the other and with synergies between the 2 main researched areas.

3. *Events* - which will support teaching and research activities in order to strengthen knowledge and exchange experiences and opinions on the CAP and on short food supply chains in Slovakia and other Member States. They consist mainly of exchanging and comparing experiences between different EU countries and exchange of practical knowledge in implementing the EU CAP and the concept of short food supply chains. Generally, there are following events planned in the project:

- a) study visit to the EC DG Agriculture and Rural Development for consulting possible development of the CAP after 2020 (in the 1st year of the project);

- b) 2 roundtable debates – both in the 2<sup>nd</sup> year of the project, one in the 1<sup>st</sup> semester and second in the 2<sup>nd</sup> semester, will be focused on specific selected components of the CAP, concrete requirements on implementation of the short food supply chains concept, national requirements and rules for direct sale and marketing activities and on risk factors of the food chain;
- c) 1 workshop – in the 3<sup>rd</sup> year of the project and 1<sup>st</sup> semester where current issues on implementation of the CAP and the concept of short food supply chains in Slovakia and other Member States will be introduced;
- d) the conference will be organised in the 3<sup>rd</sup> year of the project and 2<sup>nd</sup> semester and it will be focused on detailed perspectives of the CAP and possible support of short food supply chains in the post-2020 period, as well as on enterprise marketing activities and on risk factors in food production and distribution. It will be attended by experts from abroad, representatives of public authorities from agricultural sector and eventually representatives of farming practice; although the SUA in Nitra will be the organiser of the mentioned events, inviting experts from partner institutions in other EU Member States will be an important factor strengthening a transnational character and approaches in the project;
- e) participation of JM Centre of Excellence members at selected conferences abroad focused on topics of the project; teachers will have an opportunity to attend conferences the entire duration of the project. Their primary role will be to gain and collect expert information in the project focus area and their implementation in the teaching process and research activities at the home university. Their secondary role will be to establish relationships with partner universities abroad and to develop networking activities with experts in similar focus areas.

4. *Project deliverables* – will be produced to provide students adequate tools to enhance their knowledge and expertise:

- Website of the project,
- E – learning platform,
- International conference proceedings,
- Newsletter.

Project deliverables will be placed at the project web page and will be freely accessible to wide public. All of them will be important dissemination tools informing the wide public about the project, its aims, objectives and outputs and about its progress. Dissemination activities will be carried out during the entire duration of the project.

## IV. Conclusion

The food is a vital part of citizens' everyday life. Agri-food sector plays an important role in national economies of the EU Member States, but despite of the support from the 1<sup>st</sup> pillar of the CAP, agricultural sectors are currently facing the long-term problems, such as low quality of food products, insufficient knowledge of legal documents on environmental protection, land protection and food law and very low capability of farmers and food producers to place their products

on the market, to assure their sales and thus achieve the successfulness of their enterprise. Our project meets right these challenges in order to achieve enhancement in partial project fields responding to questions and problems needed to be solved. Thus, the project is going to follow a multidisciplinary approach in the teaching process of PhD. students and provide them professional knowledge and information in the mentioned focus areas, shifting their expertise gained during their master studies onto the higher, European level. Building on this we expect a strong dissemination of project results and outcomes in order to attract students, using traditional tools of promotion together with innovative elements of dissemination. The main impact of the project is expected in the form of the creation of “from farm to fork” experts disposing with a wide range of knowledge and skills usable in different areas of practice and in the academic environment. The project team will systematically work on the ensuring the impact at local and regional level, within the academic environment as well as in forwarding all relevant results and outputs to the field of agricultural practice. On one hand – at national level – the very good starting point for PhD. students of our university will be managed to be able to apply their knowledge in the state and public sphere, either in the decision-making bodies such as ministries (Ministry of Agriculture and Rural Development of the SR, Ministry of Environment of the SR) or state administration bodies (State Veterinary and Food Administration of the SR) or within agencies focusing on environmental protection (Slovak Environment Agency or Public Health Authority of the SR). On the other hand – at European level – in terms of all 4 newly created courses, PhD. students will be also provided with European dimension of focus areas. Moreover, the educational process managed within the project activities is going to be strongly supported by organisation of events with participation of local and international experts, providing students with complementary and practical information on how the European and national support of agriculture and rural areas work and how especially small local producers can benefit from European support schemes.

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**Contact address/ Kontaktná adresa**

**Prof. Ing. Pavol Schwarcz, PhD.**

Department of European Policies, Faculty of European Studies and  
Regional Development,  
Slovak University of Agriculture in Nitra, Tr. A. Hlinku 2, 949 76 Nitra  
e-mail: pavol.schwarcz@uniag.sk

**Ing. Norbert Floriš**

Centre of International Programmes,  
Faculty of European Studies and Regional Development,  
Slovak University of Agriculture in Nitra, Tr. A. Hlinku 2, 949 76 Nitra  
e-mail: Norbert.floris@uniag.sk

**Doc. Ing. Loreta Schwarczová, PhD.**

Centre of International Programmes,  
Faculty of European Studies and Regional Development,  
Slovak University of Agriculture in Nitra, Tr. A. Hlinku 2, 949 76 Nitra  
e-mail: loreta.schwarczova@uniag.sk