Erasmus Plus for Organic Sector

EPOS Project:

Innovative Education towards the Needs of the Organic Sector

2014-1-PL01-KA203-003392

O7 Intellectual Output:

Programme of Students Internships

September 2014 – November 2016

Coordinating institution: Warsaw University of Life Sciences – WULS-SGGW (Poland); Project Partners: Universitaet Kassel (Germany); Eesti Maaulikool (Estonia); Jihoceska Univerzita v Ceskych Budejovicach (Czech Republic); Universita Degli Studi Della Tuscia (Italy); Universidad Politecnica de Madrid (Spain); Helsingin Yliopisto (Finland). All Partners contributed towards the development of the Intellectual Outputs of the project. Person responsible for the preparation & submission of the final project report: Dr. Dominika Średnicka-Tober. tel. +48225937035; +48698116011, corresponding e-mail: dominika_srednicka_tober@sggw.pl

Erasmus+

EPOS O7 Intellectual Output comprises of a programme of the Students Internships/Problem Solving Projects, that have been organized in all EPOS partner countries within the course of the project (between January and May 2016). EPOS Problem Solving Projects involved 84 students & 26 stakeholders representing organic sector in all 7 participating countries. Students (in most cases those participating in the EPOS Intensive Study Programme + additionally enrolled students) cooperated with stakeholders representing organic sector. Students previously involved in the project became mentors for the newly recruited students (teams of 3 students were created); each team was working with one stakeholder; physical meetings and virtual cooperation were organised. Students' task was to identify stakeholders' problems/weaknesses and develop strategies to help solving them. Students were supervised by lecturers from their universities. In most participating countries the Internships were acknowledged by the University Authorities and European Credit Transfer and Accumulation System (ECTS) was applied to award the participants (3-4 ECTS, depending on the country).

Here we present the programme of the EPOS Problem Solving Projects (O7) as well as information about the number of students and stakeholders participating in this activity in all 7 countries taking part in the EPOS project & their undertaken study topics.

O7: PROBLEM SOLVING PROJECTS IN THE ORGANIC FOOD PRODUCTION CHAIN - programme

AN INNOVATIVE TEACHING TOOL DEVELOPED WITHIN THE ERASMUS + EPOS PROJECT

GENERAL BACKGROUND: The course is based on collaboration among seven European Universities: Warsaw University of Life Sciences, University of Kassel, University of Helsinki, Tuscia University, Technical University of Madrid, Estonian University of Life Sciences, and University of South Bohemia in Ceske Budejovice. It is part of "Innovative Education towards the Needs of the Organic Sector" (EPOS) - project, which has the aim to develop, test and implement innovative educational materials and methods addressing the needs of the labour market in organic sector and beyond.

CONTENT: The course is organised around work on real life cases that support development of the organic sector. During the course, students carry out a problem-solving project in co-operation with stakeholders operating in the field of organic food production chain. The stakeholders will define a development challenge connected to their activities, and the students, working as a small group, will attempt to find a solution or solutions. During the project, students learn from the experts in such fields as organic food production, processing, retail, administration or research. More detailed description of the course tasks will be delivered to the enrolled students.

AIM: The course will allow successful students to:

- apply theoretical knowledge to practical problems in a real life context
- carry out a small-scale project
- practice skills in oral and written presentations, and communicate in and with a group of experts
- strengthen team-working skills, ability to adapt to new situations, analytical and problem solving skills

WORK MODES AND TEACHING METHODS: The project is carried out in mini-groups of three members. The course can take at most 6 such groups in each participating country. The course consists of orientation meeting, and mid-course meetings either face-to-face or in Moodle, group work and visits to the chosen stakeholder organization. The course leaders will choose the cases and assist in forming the groups around the cases. Project work involves interviews with stakeholders and also with other experts, and use of scientific literature, research and other source material. The groups present their findings as a report or other form of presentation.

COOPERATION BETWEEN STUDENTS AND TEACHERS: In order to facilitate the problem solving course, the strict rules of the cooperation between the students and teachers needs to be created: (1) The course will last 16 weeks; (2) The regular meetings of the students with the leading teacher will take place every week; (3) A guide for the students will be prepared by teachers before the course with the description of the course, recommendations and additional literature.

The phases of the projects will be as following: (1) Selection of the students – if too many students are interested to join the project, a teacher selects best prepared and most ambitious students; (2) Selection of the companies – a teacher is using all possible contacts from the previous projects; (3) Matching the students and companies together – several meetings enable to create subgroups of the students in every project – mostly 2 and 3 persons in every subgroup; (4) The students start to prepare their projects – of course a teacher is always ready to give an advice and to help.

DATES: The project lasts 16 weeks (4 months)

ASSESSMENT: Each group produces a report or presentation on their case. The reports are assessed as accepted / failed. The groups receive feedback during the course, and also final oral feedback. The stakeholders are invited to the final evaluation event and give their opinions together with teachers.

CREDITS: 3 ECTS

ENROLLMENT: EPOS contact person in each country is responsible for enrollment procedures.

NUMBER OF PARTICIPANTS: Max 18 from each country

LANGUAGE: Depending on the country (Polish, Czech, Finnish, Italian, Spanish, Estonian, German)

TARGET GROUP: The course is targeted to students who study Organic Agriculture and Food Systems, Human Nutrition, Food Science, Environmental Protection and related areas.

TEACHERS: The project is guided by Ewa Rembiałkowska and Dominika Średnicka-Tober (WULS, Poland), Ritva Mynttinen and Eeva Uusitalo from Ruralia Institute and Irina Herzon from the Department of Agricultural Sciences in the Faculty of Agriculture and Forestry in the University of Helsinki (University of Helsinki, Finland), Peter von Fragstein und Niemsdorff (Kassel, Germany), Teresa Briz (Madrid, Spain), Roberto Mancinelli and Emanuele Radicetti (Tuscia, Italy), Jan Moudry and Petr Konvalina (Ceske Budejovice, Czech Republic), Anne Luik (Estonian University of Life Sciences).

PROBLEM SOLVING PROJECTS IN EPOS – participating students & stakeholders representing organic sector

Within EPOS project, every partner was responsible to select the students for the Students Internships. Below there is an information from every country about the number of the participating students and the involved enterprises or the selected study topics. Altogether EPOS Problem Solving Projects involved 84 students & 26 stakeholders representing organic sector in all 7 participating countries.

Estonia

In Estonia **9 students** participated in the problem solving projects:

No.	Number of Students	Enterprises
1.	3 students	Valete Ecocenter store
2.	3 students	Conventional Karinu farm
3.	3 students	Organic farm Tammistu Agro

Spain

In Madrid Polytechnics there was a group formed by **7 students**: 4 French, 1 German and 2 Spanish. The focus of their study was to analyse the real operation of organic enterprises. The projects were conducted in 3 enterprises.

No.	Enterprises	Topic (problem)
1.	Ecosecha (Local Producers)	Possible improvements or strategies to increase sales Understand the real business work What is their way of working The origin of their business Know their expectations (short and long term)
2.	Tresbolillo (Local Producers)	
3.	Economato Macabeo (Distributors / Shops)	

Finland

The students were free to choose which group they would join. Most participants were students of agroecology, but some other disciplines were represented as well. One of the topics was about agroecology, but two others were about practical issues of increasing sales, marketing and consumer behavior. In that sense the task was quite challenging for the students, but at the same time also very rewarding. In the fourth group there was only one member, because the student had his own product that he has been developing in real life. His case could be seen more as an example of entrepreneurship in the early stages of product development. There were **7 students** taking part in this project. The stakeholders and the topics are listed below.

No.	Students	Enterprises	Topic (problem)
1.	4 students	Retail (a grocery store selling local and organic food)	How to communicate the difference between conventional and organic products
2.	2 students	Primary production (a agroecological symbiosis farm)	How to use the residues of bioenergy production process as fertilizer
3.	4 students (3 were exchange students)	Expertise (Finnish Organic Research Institute)	How to export more organic berries to China
4.	1student www.keruu.fi	Expertise (Ruralia Institute)	How to increase forest certifications (for organic non- timber forest products)

Czech Republic

There were **12 students** taking part and 4 different problem solving projects conducted in Czech Republic.

No.	Number of Students	Enterprises	Topic (problem)
1.	3 students	School canteen Cvrcovice (Cooking specialized school Cvrcovice) School canteen Veseli nad Luznici (ZS Veseli 1) School canteen Ceske Budejovice (ZS Dukelska)	Implementation of sustainable menu into public catering
2.	3 students	Bemagro, a.s. Malonty Organic farm Zvíkov u Českých Budějovic	Marketing strategies for organic milk sale in the Czech Republic new processing capacities
3.	3 students	iProdukční, s.r.o. Dubné	Development of new cereal products from Triticum spelta L. in cooperation with students
4.	3 students	Organic farm Zvíkov u Českých Budějovic	Official SDO variety testing in organic farming in cooperation with University of South Bohemia

Italy

There were 4 different problem solving projects conducted in Italy and **9 students** took part in this project. Details are listed below in a table.

No.	Number of Students*	Enterprises	Contact details/topics
1.	3 students	Valentini	Valentini Alberto
2.	3 students	Ascenzi	Ascenzi Nicoletta
3.	3 students	iProdukční, s.r.o. Dubné	Development of new cereal products from Triticum spelta L. in cooperation with students
4.	3 students	Organic farm Zvíkov u Českých Budějovic	Official SDO variety testing in organic farming in cooperation with University of South Bohemia

*Some students were involved in more than one project.

Germany

In Germany there were 3 solving problem projects and totally **19 students** took part in them.

No.	Number of Students	Topic (problem)
1.	3 students	Food safety in Ecuadorian fish industry
2.	4 students	"Orange Innovation" Product Development of an Orange Juice Based Drink
3.	12 students	Conversion a farm into organic

Poland

In Poland the interest of students was very big. Preliminary there were 25 interested students; finally we have selected **21 students** who took part in the problem solving projects. In a table below all projects are listed.

No.	Number of Students	Enterprises	Topic (problem)
1.	3 students	Poloniak Ryszard Tyl	Project of Bio Bistro offering the organic products: Vegan and vegetarian dishes, no sugar dishes, no gluten dishes
2.	2 students	Żywność Ekologiczna Bio Food sp. z o.o. Tadeusz Szynkiewicz	Elaboration of the recipe and the product: Juice containing a lot of iron and vit. C
3.	3 students	Żywność Ekologiczna Bio Food sp. z o.o. Tadeusz Szynkiewicz	Elaboration of the recipe and the product: Cheap smoothie with pumpkin, carrots and apples
4.	3 students	Żywność Ekologiczna Bio Food sp. z o.o. Tadeusz Szynkiewicz	Elaboration of the recipe and the product : Fruit puree for kids – portion of 150 ml
5.	3 students	Ekoraj Edyta Kwiatek	Information material for the website about the organic products
6.	3 students	TAST Jan Tabiński	Elaboration of the recipe and the product: Chickpea rolls
7.	3 students	Poloniak Ryszard Tyl	Elaboration of the recipe and the product: Smoothie with kale and spinach
8.	2 students	TAST Jan Tabiński (kale chips); Poloniak Ryszard Tyl (lemonade)	Elaboration of the recipe and the product: Kale chips Probiotic lemonade with whey proteins