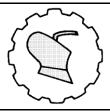
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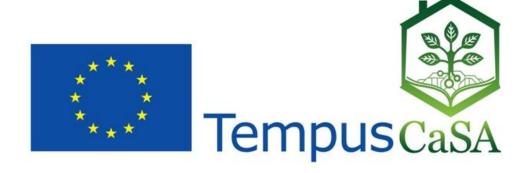
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TEMPUS PROJECT PRESENTATION

Project title: BUILDING CAPACITY OF SERBIAN AGRICULTURAL EDUCATION TO LINK WITH SOCIETY Acronym: "CaSA"

Part 2. NEED ANALYSIS AND TRAININGS

544072-TEMPUS-1-2013-1-RS-TEMPUS-SMHES
(2013 – 4604 / 001 - 001)
Sub programme:
Structural Measures, Action Higher Education and Society

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INTRODUCTION

This is a presentation of the CaSA project and the role it plays in linking research and innovation with knowledge improvement in agriculture. CaSA is a national project, coordinated by The University of Belgrade, Faculty of Agriculture.

It belongs to the TEMPUS sub-program Structural measures and the Action Higher education and society. These two benchmarks point out what are the main objectives of

the project: to improve quality and availability of vocational agricultural education; to strengthen competences of educators; to create a National Repository for Agricultural Education (NaRA) [3].

Basic course is strengthening links between higher education (HE) and society by building capacity of Serbian:

- University teachers from Faculties of Agriculture (FA)
- Agricultural secondary school (AMS) teachers
- experts in Extension services (ES)

to improve teachers' competences in pedagogic skills and provide in-service vocational training courses.

Specific objectives of the project are:

- SO1 Improvement of quality and availability of vocational agricultural education
- SO2 Strengthening of professional and pedagogical competences of educators
- SO3 Creation of the "open source" repository for educators in the area of agricultural education

Creation of a National Repository for Agricultural Education (NaRA) - a repository for online courses and teaching resources to ensure project sustainability and networking of all stakeholders in agricultural education.

There are 13 partners contributing to the project, 10 Serbian and 3 EU partner institutions. Serbian partners are 5 agricultural faculties from Belgrade, Novi Sad, Kragujevac, Novi Pazar and Sremska Kamenica, as well as Association of Agricultural Middle School in the area of agriculture, food processing and food production, Institute for Science Application in Agriculture responsible for in-service training of agricultural advisors, 2 NGO training organization (Education Forum and Balkan Security Network) and the Ministry of Education, Science and Technological Development of the Republic of Serbia. EU partners are universities from Timisoara (Romania), Maribor (Slovenia) and Foggia (Italy)

All project activities are grouped into 11 work packages.

The project lasts for 3 years (01/12/2013 - 30/11/2016) and aims to build the capacity of main holders of Serbian agricultural education: university teachers, teachers in agricultural middle schools and agricultural advisors working in extension services.

The CaSA project's main achievement will be the creation of a NaRA, available as an electronic platform that should enable the sustainability of the project and connection of stakeholders involved in all levels of agricultural education and training in Serbia. This repository will include: information necessary for teaching traditional courses as well as online courses for professional development of Agricultural Middle Schools and experts in extension services; databases of results obtained by research; selected and recorded classes of interactive teaching; selected parts of courses realized and/or developed within the project, prepared in the form of online video tutorials and posted together with additional teaching contents; and other relevant contents added to the repository based on authorized decisions of the NaRA Advisory Board.

All project participants have agreed and signed the Constituent agreement on project implementation and NaRA management.

NEED ANALYSIS AND TRAININGS

Those issues were structured through a lot of activities in different work packages. In the following part are presented the activities, including planned and realized deliverables.

WP 2 - Infrastructural support for NaRA functioning / Development of resources WP leader, project secretary: Goran Topisirović, UB, Belgrade, Serbia

A2.2. Training of IT administrators at every faculty/university for maintenance of the platform

Training of 5 IT administrators from every faculty was planned, to be trained in Belgrade by EF expert Milos Bajcetic for managing and using Moodle e-Learning software and maintaining distance learning platforms, as well as solving typical problems of users.

IT administrators were trained on May 22^{nd} and 23^{rd} 2014 at the Faculty of Agriculture in Belgrade. Trainer was Milos Bajcetic, Education Forum expert for Moodle e-Learning software application, maintenance of distance learning platforms, solving typical problems of users, etc. 5 IT responsible persons from each university/faculty and IPN were present and attended the training. The training included the following topics: 1st day - Moodle - Administration; Basics about Moodle LMS; Necessary infrastructure; Installation; Basic system settings; Users administration (identity check); 2nd day - Moodle - Administration II; Administration of courses; Courses structure and format; Sections and blocks; Activities and resources; Add-ons (plug-ins).

WP 3 - Improvement of competences of university teachers

WP leader: Ana Pešikan, EF, Belgrade, Serbia

A3.1. Training of university teachers in ATL

Active teaching/learning is an accredited teaching methodology created by experts from EF, applicable and adapted for both school and University level. It consists of 2 trainings: basic and supervision seminar, between the two - a period of at least 30 days is needed, since in that period EF experts analyze teaching scenarios and give advices for improvement, thus preparing the second seminar. 60 university teachers from all 5 Universities will be trained in ATL. They will be trained in 2 groups

The activity started by construction of two questionnaires on academics beliefs about the nature of learning/teaching process. As foreseen in CaSA application this activity started with the basic ALT seminars (in Belgrade and Cacak) followed by a supervisory training (in Novi Sad and Novi Pazar), held at least a month after the basic, in the meantime assignments given to participants were analysed and corrected. The training was realized in 2 groups: one group consisted of UTs from Belgrade and Novi Sad and the second of UT from Educons, SUNP and UNIKG. 65 UTs were trained.

A3.2. Training of university teachers in academic skills

In continuation of the 2nd ATL seminar, on the 4th day University teachers will be trained in academic skills: how to conduct quality research, prepare a project proposal

and good quality research paper, how to present research results and other academic skills. 60 university teachers from all 5 Universities will be trained in academic skills.

Two courses for university teachers were held as follows: at Novi Sad University targeting academics from University of Novi Sad, Belgrade and several from Educons; at Novi Pazar State University (targeting academics from University of Novi Pazar, Kragujevac (Cacak) and Educons University. The courses covered scientific writing, presentation skills and project proposal writing.

A3.3. Training of university teachers in methodology of creating vocational courses in e-Learning format

University teachers (UT) will be trained to create vocational courses in eLearning format using Moodle software. This training will be held for 3 days in face to face format and additional 2 days online training. They will be trained together with AMS teachers, at each University both university teachers and AMS teachers will be trained simultaneously at Universities: at UB (15 UT+12 AMS), UNS (15 UT+12 AMS), SUNP (10 UT+12 AMS), UNIKG (10 UT+12 AMS), EDUCONS (10 UT + 12 AMS) i.e. 5 groups.

This activity was held and completed by the end of 2014. As planned UTs and secondary school teachers (AMS) teachers were trained together. AMS teachers were divided in 5 groups and each training was held at 5 Serbian agricultural faculties. In total 122 AMS and UT were trained.

WP 4 - Modernization of teaching contents

WP leader: Snežana Tanasković, UNIKG, Čačak, Serbia

A4.1. Need analysis for knowledge refreshment

Report on the analysis of the needs for knowledge refreshment. This will require questionnaires preparation (will be done by BSN and ME, with assistance of IPN and AMS), their distribution (done by IPN and AMS), and finally analysis before report preparation (done by BSN and ME).

The activity started by the study visit to UM. Three representatives of the Institute for Science Application in Agriculture (IPN) and one representative of the Ministry of Education, Science and Technology Development (ME) participated in the Study visit to Faculty of Agriculture and Life Science, University of Maribor to compare experience in extension services and eLearning practices as well as other aspects of agricultural education and help Serbian partners in defining TNA.

Two detailed and broad questionnaires for training needs analysis for two target groups (secondary school teachers and advisors) were prepared in collaboration with project partners.

The registration on a website is needed to access the questionnaires that are in Serbian language. The results of the TNA for 2 groups: advisor and AMS teachers were presented in January 2015 at the workshop in Cacak. Response rate was high. Results were analysed with the assistance of IPN. Results were discussed with the participation of all beneficiaries at the meeting in Cacak which served for fine tuning of the final version of the TNA report. It was discussed to what extent TNA can be useful to training providers and to what extent should be complimented by other information sources. Also, a potential to further develop TNA as a service to NaRA users was elaborated. One

of the conclusions of the discussion was that the skill gap assessments in Agriculture on national level is missing and that practice of conduction TNA regularly can contribute to the development of Agricultural education policy in general. Due to the need to strengthen the role of EU partners at the project, it was decided to send the results of TNA, after being presented at the Cacak workshop to EU partners who gave their comments in a form of external review. The final document is prepared. TNA is a comprehensive and detailed document of 42 pages. The SC agreed that TNA will be the first brochure to be published in CaSA, and is available for download on NaRA. The whole brochure "Need analysis for knowledge refreshment of agricultural school teachers and extension service advisors in agriculture" can be found at http://arhiva.nara.ac.rs/handle/123456789/582.

WP 5 - Improvement of competences of AMS teachers

WP leader: Vidoje Vukašinović, AMS, Požarevac, Serbia

A5.1. Training of AMS teachers in ATL

The already explained active teaching/learning consists of 2 trainings: basic and supervision seminar, between the two - a period of at least 30 days is needed, since in that period EF experts analyze teaching scenarios and give advices for improvement, thus preparing the second seminar. 60 AMS teachers, 12 from 5 different AMS will be trained in ATL. They will be trained in 2 groups, according to the same training scheme as in 3.1.

Dates were decided in Cacak. Basic ATL seminars took place in February-March 2015 in Cacak and Sremska Kamenica. Supervisory ATL took place April 2015 in Novi Pazar and Sremska Kamenica.

A5.2. Training of AMS teachers in e-learning

60 AMS teachers will be trained in eLearning in 3 groups, together with university teachers as explained in 3.3.

Trainings was held in October - December 2014. AMS teachers trained with UT (Activity 3.3)

WP 6 - Improvement of competences of experts in extension services

WP leader: Snežana Janković, IPN, Belgrade, Serbia

A6.1. Training of agronomists in extension services in using e-learning platform

Agronomists, experts from extension services will be trained in using e-learning platform. They will be trained in 3 groups of 20 trainees, i.e. 60 agronomists will be trained in Belgrade.

A6.2. Training of agronomists in extension services in communication and project proposals preparation skills

Agronomists, experts from extension services will be trained in communication skills in order to acquire communication ability with farmers/ agricultural producers. They will also acquire project proposals preparation skills. This is foreseen as days 2 and 3 of the same Belgrade training that will start with the first day of using eLearning platform training. This training will be held by BSN and University professors.

IPN prepared, together with lecturers and submitted a detailed proposal for the module on e-learning and the module on communication and project proposals preparation skills to the Council for Agricultural Advisory and Applied Research of the Ministry of Agriculture and Environmental Protection for approval as one of the modules in the 2015 training plan for advisors. The proposal was accepted in December 2014.

According to the initial idea of the project, it was planned for 60 advisors from 34 Extension Offices to participate in the project (approximately two per station). IPN prepared a call and 69 advisors applied (list sent to project officer). Before the start of trainings 13 advisors more applied. Since increasing of number of advisors didn't affected budget they were invited to participate. In total, 82 participants from 34 Extension were recruited and trained in three groups in March 2015 in IPN in Belgrade. They attended training and achieved activities 6.1 and 6.2. This is considered by the SC as added value of the project.

WP 8 - Quality assurance control of project activities

WP leader: Sofija Pekić Quarrie, SUNP, Novi Pazar, Serbia

A8.1. Development of questionnaires for training courses evaluation

A Report on the creation of the Quality Control Body created during the first gathering of all partners. This body will be responsible for monitoring project achievements.

Prof. Sofija Pekic Quarrie, WP8 leader led a Creation of the QC body at the Kickoff. It was decided that all trainings should be covered by questionnaires and their analyses; QA of vocational courses will be done by detailed peer review by EU experts. QA body monitoring and evaluation comprises: recruitment of teachers, training, feedback from trained AMS and ES. Selection of topics will be based on need analysis, TNA (ME representatives in the QA body). Members of the QC body were suggested and approved.

A8.2. Analysis of training courses feedback questionnaires

Questionnaires for training courses evaluation will be developed in 3 occasions during project lifetime. Questionnaires will be developed by 2 psychologists experts from EF and one from BSN.

Questionnaires were developed for University teachers (ATL, academic skills and elearning), AMS teachers (ATL and e-learning), and advisors (project proposal preparation, communication skills and e-learning). Also, IPN has performed pre and post testing for all advisors, training participants.