

QUALITY ASSURANCE IN BUILDING CAPACITY OF SERBIAN AGRICULTURAL EDUCATION TO LINK WITH SOCIETY (CaSA)

IOANA BALAN¹, COSMIN SALASAN¹, VESNA POLEKSIC², GORAN TOPISIROVIC², SOFIJA PEKIC QUARRIE³, DUSAN PETRIC⁴, SNEZANA TANASKOVIC⁵, DANIJELA SCEPANOVIC⁶, STEVE QUARRIE⁷

¹ *Banat University of Agricultural Sciences and Veterinary Medicine “King Michael I of Romania” from Timisoara, Romania,*

² *University of Belgrade, Serbia*

³ *State University of Novi Pazar, Serbia*

⁴ *University of Novi Sad, Serbia*

⁵ *University of Kragujevac, Serbia*

⁶ *Ministry of Education and Science, Republic of Serbia*

⁷ *Balkan Security Network, Serbia*

Abstract: *Agriculture is one of the sectors of Serbian economy the country counts on to facilitate recovery of economy, a unique sector with a positive foreign trade balance. The Serbian Agricultural faculties have agreed to prepare a TEMPUS proposal Building Capacity of Serbian Agricultural Education to link with Society and create a National repository for agricultural education (NaRA) , together with other “players” participating in agricultural education and in this context, quality assurance comes to provide control of project activities.*

Key words: *agriculture, economy, education, quality assurance,*

INTRODUCTION

Agricultural education (AE) in Serbia consists of 3 main segments:

- Faculties of Agriculture (FA),
- vocational Agricultural Middle Schools (AMS),
- agricultural advisory extension services (ES) that directly communicate with agricultural producers.

All the mentioned levels have undergone reform processes in the last decade. However there are some needs of the Serbian society AE doesn't have enough capacity to fulfill yet.

The above mentioned segments are target groups that will benefit from the **Building Capacity of Serbian Agricultural education to link with society** (CaSA) project. Quality assurance ensures that project processes are used effectively to produce quality project deliverables.

MATERIALS

Following needs of the Serbian AE have been identified:

1. A lack of pedagogical education of students of FA during their graduate courses in agronomy - students that continue their carrier in education, as teachers in AMS or FA teachers, lack any formal pedagogical education; a need for young FA teachers to be trained in academic skills (writing project proposals, preparing budget, presenting project results, writing scientific papers);

2. AMS teachers and agronomy experts from ES need in-service training - both categories have an obligation to upgrade their professional knowledge;

3. ES agronomists working directly with farmers need modern means of communication, this group also expressed a need to acquire skills of writing project proposals, to be able to apply for funds, especially EU, available for ES or directly to producers.

In the Report “Gaps and training needs strategy and development plan for STAR project support to applied research and extension” from 2007 prepared for the Serbian Ministry of Agriculture it is stated that advisors must establish good relations with their customers, and that the majority of Serbian agronomists need to upgrade their knowledge.

There is a general need in Serbian Society to reinforce agricultural practice, to apply newly generated scientific knowledge. Modern production practices should be available for producers. Raising public awareness about agricultural development is important for Serbian society, issues such as ecological agriculture, organic production, GMO, are responsibility of AE to inform and educate the public.

In Recommendations from the meeting “Education of rural population in Serbia and development of the village”, held in Belgrade in 2009, the Committee on Education of the Serbian Academy of Sciences and Arts concluded that Serbia has a geographically well-arranged network of AMS that might become a powerful tool in rural development with Faculties of Agriculture as consultants and mentors. A range of possibilities offered by distance learning is a resource not enough exploited in AE. So far only a few eLearning platforms have been established.

This project proposal fits entirely into the Strategy for Education Development of the Republic of Serbia until 2020: Teachers’ education and Teachers as key factor of education development are educational subsystems particularly addressed in the Strategy. Areas of specific interest are: LLL, cooperation with other education levels and development of human resources. These are precisely the national priorities CaSA project intends to deal with: Training of non-university teachers and Development of LLL in the society at large. According to the Strategy “it is planned:....- to develop in-service teachers training to improve teachers’ competences for encouraging students’ creativity, innovation and entrepreneurship; - to train all teachers to use ICT in teaching. Methods of ATL are strongly recommended in the Strategy.

One of the 3 priorities for Middle vocational education mentioned in the Strategy is production and processing of food. Finally, in the part dedicated to adult education the Strategy specifically addresses professional development of rural population with the aim of improving agricultural practices.

In the Catalogue of programs for continuous in-service training for Teachers, Educators and Staff Associates for the school year 2012/13 and 2013/14 published by the Serbian Institute for the Improvement of Education a list of priorities prescribed is published, and “communication skills, ICTs, reinforcement of professional capacities in the area of innovative teaching methodology” are in line with the goals in CaSA.

CaSA fits into local strategies of many Serbian local communities aiming to fulfill needs in AE identified. As an example: the Strategy for Sustainable development of the city of Cacak, adopted 2011 for development of agriculture following measures are mentioned specifically: “Introducing results of scientific research to agricultural producers, agricultural advisory services and larger public; improving quality of ES to offer new knowledge and intensify production; informing and introducing good agricultural practices.”

CaSA, coordinated by University of Belgrade, will strengthen links between higher education and society by building capacity of all five Serbian Faculties of Agriculture (FA) to improve teachers’ competences in pedagogic skills and in their ability to provide

eLearning in-service vocational training courses for agricultural secondary school (AMS) teachers and experts in extension services (ES). Networking of all stakeholders in agricultural education and project sustainability are ensured by creating a National Repository for Agricultural Education (NaRA). Courses will be held at each FA in e-learning for university staff and for both university and AMS teachers in active teaching/learning (ATL), to be given by experts from Education Forum. ATL is important for both groups of teachers as they had no pedagogical training during their graduate courses. University teachers will develop and implement classical and online vocational courses targeting recent advances in agriculture for AMS teachers and agronomists in ES, in collaboration with Universities from Maribor and Foggia. NaRA will be formed with help from the Banat University of Agricultural Sciences and Veterinary Medicine “King Michael I of Romania” from Timisoara, Romania. NaRA will be used as a repository for online courses and teaching resources developed during trainings of university and AMS teachers. CaSA will also provide skills training to ES specialists for effective farmer communication in project proposals and impact by experts from Balkan Security Network and university teachers. Project deliverables will be stored and available in the NaRA for future users. Sustainability of NaRA will be ensured beyond the project by recognition of the Republic of Serbia Ministries of Education, Science and Technological Development, and Agriculture, with some courses being commercialized, and project databases, professional forums, and relevant information remaining updated and open access.

Management of NaRA will be regulated by an Agreement between universities and other project partners.

The CaSA project proposal defined its wider objective as contribution to Improvement of agricultural education (AE) to meet the needs of Serbian society. Specific objectives are:

- Improvement of quality and availability of vocational agricultural education;
- Strengthening of professional and pedagogical competences of educators;
- Creation of the “open source” repository for educators in the area of agricultural education.

The activities within the CaSA will produce a wide range of data that need to be disseminated to different stakeholders. The method of dissemination depends on (a) the communicator, (b) the message and thus the type of data and level of detail, (c) the selected presentation medium (charts, plain text, etc.), (d) the recipients (both end-users and nontechnical audiences), and (e) the desired social, political, or scientific impact and any feedback envisaged (Fig 1, Lasswell’s model).

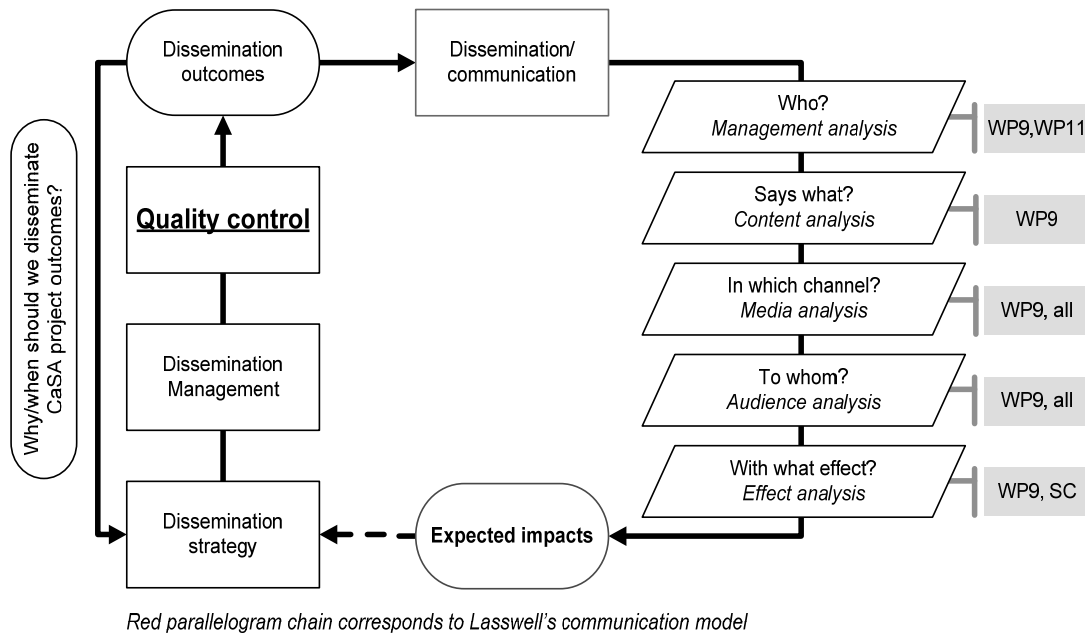


Fig 1 Dissemination/communication of CaSA outcomes and effects

(after Schaffner F., Bellini R., Petrić D., & Scholte E.-J. (2012): Guidelines for the surveillance of invasive mosquitoes, Technical report, Avia-GIS, Zoersel, Belgium, Feb. 2012, (released as Guidelines for the surveillance of invasive mosquitoes in Europe. European Centre for Disease Prevention and Control, Stockholm, Sweden ISBN 978-92-9193-378-5, doi 10.2900/61134) 44 pp. + Annexes 72 pp.)

- WP 1 Creation of the Repository
- WP 2 Assuring infrastructural support for NaRA functioning /Development of resources
- WP 3 Improvement of competences of university teachers
- WP 4 Modernization of teaching contents
- WP 5 Improvement of competences of AMS teachers
- WP 6 Improvement of competences of experts in extension services
- WP 7 Pilot implementation of vocational courses
- WP 8 Quality assurance control of project activities
- WP 9 Dissemination of project results
- WP 10 Exploitation of project results
- WP 11 Project management

Dissemination pathways for stakeholders, end-users and other target audiences (general public, non-governmental organisations, etc.) will be carefully developed, taking into account the sensitivity of the information. The choice of data type, level of detail and presentation style (charts, plain text, etc.) will be tailored to the target group and designed to deliver the desired impact. The language style used may depend on the scale of the dissemination campaign. The timing of a campaign should be set according to the desired response from the target group: launching a NaRA promotion before it became functional differs substantially from a launch when it is already posted on CaSA website when the target groups are able to navigate through and use it.

CONCLUSIONS

The focus of quality assurance is on the processes used in the CaSA project. Quality assurance ensures that CaSA project processes are used effectively to produce quality

project deliverables. It involves following and meeting standards, continuously improving project work, and correcting project defects.

The CaSA project will permit improvement of AE by introducing trainings in active teaching/learning (ATL), communication skills, e-learning, together with newest knowledge emerging from research activities that will be incorporated in the vocational courses, thus ensuring professional upgrading of educators in agriculture.

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