

## **Building an excellency network for heightening agricultural economic research and education in Romania\***

### **Summary\***

This contribution describes the Twinning Programme within H2020 by reporting about the ENHANCE project “Building an Excellency Network for Heightening Agricultural ecoNomic researCh and Education in Romania (ENHANCE)” via its objectives, measures and intermediate results. The importance of integrating evidence based methods into the training of not only post-graduate students but also into the advanced training of staff members will be shown. The Twinning Programme offers an effective tool to efficiently advance the scientific excellence of staff members and post-graduate students via the cooperation and intensified interlinkages with high performing partner institutes and researchers.

**Keywords\*** Twinning, agricultural science education, active learning

### **Introducing TWINNING and ENHANCE**

In order to avoid that low performing member-states fall further behind the European standards in research quality and excellence and thus are excluded from international research projects, the Twinning initiative has been developed within the Horizon 2020 Research framework of the European Union. Via linking a specific research institution of one of the 15 eligible member states, whose Composite indicator of Research Excellence is below the 70% threshold of the European Union, to western partners this will be accomplished (European Commission, 2014). Within this framework, we designed the project ENHANCE. The ENHANCE team is coordinated by the University of Agronomic Sciences and Veterinary Medicine of Bucharest (USAMV) and comprises three centres for agricultural economic research situated in Austria (University of Natural Resources and Life Sciences- BOKU), Germany (Leibniz Institute of Agricultural Development in Transition Economies- IAMO) and Switzerland (Federal Department of Economics, Education and Research- Agroscope) as project partners. The ENHANCE consortium designed several measures to achieve the objective mentioned above. These include training sessions focusing on methodological and theoretical topics which improve the foundation for exploring research projects. Moreover, staff exchange in both directions broadens personal networks and increase the opportunity to engage in joint publication activities and research proposals whereas summer schools bring together young international researchers and enable the participants to deal with advanced theoretical and methodological concepts in an applied way. (ENHANCE-Consortium, 2015). In Figure 1 the specific objectives of the ENHANCE project as well as the general aim are depicted.

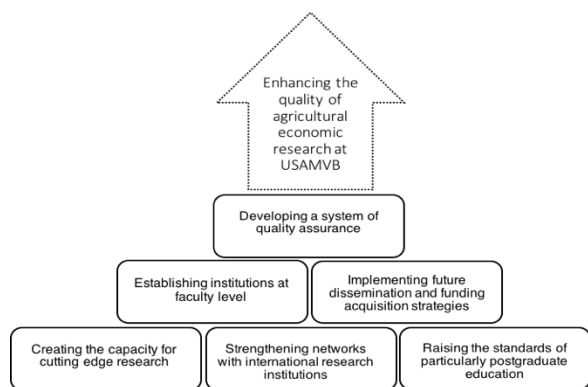


Figure 1: General aim and specific objectives of the ENHANCE project

One aspect of the ENHANCE project is to also raise the standards of scientific education at the FMEEARD which demands to take into account innovative and scientifically grounded methods of training and education. Over the last decades, the standards of teaching of post-graduate education in the majority of scientific disciplines has been criticized (Handelsman et al., 2004). This critique targets all areas of students' education and one solution to the situation in teaching is seen in active and participatory learning (Freeman et al., 2014).

## Intermediate results, shortcomings and their possible solutions

The evaluation of the first summer school on scientific working which offered several active learning and participatory elements (e.g. peer-reviewing a text, working jointly on an elevator speech) was overall either good or very good. The first staff exchanges yielded several joint manuscripts and a project grant. Moreover, the outgoing USAMV staff members intensively connected with their hosts at the partner institutes making a collaboration beyond the actual stay possible. The training sessions so far, targeted different audiences and also lead to minor changes in the curricula and schedules in order to adjust to the participants' workloads. It proved to be a challenging task to find the right pace on content for these courses.

## Concluding remarks

ENHANCE offers an appropriate way to improve the research quality and excellence and leads to better visibility of the involved researchers and thus to possible fruitful future cooperation. However, the consortium is also confronted with institutional obstacles which need to be adjusted in order to strengthen the tied network beyond the project duration. More importantly so in Eastern European Countries where, due to historical circumstances, several duties and rights from universities have mainly been carried out by academies of science which also lead to great competition amongst the two institutions (Rüegg and Sadlak, 2010). Nevertheless, via approaching current research topics the effects on the agricultural sector and regional development will definitely manifest in the long run. The project also offers a unique setting to test recent innovation in evidence based learning and integrate the latest findings from pedagogy. Hence, participants will not only profit from the courses' content but also from the methods used for its presentation.

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# DIPLOMA of EXCELLENCE

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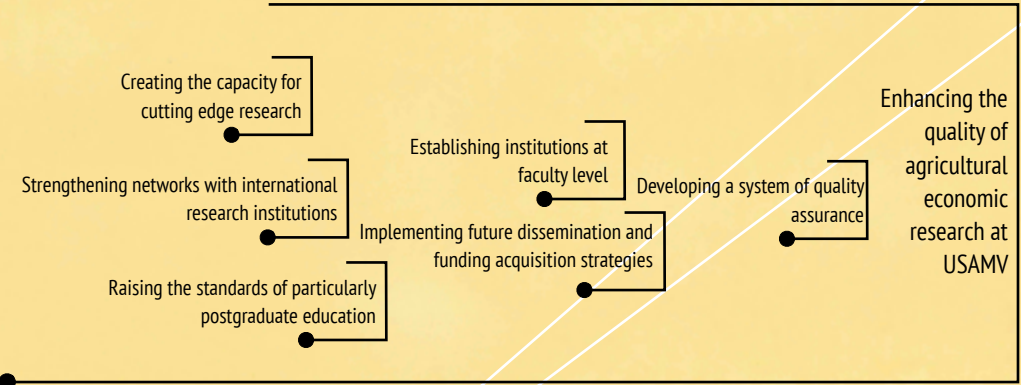
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## The Project

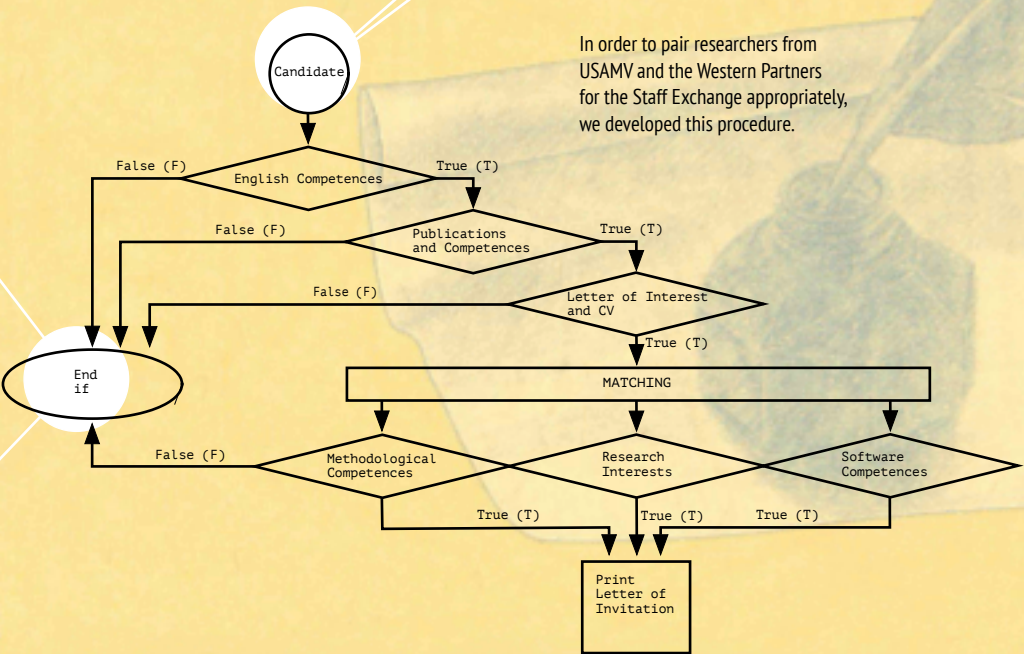
For three years, the Horizon 2020 Twinning project ENHANCE links the Faculty of Management, Economic Engineering in Agriculture and Rural Development (FMEEARD) of the University of Agronomic Sciences and Veterinary Medicine of Bucharest (USAMV) to three centers for agricultural economic research.

Situated in Austria<sup>1</sup>, Germany<sup>4</sup>, and Switzerland<sup>3</sup>, these project partners designed several measures with extraordinarily divers content and methods for knowledge-transfer in order to raise the standards of research and education at FMEEARD for future collaboration in research projects.

## The specific Objectives and the general Aim



## The Matching Procedure



## The Measures

- 3 International Summer Schools at USAMV
- 12 Training Sessions on Theories, Methods, Application
- 20 Months of Staff Exchange to USAMV
- 44 Months of Staff Exchange from USAMV

Summer Schools link young international researchers and enable the participants to deal with advanced concepts in an applied way

Training Sessions focus on methodological and theoretical topics which elevate staff members' expertise for exploring research projects

Staff Exchange in both directions broadens personal networks and increases the potential to engage in joint publications as well as research proposals

## The Composite Indicator of Research Excellence

Eligibility criterion to apply for Twinning projects is the Composite Indicator of Research Excellence. It has to be below the 70% threshold of the European Union and comprises 4 variables.

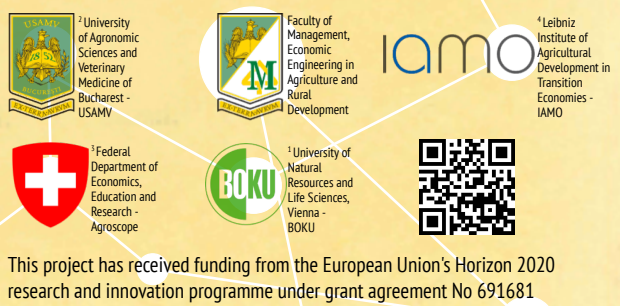
- The share of highly cited publications
- Number of top scientific universities and public research organizations
- Patent applications per million population
- Total value of ERC grants received



ENHANCE

## The Remarks and the Outlook

ENHANCE (as well as Twinning) offers an appropriate way to improve the research quality and excellence, increase the visibility of the involved researchers, establish fruitful future cooperation, apply recent insights from evidence based teaching and positively effect the agricultural sector as well as regional development. Nevertheless, institutional obstacles have to be adjusted and competition amongst universities and academies of science reduced.



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