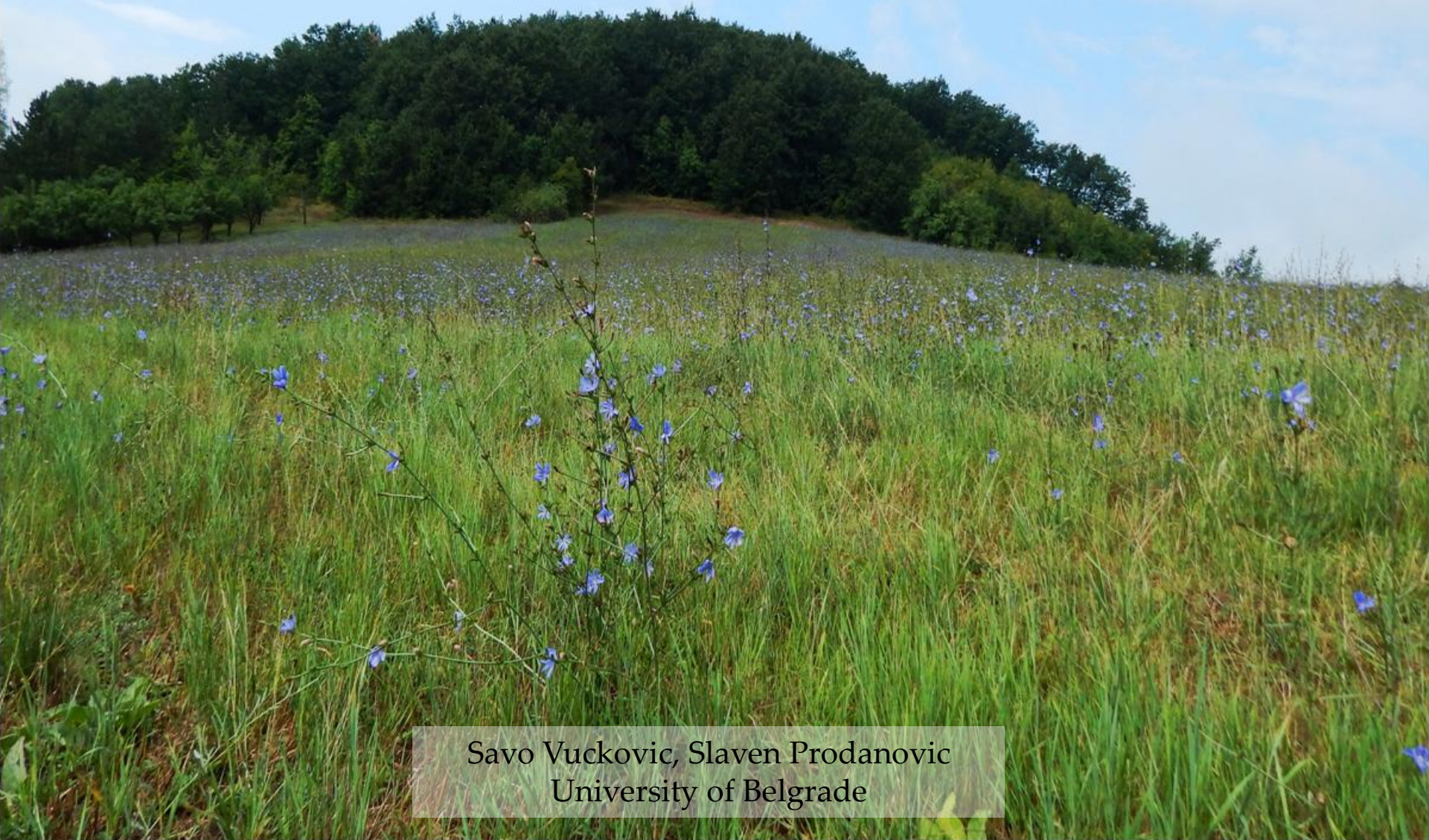
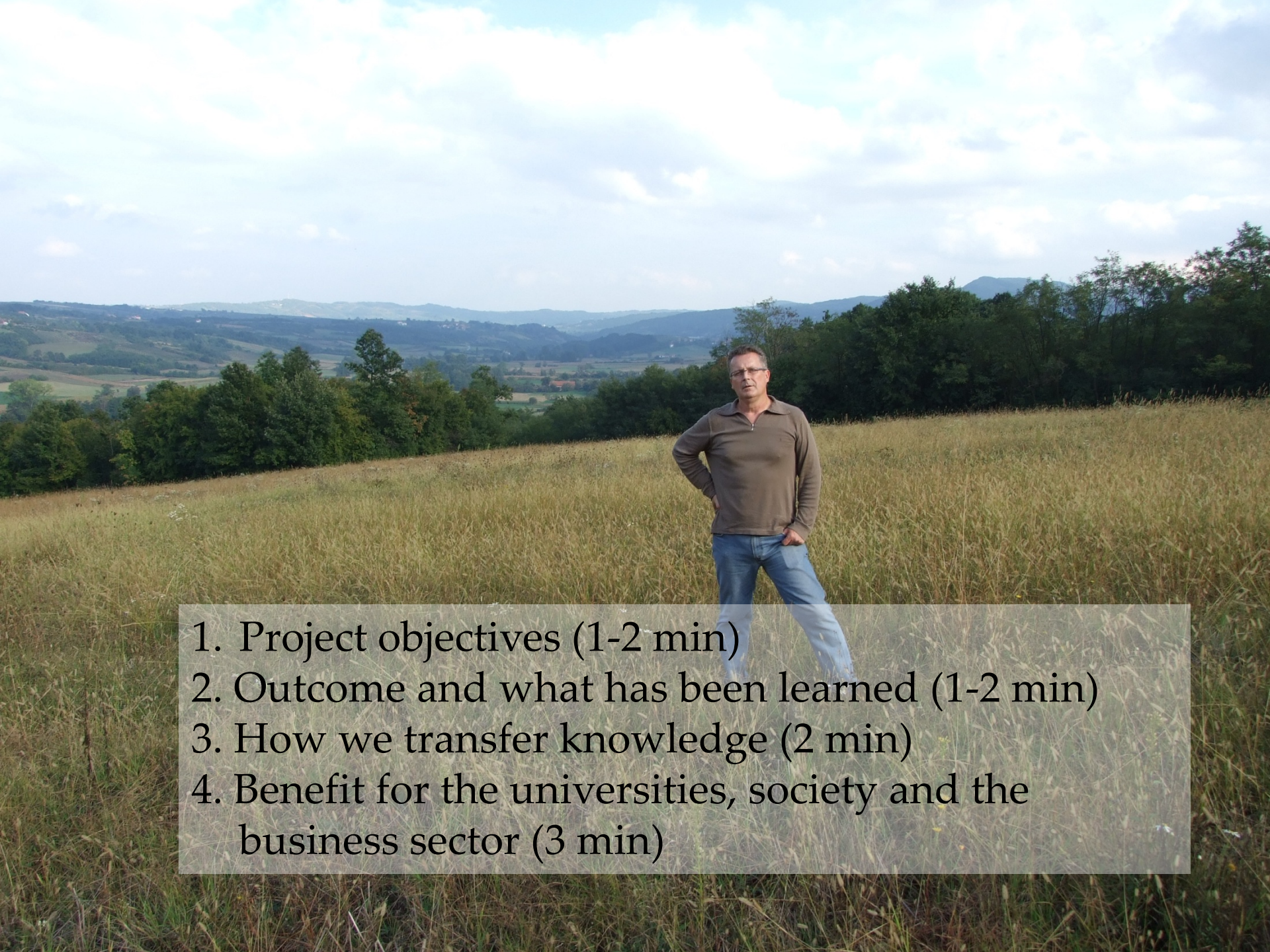


Brief presentation on outcome and importance of the HERD/Agriculture project
**“Research, education and knowledge transfer promoting entrepreneurship in
sustainable use of pastureland/grazing”**
for the universities, society and the business sector



Savo Vuckovic, Slaven Prodanovic
University of Belgrade

- 
- A man with glasses, wearing a brown long-sleeved shirt and blue jeans, stands in a field of tall, dry grass. He has his hands on his hips and is looking towards the camera. In the background, there are rolling hills, a line of trees, and a cloudy sky. A semi-transparent grey box is overlaid on the bottom left of the image, containing a numbered list.
1. Project objectives (1-2 min)
 2. Outcome and what has been learned (1-2 min)
 3. How we transfer knowledge (2 min)
 4. Benefit for the universities, society and the business sector (3 min)

1 . Project objectives:



The project was about HERD in Agriculture, with focus on pasturelands, grazing and related entrepreneurship



Project aim: Improve plant and animal production related to grasslands by university means and methods and transfer the results further.



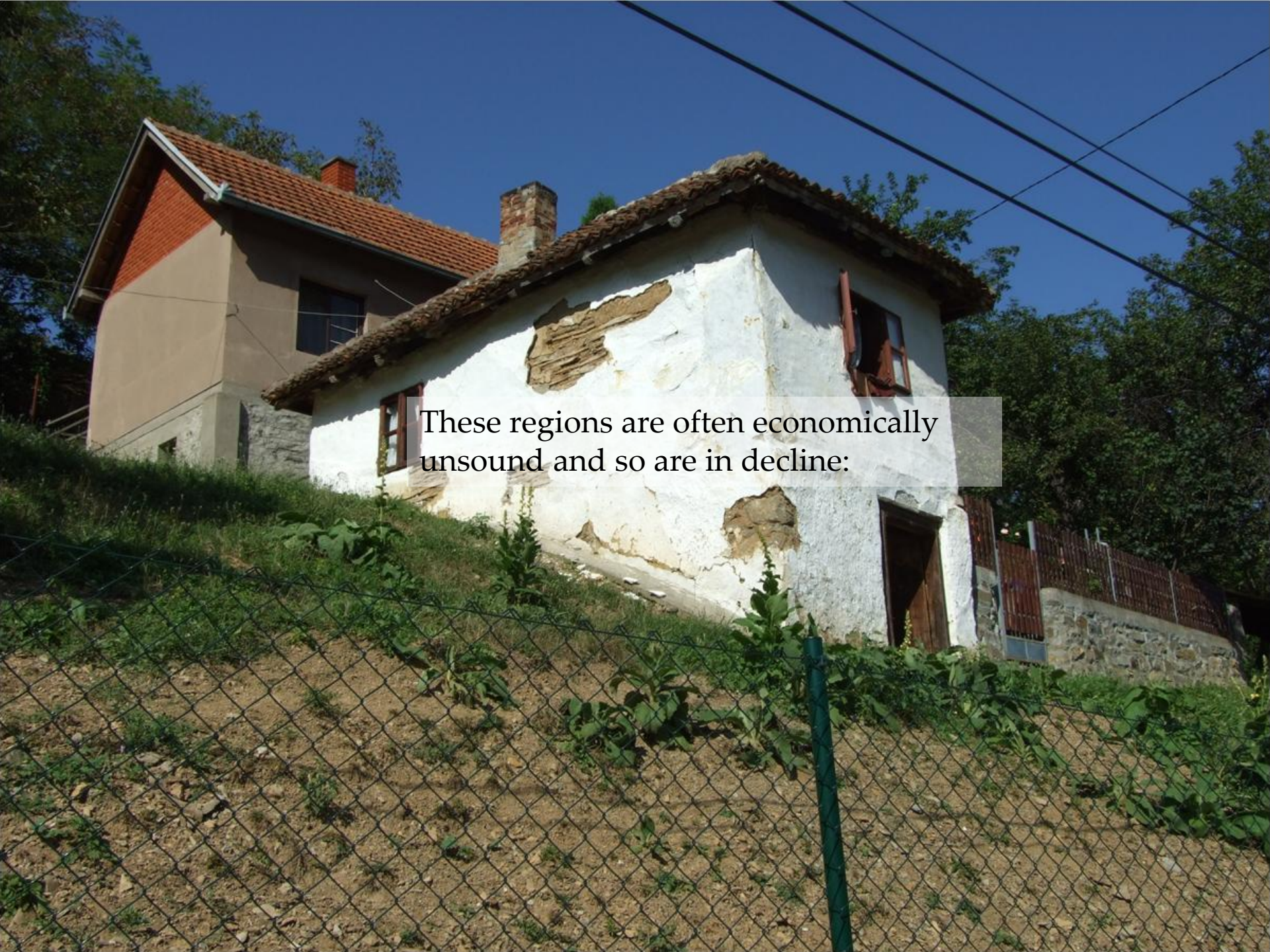
Project brought together leading WB Universities working in grasslands and the Norwegian University of Life Science.



Faculty of Agriculture University Belgrade
Faculty of Veterinary Medicine University Belgrade
Faculty of Agriculture and food technology University Mostar
Faculty of Agriculture in Lesak
Faculty of Agriculture University of Banja Luka

Grasslands and pasturelands on WB are situated mostly in hilly and mountain regions.





These regions are often economically unsound and so are in decline:



There is lot of poverty, abounding of villages and emigration, absence of women, rapid ageing of people, absence of investments and local initiatives, outdated technology and low agricultural outputs.



People working in agriculture there need help to improve production



They need the presence of agricultural advisers and experts, transfer of new knowledge, diversification in plant and animal production, impulses and stimulations, improvement of processing related to grassland and grazing, development of entrepreneurship, increasing of agricultural outputs, and appearance of local high educated leaders in agriculture.



In the same time these regions are rich in genetic resources, plants and animal biodiversity, traditional farming and forestry systems with clear technologies.



So, the project tried to contribute to development of **sustainable** use of grasslands.

2. Outcome and what has been learned

Project key results are:

- Institutional improvement
- Improved courses: “Grasslands”, “Genetic resources” and 5 others, incl. one new program at the Faculty of Veterinary Medicine
- New presentations, hand outs and books for students
- 37 New MSc and 14 PhD dissertation supported by the project
- Development of infrastructure and pursue of equipment
- Participation of faculty technicians at different workshops, symposiums, and visits

- Understanding and cooperation with participating WB institutions
- Visits among WB partners, Visit of WBI to NMBU, and reciprocal
- 6 joint workshops / seminars
- 4 Working groups
- Joint researches
- 18 new joint research papers, 4 books, web site REAKT!, one group on Social network “Facebook”

- Non-formal education for farmers and entrepreneurs
- Cooperation with other institutions (extension services, NGOs)
- Action plans in management of grasslands for municipalities



Few learned lessons:

We have learned that students are more inspired to work in the laboratory, when they have new equipment.

Students like to visit our field experiments in grasslands.





But it is more difficult to motivate students to carry out their own experiments for master theses and dissertation, because field experiments in agriculture could last long.



15/08/2009

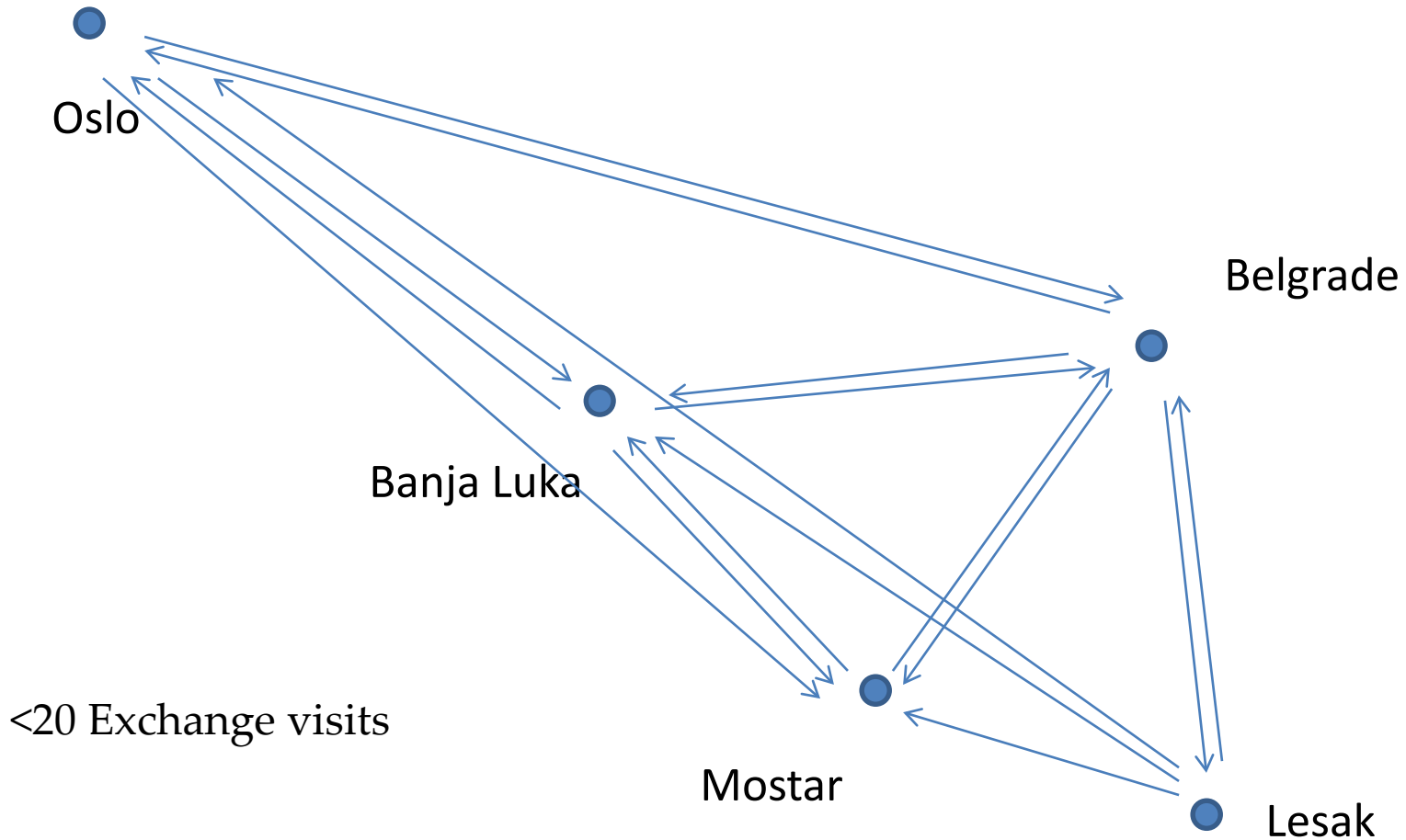


Students are proud of their participation in the project when they successfully complete the study.



But they have difficulties to find a job.

Also, we have learned how it works at the other Universities.



Each partner institution has certain advantages which can be identified best through the cooperation.

Good lesson from the project is that there is a wide range of people who are engaged in meadows. We met a very poor farmers, and very rich and successful entrepreneurs.

Professors have a difficult role to be able to communicate with everyone.

Niska Banja, 2015



Prozor, 2015



Malo Crnice, 2014

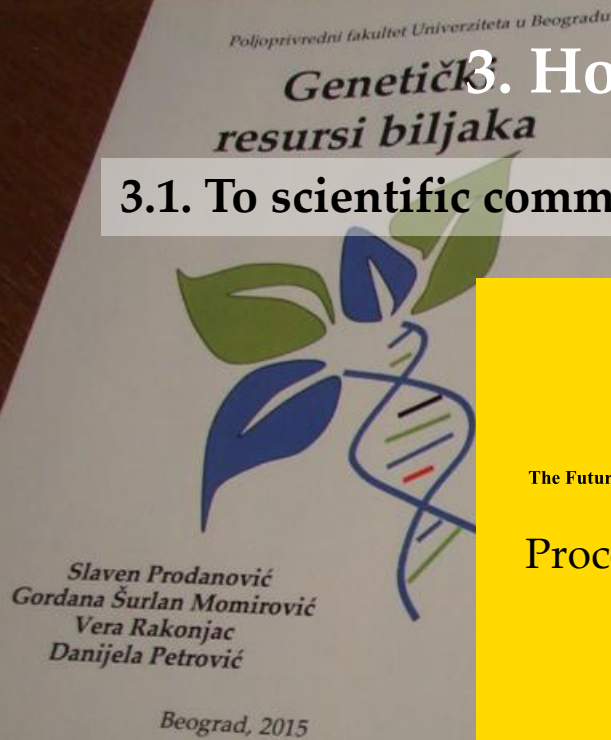


Other things learned:

- It is necessary to verify the knowledge gained at the university in practice,
- The transfer of knowledge from academic institutions towards farmers is a mutual process,
- One research topic is never completed, constantly appearing new challenges in science and practice,
- Good leadership and coordination in the project contribute to transparency and encourage cooperation among partners.

3. How we transfer knowledge

3.1. To scientific community



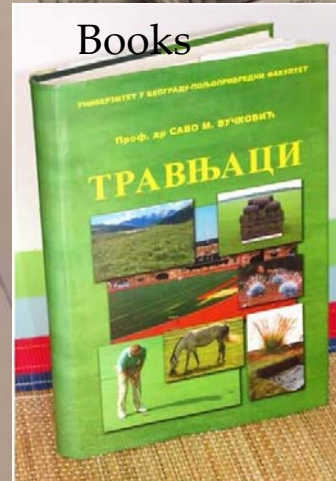
EGF at 50:
The Future of European Grasslands

Proceedings

Edited by
A. Hopkins
R.P. Collins
M.D. Fraser
V.R. King
D.C. Lloyd
J.M. Moorey
P.R.H. Roberts



VOLUME 19
GRASSLAND SCIENCE IN EUROPE



Books



Conferences



BOTHALIA Journal

Journals

Vol 44, No. 4, Apr 2014

Investigation of fertility genotypes Birdsfoot trefoil (*Lotus corniculatus* L.) depending on the method of pollination

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Abstract

Birdsfoot trefoil has a special significance for the provision of high protein forage in mountainous areas. There are a number of highly productive genotypes in natural populations, but the problem is their selection. Because of entomofilia modes, mixing

3.2. To farmers, agricultural advisers, entrepreneurs, people from government, civil sector, and NGO

Several methods:

Visit of fields - the
presence of experts in
situ (over 30 locations)



Visit of farms and farmers



Cattle farm



Goat farm



Presentations given to
grassland producers, in
villages (20 seminars for
farmers)



Public lessons about new technologies in villages
(6 Training for producers / entrepreneurs)



Buffalo dairy products



Lipe, 2015



Harvester -Bukovica, 2013



Roll baler -
Romanija, 2013

Visit of family farms
(13 visits) and
discussions



Valjevo,
2013/14



Prozor, 2014



Presentations given on seminars to
agricultural advisers (4 seminars)

Mostar, 2013



Zlatibor, 2015

Interviews to
radio and TV (5
interviews)



Slaven Prodanovic,
TV BiH



Mila Savic, TV RTS

Articles in popular journals: 6



Recording and promotion of diversification of entrepreneurship in villages

Grnčarija "Šunjarević" Pottery "Sunjarevic"

Adress: Zlakusa, 31205 Sevojno

Phon.: +381 31 546 507; +381 60 546 5070

Proizvodnja grnčarskih predmeta



Vinarija "Ivan Petković" Winery "Ivan Petkovic"

Adress: Malča, 18 000 Niš

Phon.: +381 18 201 320; +381 63 607 127

Proizvodnja vina autohtone sorte crna tamjanika



Jovanović Goran, korpar Jovanovic Goran, wood basket producer

Adress: 37 255 Kukljin, Kruševac

Phon.: +381 37 678 521; +381 64 358 42 21

Korparsko-pletarska radnja, Proizvodi od pruča: garniture, korpe, police i sl.



Udruženje građana „Etno Rasina“ Civil Association „Etno Rasina“

Adress: Trg kosovskih junaka bb, 37 000 Kruševac

Phon.: -

Udruženje za afirmaciju tradicije i kulture kao i promociju starih zanata i rukotvorina



4. Benefit for the universities, society and the business sector

4.1. Project address a relevant need in the University of Belgrade and WB partner University

The project enabled improvement of courses:

“Grasslands and Pasturelands”

“Forage production”

“Plant genetic resources”

“Organic animal production”

Relevant need of our institutions is to constantly improve curriculum of the courses, to produce new books for the courses and to develop new results, new scientific papers and new MSc and PhD thesis in these fields. These are the aims of the project, too.

4.2. The project was established in accordance with national priorities and social benefit

Agriculture is generally the priority of the Serbian Government. The Ministry of education and science and the Ministry of Agriculture are responsible for HERD in agriculture.



Priorities of the Ministry of Education and science agreed

<http://www.mpn.gov.rs/>



National Strategy of the Ministry of Agriculture for the period 2014 -2024

<http://www.mpzss.gov.rs/wp-content/uploads/datoteke/razno/4827014.0116.30-1.pdf>

In there strategic documents states that:

- Food / forage production is of the highest priority for our country
- Research in genetic resources is the priority 1.1. for our country

**Programme in Higher Education, Research and Development in the Western Balkans 2010-2014.
The Agriculture Sector (HERD/Agriculture)
Project Application Form**

(Downloaded from: <http://www.umb.no/>)



(For internal use)

Cover page

HERD/Agriculture ID.:

Received:

1. Project title

Research, education and knowledge transfer promoting entrepreneurship in sustainable use of pastureland/grazing

2. Application documents (See "Guidelines for Applicants" when filling out the project application form)

This application form
Project description
CV for project leaders
Other documents

Please send application on paper to: the HERD/ Agriculture Secretariat at UMB/ Noragric, Postboks 5003, 1432 Aas, att. Thor S. Larsen. Please also send the application and other documents electronically by e-mail to: thor.s.larsen@umb.no

3. Signatures from institutions in Western Balkans countries (For more information see attached Appendix 5)

Institutional responsible University of Belgrade, Faculty of Agriculture, Serbia	Date: 21 April 2011	Signature:  Name in print: Dean Mile D. Bobojica
Project leader	Date: 20 April 2011	Signature:  Name in print: Prof. Dr. Savo Vuckovic

4. Signatures from lead institution in Norway (attach extra forms if more than one institution)

Institutional responsible: Department for International Environment and Development Studies/ Noragric, Norwegian University of Life Sciences (UMB), Norway	Date: 29 April, 2011	Signature:  Name in print: Prof. Dr. Gr. Vegara, PhD, Head of Department
Project leader	Date: 29 April, 2011	Signature:  Name in print: Mamen Vegara, PhD, Assoc. Professor

Endorsement of 3 and 4 confirms institutional relevance of the proposed cooperation, acceptance of, and commitment to the project activities

According to the strategic state documents, the Faculty of Agriculture in Belgrade with other WB institutions and Noragric, has prepared the Application to HERD project about research, education and knowledge transfer in grasslands (signed by institutional leaders).

When the project was approved, Dean of the Faculty of Agriculture informed the Teaching and Scientific Council about it.

Then, the project was placed on the list of the International project. This list is given to the Committee for accreditation of the Ministry of education and science.

The project documentation was submitted for revision to official state Revision body in 2014.



The Faculty of Agriculture in Belgrade


The project is being implemented on a contract basis, which are signed by the Dean of the Faculty and Chef of Noragric department, and renewed every year.

5.5 Any conflict pertaining to this agreement should be resolved through negotiations. If necessary, a mediator who is acceptable to both parties should be appointed in order to find a solution.

5.6 This agreement is drawn up in duplicate, one for Noragric and one for Faculty of Agriculture, University of Belgrade.

Belgrade, 02 April 2014




Prof. Dr. Milica Petrović
Dean
Faculty of Agriculture
University of Belgrade
Belgrade, Serbia

Ås, 03 April 2014




Dr. Paul Wisborg,
Noragric, Norwegian University of
Life Science (UMB)
Noragric, Department of
International Environment and
development studies,
Ås, Norway

On the end of each project year, Dean gives consent to the Project report, and sign it.



The project logo is placed formal on the main web page of the Faculty.

<http://www.agrif.bg.ac.rs/>



4.3. Apart from the individuals directly engaged in the project, a considerable number of people at the University of Belgrade were involved and participated in the project

1. Professors participating as teachers in MSc and PhD courses that are in the focus of the project.

For example, professors Gordana Surlan-Momirovic, Vera Rakonjac and Tomislav Zivanovic participate as teachers in the course Plant genetic resources. They are interesting in course improvement, procurement of specific equipment, and publishing of joint textbook by support of the project.

2. Members of the scientific committee for defence of MSc theses and PhD dissertation developed within the project.

For example, members of scientific committee for PhD dissertation of Mr. Voja Radic were: Dr Savo Vuckovic, Dr Slaven Prodanovic, Dr Djordje Gataric, Dr Tomislav Zivanovic, and Dr Rade Stanisavljevic. They are interested in getting new experts and to interconnect their fields of research with new results obtained through the project.

All document about MSc theses and PhD dissertation are available publically.

There is a depository of all dissertations on the web site of University of Belgrade. All dissertation produced within the project contain Acknowledgment to the HERD project.

3. Co-authors of research papers published as the national and international journals and presentations given on different symposiums – apart from individuals from the Faculty of Agriculture in Belgrade, these could be also students, and researchers from other institutions in Serbia, WB and Norway.

They are interesting to improve his knowledge, to find some interdisciplinary with the project objectives, to connect with researcher from other institutions, and to have some new references in CV.

Vet. glasnik 68 (5-6) 363 - 369 (2014) Savić Mila i sar.: Selekcijski kriterijumi u organskom stočarstvu

NAPOMENA / ACKNOWLEDGEMENT:

Rad je finansiran sredstvima projekta Ministarstva nauke Republike Srbije TP 31085 i HERD Project no.: 09/1548, 332160 UÅ.

The work is funded by Ministry of Science of the Republic of Serbia TP 31085 and HERD Project no.: 09/1548, 332160 UÅ.

4. Apart from professors at the Faculty of Agriculture in Belgrade, several technical assistance as Mrs. Milanka Slavkovic and Mrs. Jovanka Ilic were interested in the project.

They have helped students in the laboratory work, and they participated on workshops, and also visited some partner institutions (University of Mostar, University of Pristina) in aim to improve cooperation on technical and administrative level.



Mrs. Milanka Slavkovic, technician at University of Belgrade, together with professors, in visit of goat farm in Mostar

4.4. Management of the Faculty of Agriculture have shown the support to the project by giving:

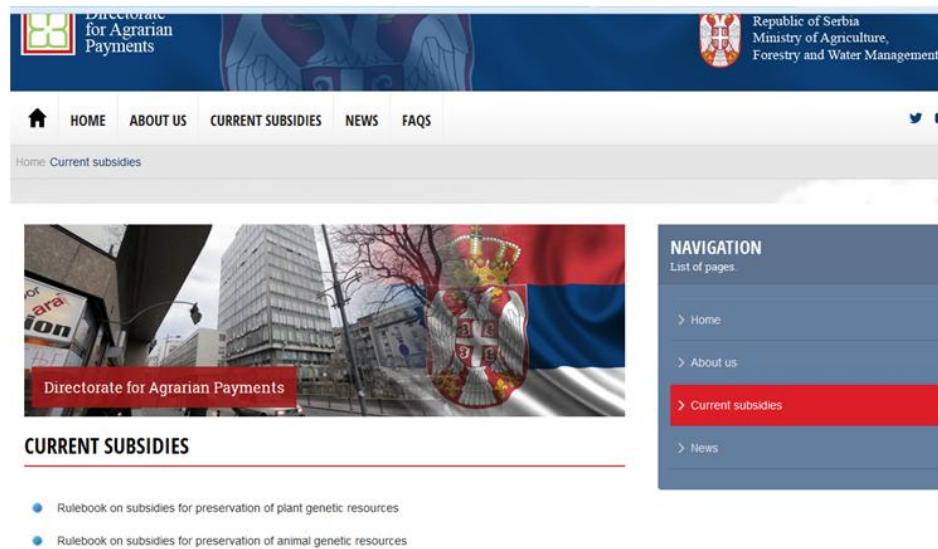
- Administrative support (Student service, Documentations and information, Contracts about project, Project plans and report, Use of copy machines),
- Support of Accountancy (they collect orders, all bills, give the financial reports, work with audit),
- Free of charge use of space for workshops, defence of theses, dissertations, meeting of working group within the project,
- Free of charge use of public services (electricity, post, heating),
- Support in use of laboratories and equipment.

4.5. The project address relevant needs in our country.

Basic argument for funding this project is that Grasslands and pasturelands represent almost **70%** of WB agricultural land.

-Project deals with high natural values (HNV), protection of plant genetic resources (PGR), protection of animal genetic resources (AGR) etc.

For example, protection of PGR and AGR is relevant need in country. Every year the Ministry of Agriculture give some incentive for this activities, according to the Rolebook on subsidies for preservation of plant genetic resources. And Rolebook on subsidies for preservation of animal genetic resources.



<http://uap.gov.rs/current-subsidies/>

4.6. Benefit for business sector

The project address the entrepreneurs and stimulates the cooperation between University and business sector.

- The entrepreneurs have participated in trainings organized within the project.
- 4 cooperation agreements signed (an example: Cooperation agreement between the University of Mostar Faculty of Agriculture and Food Technology and the Farm of sheep Smiljanic, from Tomislavgrad
- Joint application to the state project of the University Belgrade, Extension service Valjevo, and Extension Service Novi Pazar
- Joint work on protection of the geographical origin of agricultural products



Sensory
evaluation and
competition of
honey
producers



... and cheese
producers



- Participation of University representatives on fairs (Prozor, Topola, Palic, Beograd, Lipe...) as invited guests and member of the jury



4.7. Donors who funding the project

- Several institutions are interesting in the project, but they never gave directly funds for project activities, because it to complicate to do it regarding procedure and it requests a lot of administration and permits. Therefore:
- Institutes interesting in the project gave us the support by enable the free use of their land and green houses;
- Extension services have allowed to us the use of their premises and classrooms with equipment for giving lessons;
- Different institutions have provided food and drink to participants of training;
- Researchers devoted part-time to the project;
- Host institutes give us different services, as technical support in hand work and in machinery (for sowing, plant protection, harvesting).

List of donors – cooperating institutions on the project:



Institute for forage crops,
Krusevac

<http://www.ikbks.com/>



Institute “PKB-Agroekonomik”,
Padinska Skela

<http://www.pkbae.rs/o-nama.html>

Institute for vegetable crops, Smederevska Palanka

<http://www.institut-palanka.co.rs/eng/>

institute of science application agriculture, Belgrade

<http://psss.rs/page.php?63>

<https://www.linkedin.com/company/institute-for-science-application-in-agriculture>

Institute of Agricultural Economics, Belgrade

<http://www.iep.bg.ac.rs/index.php?lang=en>

Agricultural extension service Valjevo

Center for small grains, Kragujevac

Instead of a Conclusion

We thank sincerely to HERD Agriculture and Norwegian Government for supporting this project.

This project resulted in improvement of research, education and knowledge transfer promoting entrepreneurship in sustainable use of pastureland/grazing on WB.

This project begun a process of cooperation between higher education, extension services and business. The continuation of this process could significantly contribute to the progress and stability on Western Balkans.