

INVITATION

International Conference

Regenerative agriculture. An innovative approach towards mitigation of climate change through multi-tier learning (REGINA)



Organised by the Széchenyi István University
in Győr, 3rd October 2024

„Menedzsment Campus 001” Hall, at Széchenyi István University, Győr, Egyetem tér 1, 9026
Hungary

The Conference Theme:

The REGINA International Conference is organised in the context of the REGINA project, co-funded by the European Commission through Erasmus+. The conference will present the results of the REGINA project and will provide a forum for wider education and scientific community of other relevant stakeholders in Europe to present their views, policies and good practices, and discuss the conference theme, reflecting also on active citizenship and public participation for enhancing regenerative agriculture in their local area.

We hereby invite academics, researchers, NGOs and other civil society organisations, teachers, students, schools, private businesses and citizens to share their views and good practices in order to improve the regenerative agriculture and give innovative approaches towards mitigation.

In order to participate in the International Conference, a formal registration is required. The deadline for registration is 1st October 2024. **Please, register here (click on the link below):**

[Registration Form](#)

We look forward to your participation!

The background

Among the 6 European Commission priorities for 2019-24, the European Green Deal is listed as first. According to the aim, Europe wants to be the first climate-neutral continent by becoming a modern, resource-efficient economy. In order to achieve this, there is an evident need to boost the efficient use of resources and to restore biodiversity and reduce pollution. Agriculture and food systems must be transformed away from wasteful, energy-hungry and exploitative approaches. Towards the European Green Deal objective, Regenerative Agriculture (a generic term covering also Conservation Agriculture and Biodiversity Enriching Agriculture) can offer substantial results for sustainable farming by enhancing biodiversity “above and below the ground surface”. Regenerative Agriculture (RA) proposes new farming techniques and gives farmers the means to conserve and make more efficient use of natural resources, thus offsetting the destructive forces of agriculture against biodiversity. RA’s benefits include improvement of soil properties, increase of biodiversity, decrease of erosion or less CO₂ emissions.

The REGINA project – www.regina-ra.eu

REGINA is an Erasmus+ project implemented by universities, civil organisations and Secondary schools. The REGINA team is led by the Széchenyi István University Győr, and participants include the University of Florence, Euracademy Association (Greece), South and East Cork Area Development (Ireland), Farmer’s Association of Győr-Moson-Sopron County (Hungary), Slovenian Association for Conservation Agriculture (Slovenia), Secondary School of Forestry and Woodworking Postojna (Slovenia) and Veres Péter Secondary School Győr (Hungary). The main aim of the project is need to re-direct agriculture towards innovative approaches that would help to mitigate climate change is urgent and pressing. The overall aim of this project is to create learning material, in the form of courses that can be taught face-to-face and online to agronomy students (and related fields of study) at university level, to give the knowledge to the vocational secondary education students and to farmers and farmers’ advisors.

AGENDA & PROGRAM

International Conference

Regenerative agriculture. An innovative approach towards mitigation of climate change through multi-tier learning (REGINA)

08:30 – 9:00 *Registration* („Menedzsment Campus 001” Hall, at Széchenyi István University, Győr, Egyetem tér 1, 9026 Hungary)

9:00 – 9:30 Welcome and opening speeches

Palkovics László Armand: Conference opening

University professors, Széchenyi István University, Department of Plant Sciences

Honvári Patrícia: REGINA Project introduction: aims and results in a nutshell

Project manager (Széchenyi István University), college associate professor (Budapest Business University)

9:30 – 10:30 PLENARY SESSION

(Chair: Szörényiné Kukorelli Irén)

09:30 – 09:50: Keynote Speaker 1.

Abdul M. Mouazen:

Multi-Sensor Data-Fusion approach for Precision Management of Farming Input Resources
Senior full professor, Department of Environment, Ghent University (Belgium)

Abstract

Traditionally, soil conditions and crop characteristics are determined by a limited number of samples that are analysed in the laboratory. Increasing the number of samples, necessary to characterise the within-field variability, is prohibited by the extra effort, time and costs involved. Proximal and remote sensing tools have been shown to be useful sensing technologies for mapping the spatial variability necessary for decision support of variable rate applications. This talk aims at presenting recent findings about the potential of selected sensing technologies and their data fusion for optimising variable rate applications in arable crop production. Results for variable rate applications of both simulation and field experiments carried out more than 10 years in different European and associated countries are reported. Results showed, in the top majority of cases, that compared to the traditional uniform rate applications, variable rate applications increase crop yield, and profitability, while reduce environmental impact by reducing the amount of agrochemicals. It is recommended to promote the adoption of key proximal and remote sensing technologies and fusion modelling in an integrated decision support system as the agronomic, economic and environmental benefits are promising.

Abdul M. Mouazen is a Senior Full Professor in precision soil and crop management and a group leader of Precision SCoRing Group, at Ghent University, Belgium. He has a background in the application of engineering principles to soil and water management, with specific applications in soil dynamics, tillage, traction, compaction, mechanical weeding, soil remediation and management. He has over 20-year experience in the use of proximal soil sensing technologies for precision agricultural applications. He is the co-chairman of the working group on proximal soil sensing (WG-PSS) under international union of soil science (IUSS). Abdul has coordinated or is coordinating several major projects and is a

partner in several other national and international projects. Abdul carried out research and was a staff member of several Universities in Syria, Hungary, Belgium, UK and Lithuania. Abdul is a member of Editorial Boards of *Soil & Tillage Research*, *Soil Research*, *Biosystems Engineering*, *Remote Sensing*, *Soil Systems and Geomatics*. He has published over 260 peer-reviewed papers in WoS journals, with a h-index of 50.

09:50-10:10: Keynote Speaker 2.

Wojciech Kniec:

Social aspects of regenerative agriculture. Changing perception of farming, farmers and food in contemporary societies

Professor of Rural Sociology, Head of Department of Social Ecology, Institute of Sociology, Nicolaus Copernicus University (Poland)

Abstract

Regenerative agriculture (Reg.Ag.) is a paradigm shift in food production, which is led by many drivers, including changes in consumers' attitudes, but also by farmers themselves. As social idea and at the same time business strategy is based on the fundamental assumption to respect and work with the environment rather than downgrading it. Besides its ecological and economical dimension it is also a social phenomenon. It can be analysed within the broader framework of what farming is/was perceived as by the general society and what is the ideal type of farmer. The evidence from social research give us interesting and inspiring view of regenerative agriculture as "mission oriented" or "smart strategy". Regenerative agriculture has received significant attention from producers, retailers, researchers, and consumers, as well as politicians and the mainstream media. As such it is a part of the debate on the future of farming in general. But it is worth to notice, that Reg.Ag. is the product of social change in farming. This includes changes of values and norms of growing number of farmers into the system of more sustainable farm practices. It should be honestly admitted, that it is a form of „social contract” between humans and the nature. Indeed - when we realise, that food security could not be ensured on a long term basis by more and more intensive agriculture, then the only way is to promote rational use of natural resources in order to achieve regeneration effect. As such from farmers' side Reg.Ag. could be treated as rational strategy to achieve farm's durability through long-term accessibility of resources, such as fertile soil, water, biodiversity and so on. On the other hand widespread of sustainable lifestyles among food consumers generates different forms of pressure on farmers to dismiss industrial ideology of farming and introduce more holistic, long-term strategies that promise e.g. rapid carbon sequestration at global scale – for good of society. Last but not least - Reg.Ag. should also be analysed as normative shift from perceiving farmers as 'bad guys' (responsible for reducing biodiversity, degrading soil by erosion and excess fertilisers, over-using water catchments and lowering water quality, destroying traditional rural landscape etc.) towards "good guys", "future keepers", "real friends of the nature".

Wojciech Kniec is professor of rural sociology at the Nicolaus Copernicus University, Torun, Poland, chief of Social Ecology Department. Researcher involved in both international and national scientific projects on local development, rural development and food studies. Author of more than 70 books and scientific articles. Coordinator of research projects, including "Alternative Agro-Food Networks", "Agriculture and Common Goods", "Local Partnerships in Poland", "Social Capital on Rural Areas in Northern Poland", "Food Cooperatives in Northern Poland" etc. Expert of Polish National Center for Agricultural Advisory Service, Expert of Polish Rural Municipalities Association. expert of EU Committee of the Regions. At the moment engaged in research projects on Community Supported Agriculture in the context of endogenous rural development. President of Local Action Group "Podgrodzie torunskie".

10:10-10:30 Discussion, Questions & Answers

10:30 – 11:30 PANEL 1: Theory & concept of Regenerative Agriculture

(Chair: Marco Napoli)

10:30 – 10:45

Rok Mihelic: Soil regeneration following conservation agriculture principles
University of Ljubljana, Biotechnical Faculty (Slovenia)

10:45 – 11:00

Uszkai Andrea: Knowledge transfer organizations and networks for promoting sustainable agriculture in Hungary
Research fellow, HUN-REN CERS Institute for Regional Studies (Hungary)

11:00 – 11:15

Giovanni Sordi & Alessio Mariotti: Tenuta di Alberese: an example of sustainable agriculture, history and tradition in Central Italy
Director of Terre Regionali Toscane & Agronomist at Tenuta di Alberese (Italy)

11:15-11:30 Discussion, Questions & Answers

11:30 – 11:45 Coffee break with small snacks

11:45 – 13:15 PANEL 2: Education in Regenerative Agriculture (REGINA Project Results)

(Chair: Honvári Patrícia)

11:45 – 12:00

Demetris Mylonas: Transnational survey results on Regenerative Agriculture
Euracademy Association (Greece)

12:00 – 12:15

Beke Dóra: Learning Methodology of REGINA
Széchenyi István University (Hungary)

12:15 – 12:30

Marco Napoli: Learning content for university education, experiences of a pilot testing
University of Florence (Italy)

12:30 – 12:45

Tamara Urbancic: Experiences of the pilot testing and learning materials on SGLZS Postojna
Project coordinator, SGLZS Postojna (Slovenia)

12:45 – 13:00

Gyulai Kovács Andrea, Ravasz László: Experiences of the pilot testing and learning materials in Veres Péter Secondary School
Veres Péter Secondary School (Hungary)

13:00-13:15 Discussion, Questions & Answers

13:15 – 14:45 PANEL 3: Practical side of Regenerative Agriculture (farmers' presentation and experiences)

(Chair: Rok Mihelic)

Including:

*Hajzser Máté: Rábapordányi Agricultural Ltd.'s path towards sustainability
Agronomist, Rábapordányi Mezőgazdasági Zrt. (Hungary)*

14:15 – 14:45 Panel Discussion with the Presenters

14:45-15:00: Experiences of the day, theory & practice of Regenerative Agriculture

(Chair: Honvári Patrícia)

15:00 Closing the conference/ open-end & networking

Late lunch served

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