ENOLL ______ 1/11

ENOLL WEBINAR SERIES



RURAL DEVELOPMENT, NATURE AND TOURISM: IMPACT OF COVID- 19 AND NEW APPROACHES

(HELD ON 30TH JUNE 2020)

ENOLL community is actively working on the challenges that the COVID-19 crisis has brought to us. Our aim now, as it is for many others, is to react in an agile way and prepare our cities and communities now for the new societal changes that will take place in Europe and the World. The Webinar Series "Let us tackle COVID-19 together" gathers the global Living Lab community around actual proposed solutions discussing the current actions preparing our digital societies for a post-COVID future.

Presented cases

Milica Trajković. Biosense Living Lab. Serbia.

Marc Pons. Andorra Innovation Hub, Andorra.

Peter Khoury. Planning and engineering unit at Bsharri Municipality, Lebanon

Varga Korinna. BOIEAST and Research Institute of Organic Agriculture (ÖMKi), Hungary.

MODERATOR: Fernando Vilariño (Computer Vision Center – UAB, ENOLL Chairperson, Library Living Lab)

PRECISION AGRICULTURE 4 ALL

Presenter: Milica Trajković (Biosense Living Lab - Serbia)





About Biosense Living Lab:

WHAT

R&D institute for IT in biosystems focusing on ICT in agriculture. It represents the first public institute – first public start-up with diversified income that also serves as backbone for local agritech start-ups. More than 100 employees are engaged in BioSense's multidisciplinary research activities.

WHERE

- Located at the heart of Europe in the north part of Serbia characterized by fertile land and represented mainly by rural area except for some cities. This makes agriculture industry especially relevant for local context.
- ICT and outsourcing industries the next most-developed ones in the area
- There are ongoing policy changes supporting the digital transformation in Serbia

MAIN GOALS TO REACH

- How to connect ICT & rural area
- How to attract and develop new start-ups and products without outsourcing in the agriculture industry

WHY ENOLL AND ITS APPROACH

- Transform and adopt new technologies to the traditional farmers fields: «We wanted real implementation and real deployment of the solutions that our researchers are developing into an average farmer field»
- · Connect researchers and farmers, especially the small ones: «We make gigs and farmers speak the same language»
- Understand the needs of farmers and what is needed by the field

Approach

PHYSICAL PART

BioSense organized Digital farms, chose one huge agricultural producer and deployed the equipment there to conduct then open farm days enabling people to see how it works and how advanced technologies can be adopted by traditional farmers.

VIRTUAL PART

Special app was developed to produce ready-to-use advice for farmers who installed sensors using sattelite system.

Main Challenge

Low adaptation rate in Serbia among farmers

Factors and reasons for such low rates revealed from survey

- 1. Agriculture is not an interesting field for young people who prefer working in the city office rather than in the field
- 2. There is no ICT education in high schools
- 3. Those who are ready to continue family farming are not willing to change their parents' traditional agriculture way and farming approach
- 4. Hard to convince them to try even for free, especially in the period of COVID-19

Actions & solutions

- · Go to agricultural school, reach future decision makers to convince them to try implementation of new technologies and advances
- · Co-created curriculum with one school in Serbia and test it

Challenges to be solved in the future

How to go on activities in the most traditional sectors, i.e. agriculture & education, in COVID19 times? How to adapt to new corona crisis? (It was decided to stop the experiment and start plan B in September).

FACING COVID- 19 CHALLENGES IN ANDORRA WITH AN INNOVATION LIVING LAB APPROACH

Presenter: Marc Pons (Andorra Innovation Hub, Andorra)

THE COUNTRY AS AN OPEN INNOVATION LIVING LARS

Andorra is a small country that turned out to be one of the most affected by COVID19- countries in Europe particularly because of its high popularity with tourists from all over the world (8 million per year). The size of economy represents another challenge in terms of talent capacity, critical mass and access to infrastructure.

WHY OPEN INNOVATION LIVING LABS IN ANDORRA?

To tackle the main challenges faced by the small country, including mobility, energy etc., but also having an ambition to offer the national and international community a nice place to prototype, co-create ant test different solutions to the society.

Finally, it became an interesting tool engaging different stakeholders (researchers, public and private sectors) to use in the face the current COVID- 19 pandemic to find response to the crisis.

SOLUTIONS

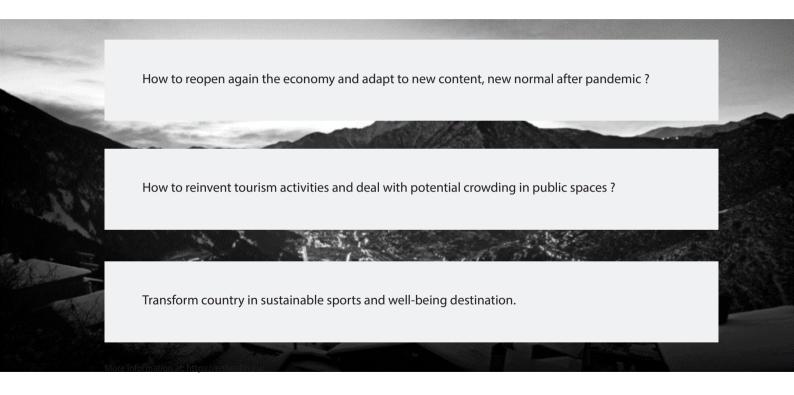
- Develop and test solutions to track symptoms, drugs, population access to drugs
- Establish 59 points in the country with a strong logistics to test the solutions on the population
- Reached %90 of the population to make immune test

OUTCOMES

- Contribute to development of national confinement strategy to deal with
- Collect more data on dynamics and patterns of disease
- Improve control over situation



CHALLENGES TO BE TACKLED IN THE FUTURE



ENOLL ______ 6/11

BSHARRI MUNICIPALITY FACING COVID- 19



Presenter: Peter Khoury (Planning and engineering unit at Bsharri Municipality, Lebanon)

Bsharri Municipality is a small area in Lebanon with about 5000 inhabitants. Some of its natural beauty sites, museums and cultural landmarks are included in UNESCO protection list and attract tourists from all over the world that makes tourism the key industry in the region. On the other hand, the local economy relies on agriculture, particularly apple production with Bsharri being responsible for 65 % apple production in the region and around 1000 farmers involved in the sector. Other agricultural produce includes arak (vodka), cheese, yoghurt and local products.

CHALLENGES

- Socio-economic and political instability affects apple production
- Export decrease due to closed borders with Syria implies the necessity to find new markets for export that is highly difficult

RESULTS

All 74 reported cases were dealt with and people now are in better health that is proved by negative dynamics.

ACTIONS & SOLUTIONS

- With the USA support machines for apple production and apple agriculture development were bought
- When pandemic started the lockdown decision was made in the town immediately that created difficulties for population to make money. The decision to provide chicken and boxes to each family was taken
- Support population with introduction of app connected to university so that everyone who had symptoms COVID19- could post this information so that the Red Cross came to render help and deliver to the hospital.

CHALLENGES TO BE TACKLED IN THE FUTURE

Deal with negative impact of COVID19- on agricultural & tourism fields

How to go back to normal life?

How to restore tourism industry in the face of economical & political instability?







BIOEAST AND RESEARCH INSTITUTE OF ORGANIC AGRICULTURE (ÖMKI)

Bl

Presenter: Korinna Varga (BOIEAST and Research Institute of Organic Agriculture (ÖMKi), Hungary)



CUTTING-EDGE RESEARCH, ORGANIC INNOVATION, SUSTAINABLE FUTURE.

About ÖMKi:

Partner of BOIEAST initiative, central-European inter-governmental initiative for knowledge-based agriculture, aquaculture & forestry in the bioeconomy which offers a shared strategic research and innovation framework for working towards sustainable bioeconomies in the Central & Eastern European countries.

ÖMKi is the only private research institute in Hungary that deals with organic agricultural research. ÖMKi also operates the ÖMKi On-farm Livin Lab, which is an agroecology-focused nationwide participatory experimentation network that includes a variety of field trials and technology tests co-designed and co-implemented with farmers in Hungary with the aim to promote agroecology.

FIFI D OF WORKS AND THE MAIN AIMS

- Participatory on-farm research & product development of organic agriculture & agroecological transition in Hungary
- Together with BIOEAST accelerate the agricultural transition in CEE region by setting up a network, aligning national agendas and collecting and sharing good practices

MAIN CHALLENGES

- Destruction of natural habitats and major reduction in (agro) biodiversity
- Pandemic direct impacts on global and national trading systems, unsustainable consumption habits that aggravated crisis in global food supply chain
- The present crisis is also a humanitarian crisis
- The need for ecological turn in Hungary and in the CEE region
- · Crisis as opportunity to redefine food production and supply chain at a strategic level (local and regional as well) in a sustainable spirit.

ENOLL _______ 9/11

Actions & Solutions

1. ÖMKi has open innovation space for finding more sustainable agriculture management solutions that benefit the farms directly, makes a direct impact on production pratices and efficiency, improving resilience of farming systems and having direct impact on local climate adaptation strategies

- In cooperation with different stakeholders, they developed the production technology of HU landrace tomatoe and shared the knowledge with farmers.From the best performing landraces created a landrace tomato seedling product line thus helping agricultural and alimentary SMEs.
- 3. Support local biodiversity of local farmers and local supply chain development
- 4. Soil management improvement in viticulture and a diverse interrow seed mixture product
- 5. Bioest helped to spread and accelerate the participatory Living Lab approach in the region and other countries by setting up networks and establishing the sharing of best practices

CHALLENGES TO BE TACKLED IN THE FUTURE

How to be prepared for next pandemic?

How to strengthen and empower farmers to adapt to rapid changes in digitization?

How to support farmers in their agroecological transtion in Hungary and in the CEE regions?









Q&A

.01

HOW THE ANDORRA HUB CONNECT TO THE GOVERNMENTAL INSTITUTIONS IN TERMS OF COORDINATE ACTIVITIES POST COVID 19?

Andorra Innovation Hub:

Well, the initiative is really well connected to the government main strategic policies and initially it was a public initiative. And this is the strength of this case. However, the challenge is also to connect tit to private industry as well. .02

WHAT WILL BE PRIORITY NOW TO MOVE FORWARD AND HOW
TO MANAGE APPLE PRODUCTION AND LABOR MARKET AND
TOURISM INDUSTRY?

Bsharri Municipality:

Regarding the labor market, we have 20 % of inhabitants in our town – refugees from Syria. We tried several times to intervene students from the town to work in the fields, but it was not efficient. The farmers think that it is more efficient and productive to work with Syrians. This is how it is going. We try to push owners of guest houses to offer tourists programs to stay for free in exchange of working in the fields, to do some programs at the same time. That may be win-win situation for both parts.

Also we have now participatory project approach related to tourism – we are trying to refurbishing facades and paint those that are not painted. We employ citizen of the town (50 % Syrians, 50 % Lebanese) so it is a competition for the best idea.

ENOLL ________11/11

.03

HOW TO TACKLE THE CHALLENGE OF CO-CREATING REMOTELY?

Biosense Living lab:

Well, it is difficult. Rural area in Serbia is underdeveloped country, our aim – to foster development of rural areas, especially in agriculture. We are working with government for subsidies for agricultural producers via our platform. We want to convince farmers that ICT is not their enemy, but can help them, save their time. With schoolchildren we succeeded to show them that with solar sensors they do not need to go every day in the filed. Step by step we are trying to introduce technologies to average farmers», make it clear for them how to use ICT. It is a challenge.

It is also up to mentality – farmers do not share equipment that is hindering factor, but with COVID19- showed that only together we can cope with this situation. We hope for more farmers to join and greater cooperation between farmers in using new technologies

.04

WHAT'S NEXT? WHAT IS YOUR PRIORITY?

ÖMKi:

- 1. Reinforce the presence of opinions on this matter.
- Enable farmers to get access to digital solutions or help them adapt currently available solutions into their everyday life scenarios (especially small scale farmers)
- Enable co-creation among countries and set up a network to deal
 with upcoming problems and to collect and share agricultural good
 examples and knowledge. Help implement new technologies in the
 region.

FUTHER DISCUSSION POINTS

- 1. 1. Value of Rural area for the citizens
- 2. Country as a Living Lab
- 3. Pandemic accelerated digitalization that poses new challenges. How to deal with this?
- 4. Links between natural heritage and cultural heritage
- Sharing efforts between countries (see comment from Australia) and making common understanding of what we can do