VITALISING ICT RELEVANCE IN AGRICULTURAL LEARNING

From **VIRAL** to real

project achievements

Florin Stanica USAMV, Miljan Cvetković UNIBL

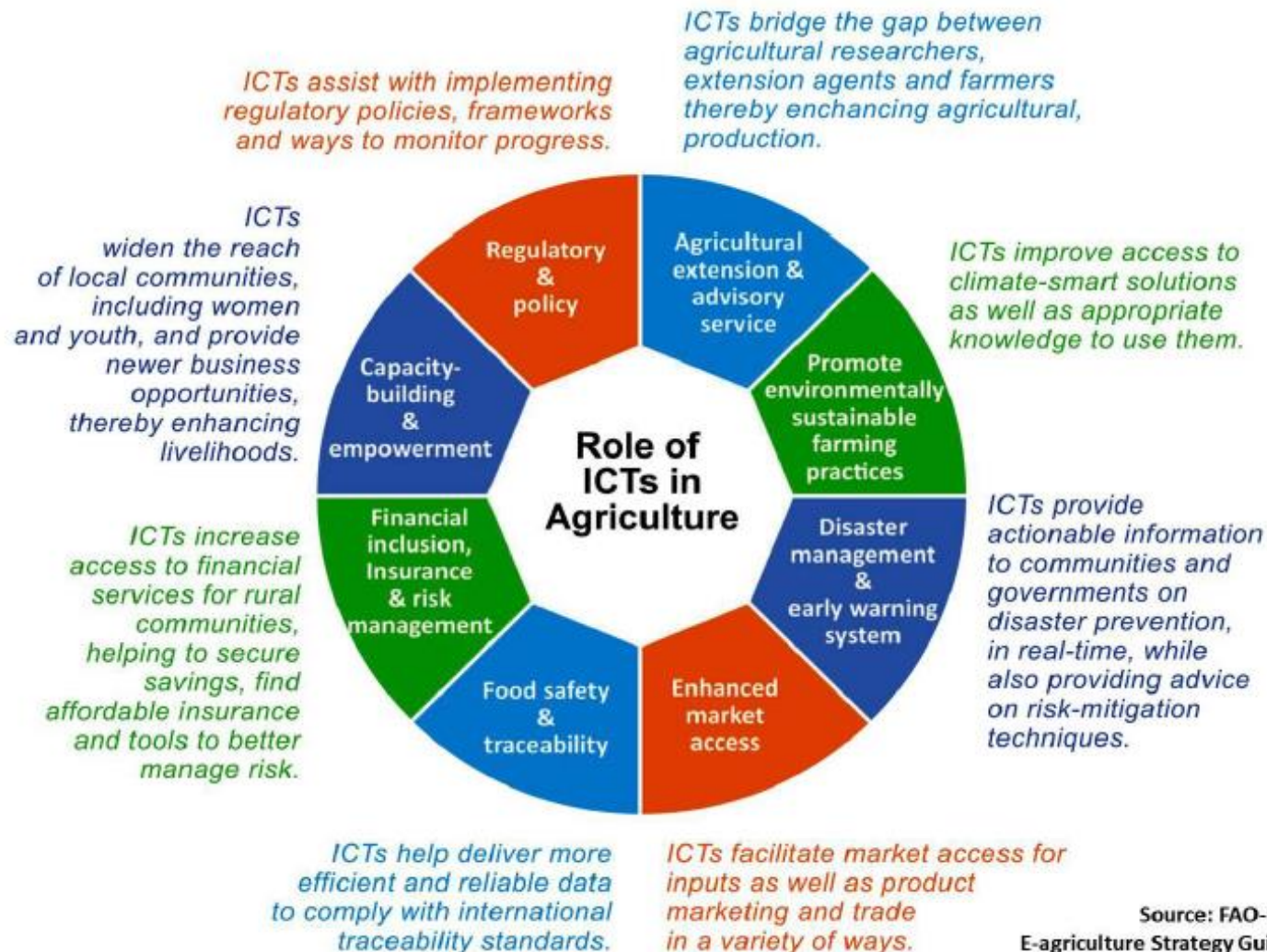**"The role and importance of ICT in Agriculture future development"**

VIRAL workshop

Figure 1: Role of ICT in agriculture

Source: FAO-ITU
E-agriculture Strategy Guide

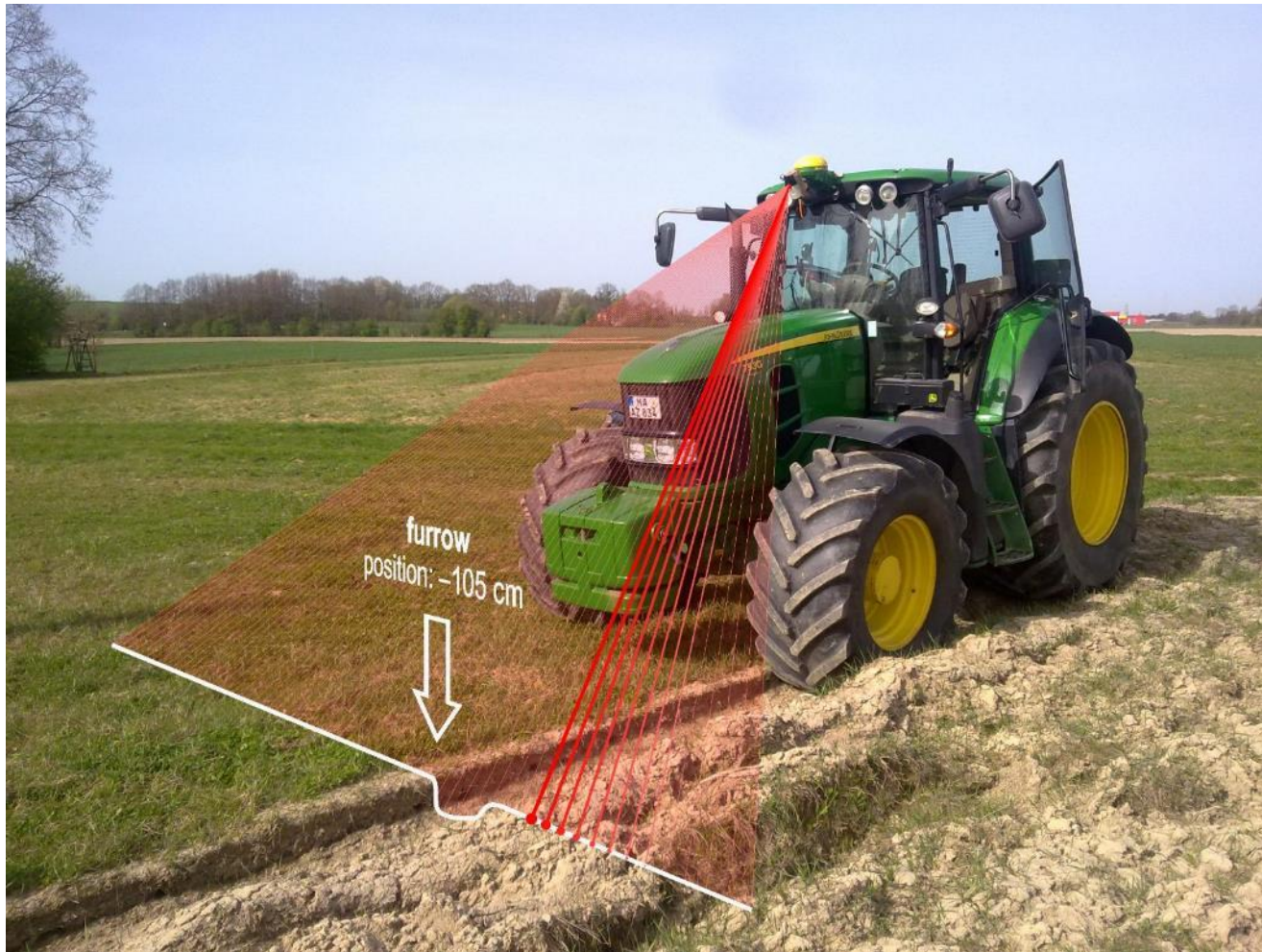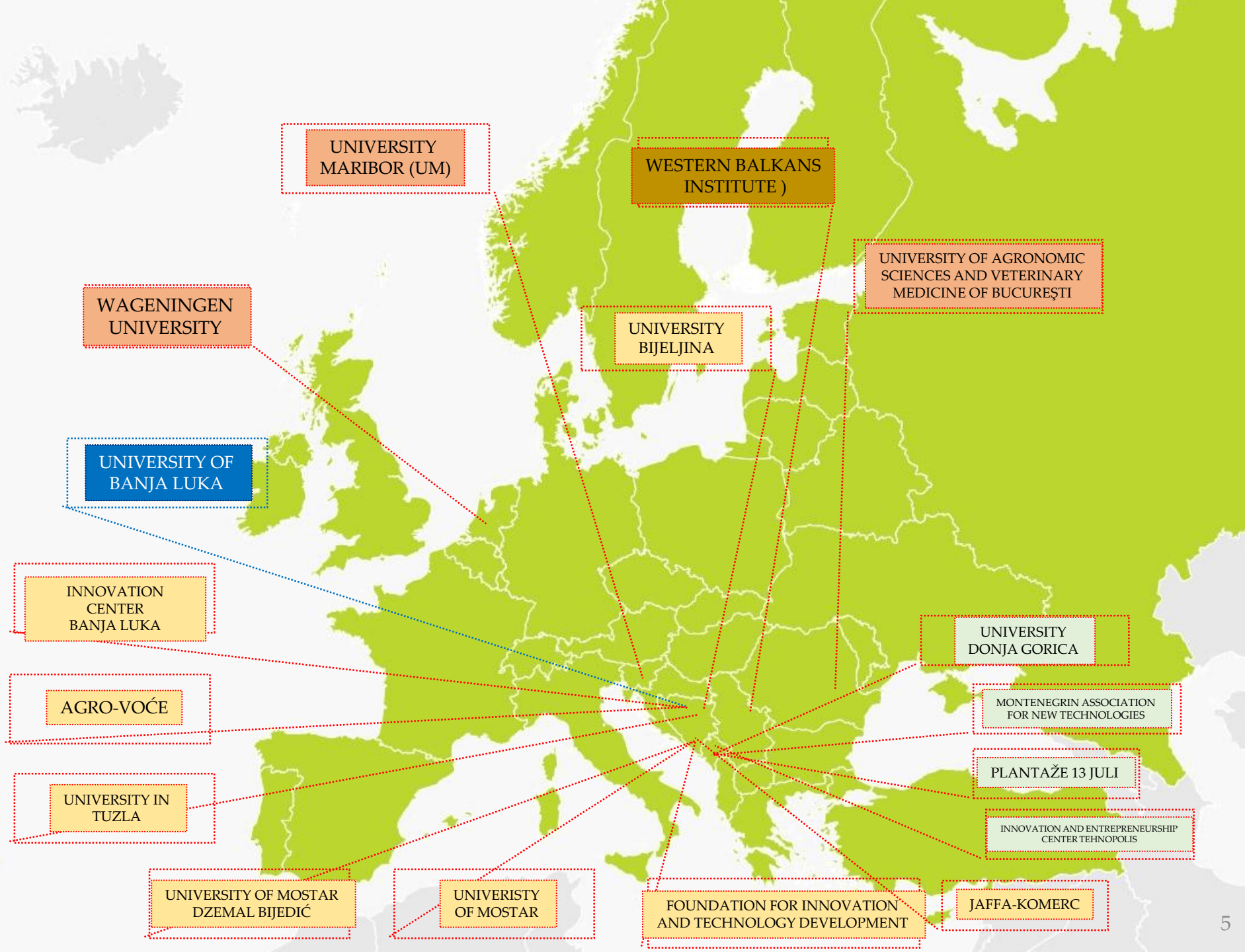http://viralerasmus.org/en/home/

PARTNERS

Partners
(universities, private companies, NGOs)

UNIVERSITY MARIBOR (UM)

WESTERN BALKANS INSTITUTE)

UNIVERSITY OF AGRONOMIC SCIENCES AND VETERINARY MEDICINE OF BUCUREŞTI

WAGENINGEN UNIVERSITY

UNIVERSITY BIJELJINA

UNIVERSITY OF BANJA LUKA

INNOVATION CENTER BANJA LUKA

UNIVERSITY DONJA GORICA

AGRO-VOĆE

MONTENEGRIN ASSOCIATION FOR NEW TECHNOLOGIES

PLANTAŽE 13 JULI

UNIVERSITY IN TUZLA

INNOVATION AND ENTREPRENEURSHIP CENTER TEHNOPOLIS

UNIVERSITY OF MOSTAR DZEMAL BIJEDIĆ

UNIVERISTY OF MOSTAR

FOUNDATION FOR INNOVATION AND TECHNOLOGY DEVELOPMENT

JAFFA-KOMERC

5

PROJECT AIM

Overall project aim of VIRAL to support university and business collaboration (UBC) through accelerating the use of ICT across Western Balkans agro-communities. The concept is led by relevant regional AET facilities and based on enabling the use of different ICT solutions/techniques/tools in the classroom and outside of it in order to obtain desired integration of agriculture and it engineering which in effect reinforces UBC across regional agro communities.

SO1: to increase the capacity of HEIs to apply and generate ICT in AET and practice

SO2: to improve effectiveness and employability of AET graduates

SO3: to boost academic-business cooperation regional platform for sustainability, networking and exchange within agricultural and technological communities

Work packages

WP 1 – **Preparation**

WP 2 – **Buiding competences in AIT**

WP 3 – **Development of Student pitching competitions - hackatons**

WP 4 – **Creation of University-Business cooperation platform**

WP 5 – **Knowledge transfer across Agri-community**

WP 6 – *Quality assurance*

WP 7 – *Results dissemination & exploitation*

WP 8 – *Management*

V I R A L

From VIRAL...

...to

VIRAL

WP1.1.Comparative analysis report (link)
WP1.2.Needs assessment report (link)

Both reports were carried out. The input data was collected through the questionnaire surveys which were carried out in all participating countries (BA, ME, RS, SI, RO, NL). Surveyed population include: **256** *farmers,* **89** *extension service providers,* **164** *professors i* **643** *students.*

WP1.3. Web http://viralerasmus.org/
WP1.4. Introduction conference (link), (link), (link), (link)

Completed

COMPARATIVE ANALYSIS OF UNIVERSITY-BUSINESS COOPERATION IN AGRICULTURE IN THE WESTERN BALKANS AND EU AND DEVELOP POLICY RECOMMENDATIONS

VIRAL
WP 1.1. REPORT

Co-funded by the Erasmus+ Programme of the European Union

...EDS ASSESSMENT/KNOWLEDGE TRANSFER UPDATE REPORT

VIRAL
WP 1.2 REPORT

Co-funded by the Erasmus+ Programme of the European Union

VIRAL

VIRAL

WP2.1.Educational seminar on ICT in agriculture

Introduction seminar on ICT in agriculture was prepared and delivered by WU online. 87 persons applied and 77 attended the seminar. (link)

WP2.2. Training sessions

First ToT training session focusing on train̶i̶n̶g̶ ̶and agriculture, was held in Tuzla. 47 persons attended ̶ ̶ ̶ ̶ ̶ out of which 25 were online (link).

Second ToT training session focusing on training in ICT and agriculture, was held in Mostar. 39 persons attended the training, out of which 16 were online (link).

Completed

VIRAL

WP2.3. Creation of University ToT

Following the completion of 2 training sessions cross-institutional ToT teams of educators were ~~constituted~~ for all 5 disciplines: IoT; Mobile Applications; Drones in Agriculture; Robotics in Agriculture; GIS
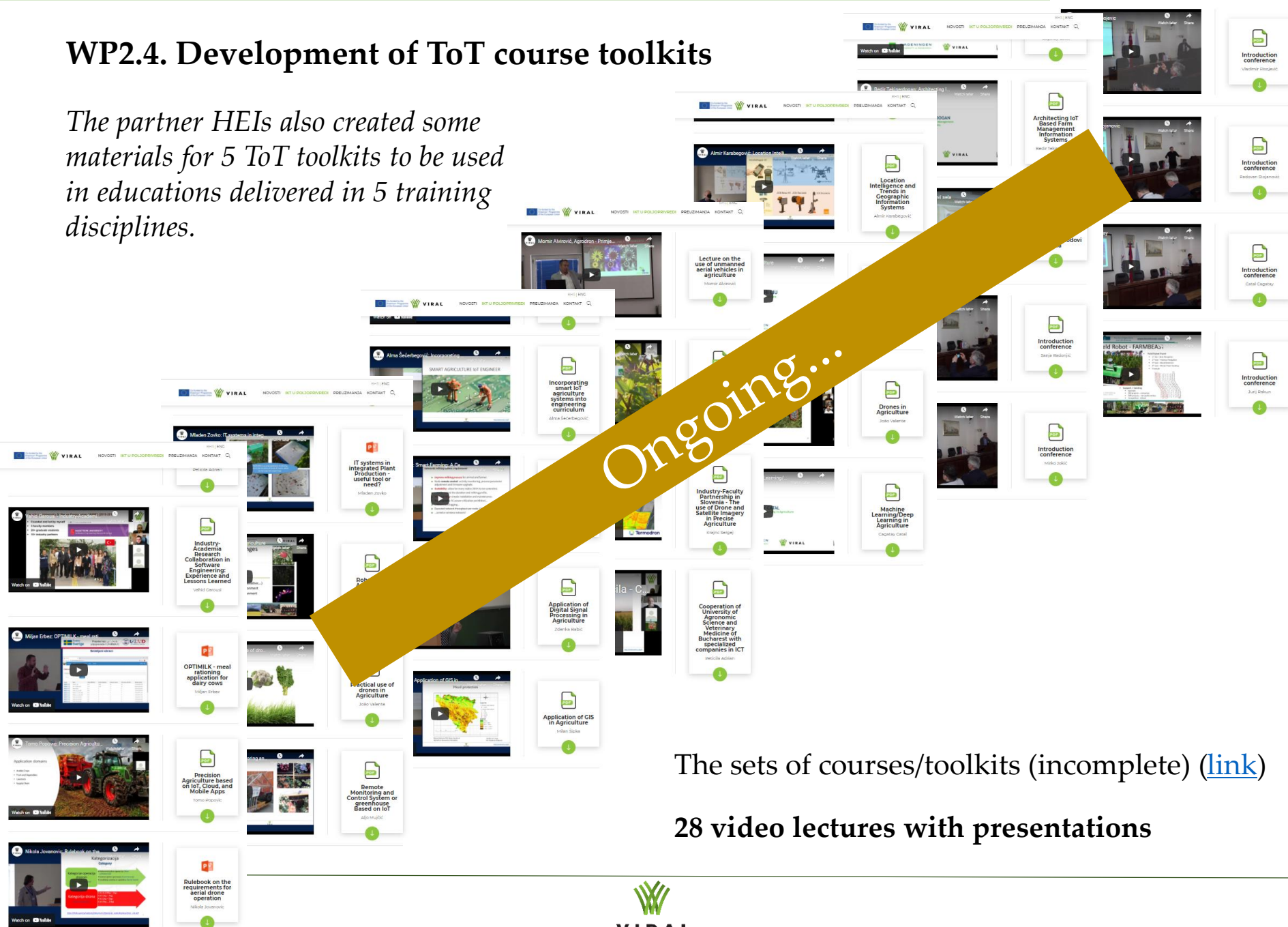
Completed

	GIS *team of trainers*		
	Name and surname	**Academic title**	**E-mail address**
anja	**Milan Šipka**	**Teaching assistant**	milan.sipka@agro.unibl.org
rsity of Tuzla	Emina Bajraktarević	Teaching assistant	emina.bajrektarevic@fet.ba
"Džemal Bijedić" University of Mostar	Aleksandra Šupljeglav	Teaching assistant	aleksandra@unmo.ba
University of Mostar	Antonio Stipanović	Associate, MSc	antonio.stipanovic@aptf.sum.ba
University of Donja Gorica	Tomo Popović Stevan Čakić	Assistant professor Research assistant	tomo.popovic@udg.edu.me stevan.cakic@udg.edu.me
University of Bijeljina	Miroslav Nedeljković	Assistant professor	miroslav.nedeljkovic.bn@gmail.com
University of Agronomic Sciences and Veterinary Medicine of Bucharest	Doru Mihai Cristian Moise	Professor Lecturer	doru.mihai1@gmail.com cristian.moise@rosa.ro

With the support of the Erasmus+ Programme of the European Union

V I R A L

WP2.4. Development of ToT course toolkits

The partner HEIs also created some materials for 5 ToT toolkits to be used in educations delivered in 5 training disciplines.

Ongoing…

The sets of courses/toolkits (incomplete) (link)

28 video lectures with presentations

VIRAL

WP2.6. Practical Guide for the use of ICT in AET

Practical guide for the use of ICT in agriculture in English (link)
Practical guide for the use of ICT in agriculture in Serbian (link)
Practical guide for the use of ICT in agriculture in Croatian (link)
Practical guide for the use of ICT in agriculture in Bosnian (link)
Practical guide for the use of ICT in agriculture in Montenegrin (link)

WP2.7.Creation of crash course on ICT in agriculture

In the period covered by this report the structure of the crash courses has been developed. The structure covers 5 specific fields: IoT; Mobile Applicatio...... in Agriculture; Robotics in Agriculture; GIS). The structure of each .... a has also been developed, along with design and training materials for ...... nd learners.

Ongoing…

VIRAL

WP.3.1. DEVELOPMENT OF STUDENT PITCHING COMPETITIONS – HACKATONS

Video guide for organizing student pitching competitions ([link](#))
Guidelines for organizing student pitching competitions ([link](#))
Manual for organizing student pitching competitions ([link](#))

The total of **18,100 EUR** raised from businesses by project partners for rewards.

Completed

WP4.1.Introduction seminar on university-business cooperation

The Introduction academic-business cooperation (ABC) seminar was held online via ZOOM with participation of more than 60 professors, business representatives and stakeholders (link).

Development workshops on university-business cooperation

Chamber of Commerce and Industry of the Republic of Serbia and participants in the "Scaleup4europe" project (link).

Developing a model of a multifunctional robot for use in protected areas (link).

HORIZON 2020 project "Scaleup4europe" (link).

Project AgroLIFE is funded by GIZ (German Technical Assistance Agency) and implemen... ...National Alliance for Local Economic Cooperation) and TeleGroup doo (link).

Cooperation agreement in the field of ICT application in agriculture was sig... ...aculty of Agriculture, University of Banja Luka, and the Association for Unmanned Systems in ...grodron Consortium (link).

Ongoing…

WP5.1. Implementation of student crash courses

Agrodrone lecture for students about the use of drones in agriculture (link)

Ongoing...

The workshop was intended for students of the II and III cycle of the Faculty of Agriculture.

VIRAL

WP5.2.Knowledge transfer seminar for extension service providers

On 26/03/2021 within the VIRAL project, the <u>Faculty of Agriculture of the University of Banja Luka and the Ministry of Agriculture, Forestry and Water Management of the Republic of Srpska</u> organized the practical demonstration of the use of drones for extension service providers (link). The activity is realized in cooperation with the company <u>"Agrodron"</u> from Serbia and "......" from Laktaši. More information is available at the following (link).
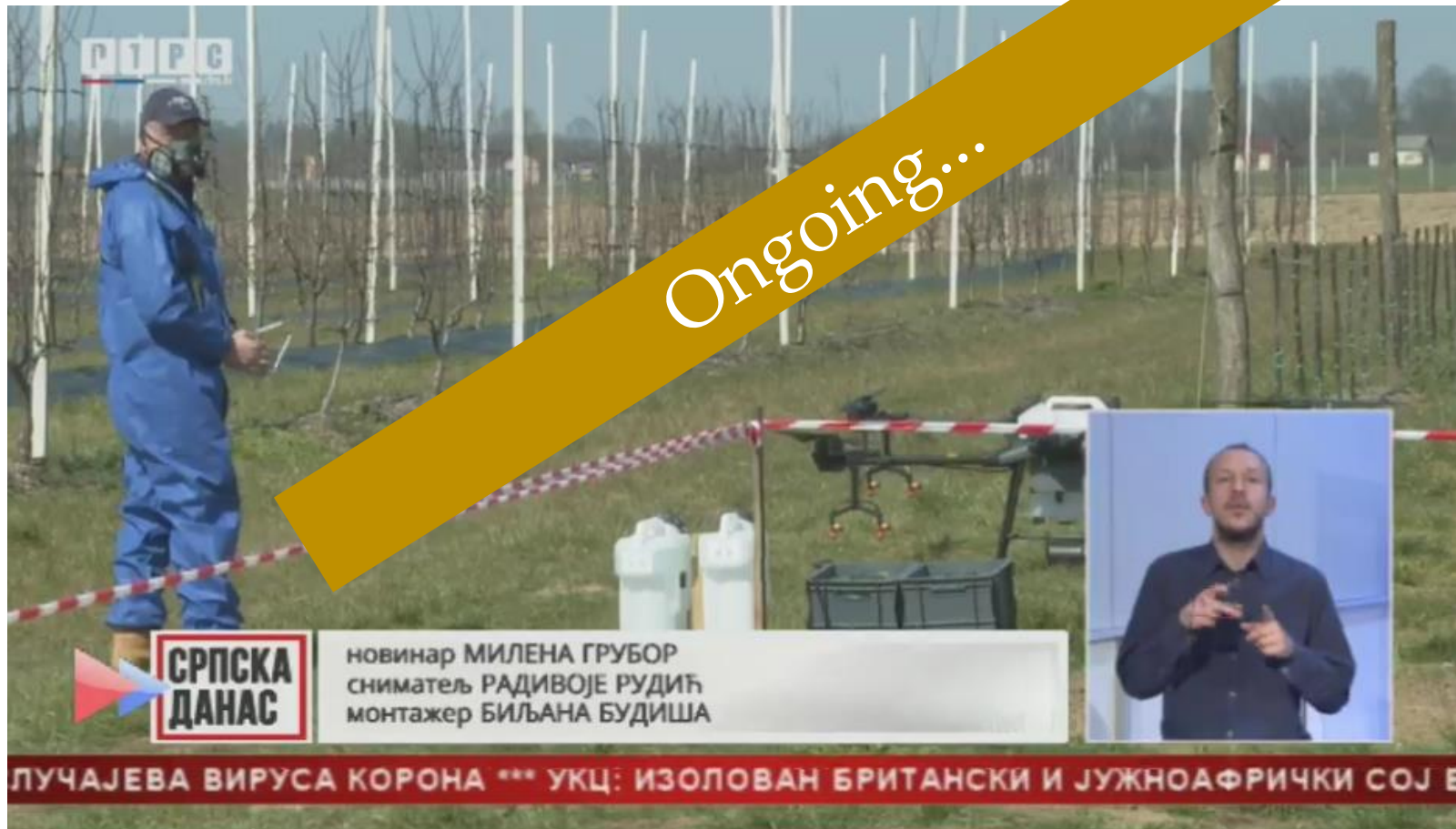
WP5.3. Knowledge transfer seminar for agriculture businesses

The seminar about the challenges of agricultural production in 2021, was organized by the Faculty of Agriculture of the University of Bijeljina on 10/03/2021 within the "Viral" project and co-organized by the Ministry of Agriculture, Forestry and Water Management of Republika Srpska and the City of Bijeljina. The seminar was attended by more than 50 participants, mostly farmers from Bijeljina. More information is available at the following (link).

Project dissemination

We are halfway to reaching reality...

VIRAL

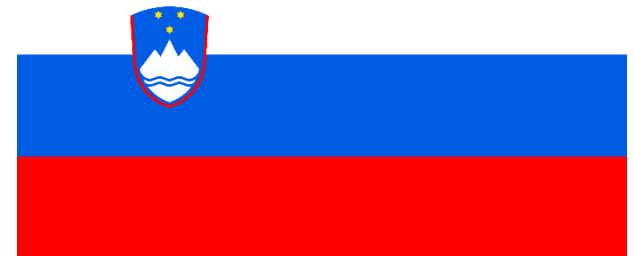...equipment...

...training toolkits...

...regional hakaton...

...EXPO online event...

...trainings...

...dissemination...

...traveling to...

Join in the journey - it's not too late...
You are welcome!

VIRAL

Thank you !

VITALISING ICT RELEVANCE IN
AGRICULTURAL LEARNING