

D.T4.2.2

Feedback report on Co-Creation workshop: LOW-EMMISSION LIVESTOCK PRODUCTION CROATIA

PP11 (CWC) and PP12 (MEEC)
06 / 2022

Project Information

Project Title: GoDanuBio - 'Participative Ecosystems for fostering the revitalization of rural-urban cooperation through governing Danube Circular Bioeconomy'

Project code: DTP3-471-4.1

Lead partner: BIOPRO Baden-Württemberg GmbH

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1. General information about the co-creation workshop

Date of the workshop	05.4.2022
Topic of the workshop	Low-emission livestock production
Format of the workshop	Hybrid (Osijek)
Region/Adress	City of Osijek
Project partner(s) involved	Croatian Wood Cluster, Ministry of economy and sustainable development
Guiding question/theme of the workshop	Low-emission livestock production
Number of participants	26
Type of participants (Target groups) ¹ and name of institutions*	<p>Competence Center Vinkovci</p> <p>Ministry of agriculture</p> <p>Faculty of machinery and boatbuilding</p> <p>Ministry of economy and sustainable development</p> <p>Regional development agency of Vukovar-srijem county</p> <p>Tourist board of Zagreb county</p> <p>Faculty of agronomy</p> <p>Croatian Chamber of Agriculture</p> <p>Splitsko-dalmatinska county</p> <p>Green consulting Ltd.</p> <p>Environment protection and energy efficiency fund</p> <p>Ličko-senjska county</p> <p>Regional development agency of Karlovačka county</p> <p>Local development agency PINS</p> <p>Cluster Lika Destination</p> <p>Unikom Ltd.</p> <p>Sisacko-moslavacka county</p> <p>Green energy association</p> <p>EUVITA cluster</p> <p>Faculty of agrobiotechnical science</p> <p>Spin Valis Ltd.</p> <p>Agrivi Ltd.</p> <p>Municipality of Darda</p> <p>Municipality of Velika</p> <p>Eurofins Croatiacontrol Ltd.</p>

¹ Please group the target groups according to the ones listed in page 42 of the Application Form

	Karlovac county Tera Tehnopolis Ltd. Municipality of Kraljevec on Sutla Croatian electricity company
Cooperation with experts (i.e. speakers, external moderators, politician...)	The workshop was organized with an external expert, prof. PHD Biljana Kulisic, and in cooperation with BioEastUp project.

2. Objective of the workshop

The main objective of the workshop was twofold:

- 1) To validate the findings and results of surveys conducted in the past 2 years organized by BioEastUp project concerning the livestock production and potential bioeconomy projects
- 2) To organize brainstorm activity of the participants on possible projects and relevant actors based on the national resources within the livestock production sector.

This objective was chosen upon the results of the surveys and research activities conducted by BioEastup project, that has shown that there is a significant potential to adopt bioeconomy production principles when it comes to the livestock production sector in Croatia.

The event was focused on possibilities of rural-urban cooperation. Representatives of both local and regional administration were present in the workshop, and shared their experiences and knowledge about the topic.

3. Initial situation of your region

Croatian producers still produce in a very traditional way when it comes to the livestock production: milk, eggs, meat. The price is determined by the quality and negotiating power. According to some market estimations, 40-50% of Croatian GDP depends on bioeconomy, and cannot be separated of climate changes. The total realized added value from sectors based on the production and processing of biomass is estimated at 3.98 billion euros in 2019. The realized added value per employee in the bioeconomy sectors is 19 thousand euros or 50 percent of the EU-27 average. The highest added value (69.8 percent) was achieved in the production chain "from field and water to table": in the processing of food products, beverages and tobacco (C10-12) 38.2 percent and in agriculture (A01) 31.6 percent, and fisheries and aquaculture participate with 2.9 percent. However, dairy outputs fell over 12 percent between 2016 and 2019, which is the sharpest contraction in the EU. Similarly, while it is estimated that EU swine production will grow at a rate of 4 percent annually by 2030, Croatian swine stocks have reduced at an average rate of 7 percent since 2016.

4. Methods used within the workshop

The workshop was organized during COVID-19 pandemics and therefore in hybrid form. The majority of the participants were present online so the main methods were:

1. Presentation (Powerpoint)
2. Mentimeter evaluation
3. Discussion.

The chosen methods worked well in practice. Participants were experienced with the online tools, but since the tools are user-friendly, they are to be recommended for this kind of events and objectives.

5. Lessons learned for next upcoming workshops

This workshop was organized in the cooperation with BioEastUp project, which enabled to reach almost all relevant stakeholders without repeating the subjects and topics.

6. What did the local or/and regional administration and the citizens expect from the process of participative governance?

Participative governance is not an unknown topic in Croatia. However, more practice is needed to improve the process of meeting decisions by using participative governance method. Since the topic of the workshop was mainly intended for SMEs and business society in general, no citizens were present at the workshop. The participants expected to gain new knowledge linked to livestock project financing, but also to share their experience and information about use of biomass on the Croatian market.

7. Outcome of the co-creation workshops

The participants were informed about potential of livestock production in the context of bioeconomy projects. The workshop lead to the increase of institutional capacity for local/regional administration.

Conclusions:

- it is necessary to create collection and logistics centers in the counties for disposal of livestock residues
- since 40-50% of Croatian GDP depends on bioeconomy, and cannot be separated of climate changes, the livestock production should be aligned with the existing low-emission strategy
- the future action plans should be strongly linked with the IT sector, and advanced information and communication models

- there is a need to develop incentives models for entrepreneurship activities for low-emission bioeconomy
- it is necessary to encourage further knowledge and technology transfer from academy and science community towards business community

This conclusions will be distributed to the working group that is in charge for the development of national bioeconomy strategy. The development of regional projects based on livestock sector will depend on the incentive schemes to develop innovative and smart products based on the biomass, residues, and waste collected in that sector. The process of participative governance should be used in the communication with general public. In rural area there are many people having some livestock for private purposes. It is recommended to develop an incentive scheme to support them in gaining knowledge and tools to get involved in the collection process.

8. Innovation potential for your region

According to the European Innovation Scoreboard 2022, Croatia is an Emerging Innovator with performance at 66.5% of the EU average. Performance is above the average of the Emerging Innovators (50.0%). Performance is increasing (15.5%-points) at a rate higher than that of the EU (9.9%-points). The country's performance gap to the EU is becoming smaller. However, resource productivity index decreased compared to 2021 (8.8%), although increase in the period of 2015-2022 (15.6). Croatia has a competitive advantage of joining the transition towards sustainable and circular bioeconomy but there are challenges to keep up with the dynamics of the EU trends, and development of bioeconomy policies which is mainly influenced by the following factors:

- weak coordination among different sectors
- lack of communication between the public and private actors
- educational system not being prepared to support the transition to circular bioeconomy
- fragile regional innovation system
- lack of leadership capacities as well as vision among regional development stakeholders.

9. Strengths and weaknesses of the process of participative governance

The main strength of participative governance in a decision making process of the continental part of Croatia is facilitated communication due to the fact that majority of people live in small communities where people know each other. However, regional development and autonomy status require improvement. The workshop contributed to the skills of local and regional administration but there is a need to improve the communication with non-governmental bodies.

10. Do you plan to use the process of participative governance also in future?

General public has possibility to participate in the process of participative governance but the main challenge is engagement and trust towards the system.

11. Identified opportunities for rural development in your region

Livestock production on bioeconomy principles has a potential to tackle demographic change in Croatia, as well as to encourage a further rural development by employing local people. However, the imbalance in livestock production, emphasis on grain, and generally small size of agricultural producers are considered to be a key hindrances on product viability for downstream actors. In 2020 Croatia's trade deficit for agricultural and food goods amounted to 717.5 million EUR, and adverse demographic trends give additional reasons for concern as many emigrated from agricultural and livestock intensive regions such as Slavonia.

12. Annexes

Agenda of the co-creation workshop, invitation of the workshop

Pictures of the workshop



Tematska radionica o bioekonomiji u RH 3 - NISKOUGLJIČNO STOČARSTVO
Osijek i online, 05.04.2022.

POTPISNA LISTA

IME	PREZIME	TVRTKA/INSTITUCIJA	E-MAIL	POTPIS
ANA	DIJAN	HDK	projekti@stomiklaster.hr	
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Kristijan	Drinković	FAZOS	drinkovic@hapih.hr	

[illegible]



Poštovani,

u nastavku dostaljamo poveznicu za sudjelovanje na tematskoj radionici o bioekonomiji na temu NISKOUGLJIČNO STOČARSTVO.

Vrijeme: Utorak, 5.4.2022.

Mjesto: Osijek i online, od 13.00 do 15.00 sati (Fakultet agrobiotehničkih znanosti, V. Preloga 1: Fakultetska vijećnica, 1. kat, dvorana 158)

Za razmišljanje:

Klimatske politike dovode stočarstvo pred prekretnicu gdje uvrštavanje postupaka za uštedu ili ponor emisija stakleničkih plinova u svakodnevni uzgoj i proizvodnju mesa, mlijeka i jaja te njihovih prerađevina, predstavlja dugoročni i održivi opstanak ruralnih krajeva, bioraznolikosti pašnjaka te izdašan doprinos bruto domaćem dohotku.

Rast stočarske proizvodnje od povećanja UG za 20% kod goveda te 35% kod svinja u tovu u domaćoj proizvodnji te ciljna vrijednost kod peradi na 1.465.100 do 2030. godine je postavljen kao strateški cilj za razvoj hrvatske poljoprivrede. Ispunjenje tog strateškog cilja izravno utječe na povećanje emisija stakleničkih plinova iz poljoprivrede i time je u suprotnosti od mjere predviđene u Nacionalnom energetske klimatskom planu za uštedu od 160 kt CO₂eq do 2030. godine iz poljoprivrede.

U hrvatskom gospodarstvu, proizvodi od mesa, mlijeka i jaja generiraju najviše pojedinačne bruto dodane vrijednosti u industrijskog proizvodnji, u vrijednosti od oko 1,5 milijardi eura ili oko 50% ukupne vrijednosti proizvodnje prehrambene industrije. Od njih, najveći doprinos donose razni suhomesnati proizvodi, mlijeko i vrhnje, razni sirevi i sladoled te svježe ili hladeno meso. Prehrambeno prerađivačka industrija sudjeluje s 91% hrvatskog izvoza u 2020. godini. Istraživanja tržišta ukazuju da su potrošači voljni platiti prosječno do 29,5% više za održivi proizvod, a takvi potrošači predstavljaju značajan udio u zemljama glavnih vanjskotrgovinskih partnera Hrvatske.

Radionica razmatra načine kako odvojiti rast stakleničkih plinova od rasta stočarstva i proizvodnje niskougljičnog mlijeka, mesa i jaja, a cilj joj je kroz diskusiju svih sudionika identificirati resurse i potencijalne ideje za provedbu projekata, posebno u ruralnim područjima, a koji će biti temeljeni na načelima bioekonomije.

Program rada:

12.45-13.00	Registracija (otvaranje pristupne poveznice)
13.00-13.15	Pozdravne riječi i uvod, GoDanuBio Župan Ivan Anušić, Osječko-baranjska županija Prodekanica izv. prof. dr. sc. Brigita Popović, Fakultet agrobiotehničkih znanosti Dekan prof. dr. sc. Jurislav Babić, Prehrambeno-tehnološki fakultet Osijek
13.15-14.00	Pregled zaključaka iz prethodnih radionica - održane 14.12.2021. i 18.02.2022. Uvod u temu HPK & EIHP: Mapiranje dionika od polja do stola za kružnu i održivu bioekonomiju: EIHP & BIOEASTsUp: Lanac vrijednosti NISKOUGLJIČNO STOČARSTVO u kontekstu bioekonomije Pitanja i odgovori
14.00-14.50	Projekti u lancu vrijednosti Niskougljično stočarstvo u RH - rad u grupama ('30)

	Mapiranje dionika i nosioca znanja Stvaranje inovativnih lanaca vrijednosti iz sekundarne biomase Regionalne potrebe i resursi Rezultati rada u grupama - Diskusija ('10) Mogući izvori financiranja projekata, EIP-AGRI & HPK
14.50-15.00	Zaključci i najava sljedeće radionice

POVEZNICA ZA SUDJELOVANJE: [https://us06web.zoom.us/j/3899668542?](https://us06web.zoom.us/j/3899668542?pwd=SVovZEh3djhPZHRxTHNPMVZQcThJdz09)

[pwd=SVovZEh3djhPZHRxTHNPMVZQcThJdz09](https://us06web.zoom.us/j/3899668542?pwd=SVovZEh3djhPZHRxTHNPMVZQcThJdz09)

Meeting ID: 389 966 8542

Passcode: 1d9iZv

Veselimo se Vašem dolasku i aktivnom sudjelovanju!

Srdačan pozdrav,

Organizatori

Ministarstvo gospodarstva i održivog razvoja RH - Služba za EU politike teritorijalne suradnje i makroregionalnog razvoja, Uprava za programe i projekte EU, europske i međunarodne poslove
Hrvatski drveni klaster - Odjel za projekte i međunarodnu suradnju

Kontakt podaci:

Helia Kovačević Grčić, 01 610 9225, helia.kovacevicgrcic@mingor.hr

Ana Dijan, 091 539 76 83, projekti@drvniklaster.hr

**Radionica se održava u sklopu implementacije EU projekta GoDanuBio te u suradnji s projektom BioEast Up.*

[Više o projektu GoDanuBio...](#)

[Više o projektu BioEast Up...](#)

Dodatne informacije za one koji nisu sudjelovali u prethodnim radionicama:

Ministarstvo gospodarstva i održivog razvoja u suradnji s Hrvatskim drvnim klasterom te projektom BioeastUp organizira seriju tematskih radionica na temu prelaska RH na sustav biogospodarstva, s glavnim ciljevima:

- Identifikacija resursa i izvora financiranja projekata na području RH
- Jačanje suradnje svih dionika u procesu prelaska RH na kružnu bioekonomiju
- Osmišljavanje projekata koji počivaju na načelima biogospodarstva na regionalnoj razini.

ZAŠTO JE BIOEKONOMIJA DOBAR KONCEPT ZA RH?

Oživljavanje ruralnih područja i zaustavljanje negativnih demografskih trendova. Republika Hrvatska suočena je s velikim sociološkim promjenama, naročito vezanih uz demografsku transformaciju. Mladi napuštaju ruralna područja zbog boljih mogućnosti zapošljavanja u urbanim sredinama. Za oživljavanje ruralnih područja i aktiviranje potencijala potreban je pristup koji uključuje participativno upravljanje i aktivaciju institucionalnih kapaciteta. U tom procesu koncept kružnog biogospodarstva koristi se kao alat

koji može poduprijeti regionalni razvoj, odnosno osigurati tranziciju gospodarstva, temeljenog na fosilnim gorivima, prema gospodarstvu koje koristi biološke resurse u održivoj proizvodnji.

Razvoj regija i zaštita okoliša. Dugoročni cilj takvih promjena je unaprijediti socio-ekonomski status regija, doprinijeti zaštiti okoliša, klime i resursa, kao i unaprijediti daljnji razvoj ruralnih područja. Za uspješnost tog procesa potrebno je uključiti sve interesne skupine, zainteresiranu javnost, akademsku zajednicu, predstavnike industrije te donositelje odluka koji do rješenja trebaju doći formirajući novi ekosustav koji će zajednički donositi odluke i osmišljavati projekte kroz suradnju ruralnih i urbanih područja te uzimajući u obzir načela kružnog biogospodarstva.

CILJEVI

1. Adresirati relevantne teme za pokretanje javne diskusije
2. Okupiti interesne skupine koje sudjeluju u donošenju odluka
3. Analizirati resurse, prednosti i slabosti pojedinih regija u kontekstu prelaska gospodarstva na kružno biogospodarstvo

SVRHA

1. Podržati interesne skupine u jačanju kapaciteta za participativno upravljanje
2. Identificirati moguće dugoročne scenarije suradnje u pojedinim regijama na strateškoj razini
3. Pokrenuti procese koncipiranja i financiranja projekata u RH na načelima biogospodarstva

PROFIL SUDIONIKA

- Predstavnici županija, gradova, općina
- Regionalne razvojne agencije, poduzetnički inkubatori, centri kompetencija, industrijski klasteri
- Tvrtke koje već primjenjuju neka od načela vezana za biogospodarstvo i/ili kružno (bio)gospodarstvo
- Nadležna ministarstva (MINGOR, MINPOLJ, MRRFEU, MZO)

UVJETI SUDJELOVANJA

Sudjelovanje je moguće bez naknade, ali uz prethodnu registraciju (troškove organizacije snose isključivo organizatori).

Napomena: Osim plenarnog izlaganja, predviđen je rad u grupama te diskusija među sudionicima. Stoga je broj sudionika ograničen (30-35 osoba). Ukoliko organizator zaprimi veći broj prijava, moguća je organizacija radionica u dodatnim terminima.

VRIJEME I MJESTO ODRŽAVANJA

Planirano je održavanje 4 radionice u periodu od prosinca 2021. do lipnja 2022.



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Bojan Petrovi...

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Učiteljica: Halima Kovačević Grčić, MING

 Liubica Rapogaieci

NK Nirvana Kapitan Butkovic

sd snježana došen

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Hrana-proizvodnja:

V Prihod	Izvoz (mil.kn)	Uvoz (mil.kn)	Broj zaposlenih	Proječna netto plaća (kn)
1%	2.107.613,00	199,14	1,56	4.702
10%	1.061,52	726,56	3,105	8.108
2%	318,59	229,50	1,467	6.327
2%	311,37	492,40	1,721	5.515
1%	268,80	429,11	983	10.438
7%	234,56	194,48	399	7.153
1%	216,02	0,00	1,128	6.369
0%	198,35	382,13	962	7.681
3%	137,14	52,37	568	5.633
5%	11,69	0,00	1,125	5.161