



UNICOM Meeting Prague (2023)





Welcome!



Czech University of Life Sciences Prague (CZU)

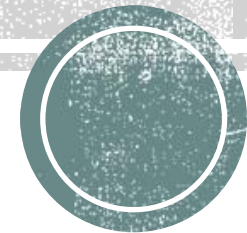
Third role & examples of good practice

Assoc. Prof. Dr. Hynek Roubík (roubik@ftz.czu.cz)

Group leader of Biogas Research Team

Czech University of Life Sciences Prague

biogas.czu.cz





**Co-funded by
the European Union**



Czech University of Life Sciences Prague

- The Czech University of Life Sciences Prague (**CZU**) is one of the leading European institutions in the field of life sciences (62nd worldwide in Agriculture and Forestry).
 - CZU is not just a life sciences university, but a place of innovative scientific research and discovery.
- We live in a world where natural resources are being depleted at an alarming rate.
 - CZU emphasizes education and research in **sustainable development** and the **conservation of biodiversity** along with the responsible use of **natural resources** and **alternative, renewable means of energy production**.
- CZU Prague is situated on the outskirts of Prague, on a quiet and well-equipped campus that is easily reachable from the city centre by public transport.
 - CZU is one of the largest universities in the Czech Republic, offering over 220 Bachelor's, Master's, and PhD study programmes. **Over 50 study programmes** are taught entirely in **English**.
 - More than three hundred students from our university travel each year in the framework of the Erasmus+ mobility programme, traveling to **27 countries in Europe to study for a semester or one academic year at over 200 universities throughout Europe**.



Czech University of Life Sciences Prague

- The university has 6 faculties: (Economics and Management, Agrobiology, Food and Natural Resources, Engineering, Forestry and Wood Sciences, Environmental Sciences, Tropical AgriSciences), and 1 institute (Education and Communication).
 - Over 20,000 students are currently enrolled at CZU Prague.
- The university signed Memorandums of Understanding with more than **170 universities throughout the world.**
- In the framework of the Erasmus+ programme **hundreds of exchange students from around Europe study at Czech University of Life Sciences Prague** for a semester or an academic year, whilst staff members from partner universities in Europe come to CZU for short term teaching assignments and training.
- **Czech University of Life Sciences Prague is a temporary home for over 2000 international students from more than 90 countries.**



About our program

Monday, 2.10.2023

Time	Topic	Responsible person	ROOM
10:00-13:00	Arrival & Registration		313
11:00-12:00	Voluntary option to participate in: Biogas Research Team regular meeting		315
14:00	Official Welcome	Hynek Roubík	313
14:30-15:00	Presentation of BRT activities		
15:00-17:00	Importance of communication and ways of strengthening third mission of universities	Stacy Denise Hammond Hammond	313



About our program

Tuesday, 3.10.2023

Time	Topic	Responsible person	
9:00-10:00	Arrival & Registration		313
10:00-12:00	National regulation on third missions of HEIs	Hynek Roubík	313
12:00-14:00	Lunch break		
14:00-15:30	Practices of the university-community cooperation at European HEIs	Hynek Roubík	313
15:30-17:00	AI and third mission of universities	Ing. Jan Staš	313



About our program

Wednesday, 4.10.2023

Time	Topic	Responsible person	
9:00-10:00	Arrival & Registration		313
10:00-12:00	Third mission in practice – examples of CZU	Hynek Roubík	313
12:00-14:00	Lunch break		
14:00-17:00	Third mission in practice – thinking of the next steps	Hynek Roubík	313



About our program

Thursday, 5.10.2023

Time	Topic	Responsible person	
8:00 - 9:00	Registration and Check-In		
9:00 - 10:30	Opening Ceremony	Hynek Roubík	
10:30 - 11:30	Coffee Break		
11:30 - 12:30	Session 1: Exploring Sustainable Development and Economics	Hynek Roubík	
12:30 - 13:30	Lunch Break		
13:30 - 17:30	Session 2: Waste to Energy: Opportunities and Challenges, Environmental Sciences, Medicine and Veterinary medicine, Agrobiology	Hynek Roubík	
18:00	Dinner		



About our program

Friday, 6.10.2023

Time	Topic	Responsible person	
9:00 - 10:30	Session 3: In-Person Poster Presentations	Hynek Roubík	
10:30 - 11:30	Coffee Break		
11:30 - 12:30	Session 4: Online Poster Presentations	Hynek Roubík	
12:30 - 13:30	Lunch Break		
13:30 - 16:30	Session 5: Advancements in Agriculture Engineering, Food security: Challenges to come, Ukraine - Current challenges and opportunities	Hynek Roubík	



About third role/mission at CZU

- The third role of the Czech University of Life Sciences (CZU) is to provide services to the society and to promote the transfer of knowledge and technology to the public and private sectors.
 - CZU aims to be a **reliable partner for businesses, public institutions, and non-profit organizations**, providing them with research and development services, consulting, and educational programs tailored to their needs. The university cooperates with various partners from the agricultural, environmental, and forestry sectors, as well as with municipalities and regional authorities.
 - In addition, CZU **promotes entrepreneurship and innovation** among its students and staff, encouraging them to develop their ideas and start their own businesses. The university also provides support for technology transfer and commercialization of research results, helping to bring new products and services to the market.
 - Overall, CZU plays an important role in the development of the Czech economy and society, contributing to the sustainable management of natural resources, the improvement of agricultural practices, and the protection of the environment.



What does it involve?

- The third role of CZU involves providing services to the society and promoting the transfer of knowledge and technology to the public and private sectors. CZU accomplishes this role through various means, including:
 - **Research and development services:** CZU offers a wide range of research and development services to businesses, public institutions, and non-profit organizations. These services are tailored to meet the specific needs of each client and can include everything from feasibility studies and market research to product development and testing.
 - **Consulting:** CZU provides consulting services to help organizations improve their operations, solve problems, and achieve their goals. These services may include strategic planning, financial management, human resources, and marketing.
 - **Educational programs:** CZU offers a variety of educational programs to help individuals and organizations acquire the knowledge and skills they need to succeed. These programs can range from short-term training courses to long-term degree programs.
 - **Technology transfer:** CZU promotes the transfer of technology from the university to the private sector by facilitating partnerships between researchers and industry. This helps to bring new products and services to market and contributes to the economic development of the region.
 - **Entrepreneurship and innovation:** CZU encourages entrepreneurship and innovation among its students and staff, providing support for the development of new ideas and the creation of new businesses. The university also hosts events and competitions to promote innovation and entrepreneurship.
 - **Being ready to help:** during various crisis (shown especially during covid era)





Overall, the third role of CZU is an important aspect of the university's mission, helping to connect the academic community with the broader society and contributing to the sustainable development of the region.





Biogas Research Team



Faculty of Tropical
AgriSciences



[News](#)

[About BRT](#)

[BRT Team](#)

[Group leader](#)

[BRT-Lab](#)

[Projects](#)

[Publications](#)

[Bioeconomy](#)

[Resources](#)

We aim to reveal current state, bottlenecks and perspectives of biogas plants.

Biogas Research Team



About Biogas Research Team

- The main objective of the solved research at the Biogas Research Team is to determine the real impact of small biogas plants (both in developing and developed countries) on the environment, climate change and society and to contribute crucially to the current global debate on small biogas technology.
- The main long-term research interest of the Biogas Research Team is to:
 - reveal the current state,
 - bottlenecks
 - and perspectives of biogas plants in both developing and developed countries.



About BRT

- Our team is covering what we call the whole **research life cycle** – which, from our point of view, means:
 - that we do everything from feasibility studies,
 - system studies,
 - technology development,
 - laboratory scale research,
 - towards implementation.
- Furthermore, we continue with socio-economic studies and implications, gender studies as well as various environmental studies.





Example of projects

- <https://biogas.czu.cz/en/r-17719-projects>





AgriSci-UA

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AgriSciences Platform for Scientific
Enhancement of HEIs in Ukraine

A close-up, low-angle shot of a person's feet wearing dark hiking boots with red accents, stepping on a rocky and brush-covered trail. The background shows a hazy, mountainous landscape under a clear sky. The text is overlaid in the center-left of the image.

**LET'S HAVE A
LITTLE WALK
NOW...**



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Third role & examples of good practice

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Practical ways to enhance third role of universities

- To enhance its third role of providing services to society and promoting the transfer of knowledge and technology to the public and private sectors
- **Establishing partnerships:** One of the most effective ways to enhance the third role of the university is to establish partnerships with businesses, public institutions, and non-profit organizations.
 - These partnerships can be formal or informal, and can involve collaborations on research and development projects, consulting services, and educational programs.
 - The university can actively seek out partnerships with organizations that share its values and goals, and work to build long-term relationships based on mutual trust and benefit.
- **Creating outreach programs:** Another way to enhance the third role of the university is to create outreach programs that engage with the broader community.
 - For example, the university could host public lectures and seminars, organize workshops and training sessions, or offer consulting services to local businesses and organizations.
 - By reaching out to the community in this way, the university can build stronger relationships and promote the transfer of knowledge and technology.



Practical ways to enhance third role of universities

- **Encouraging entrepreneurship and innovation:** Universities can play a key role in fostering entrepreneurship and innovation by providing support and resources for students and staff who are interested in starting their own businesses.
 - This can include offering mentoring and coaching, providing access to funding and networking opportunities, and hosting entrepreneurship competitions and events. By encouraging entrepreneurship and innovation, universities can help to create new jobs and drive economic growth in the region.
- **Commercializing research:** Finally, universities can enhance their third role by actively seeking to commercialize their research results.
 - This can involve filing patents, licensing technology to industry partners, or even starting their own spin-off companies. By commercializing research, universities can help to bring new products and services to market and contribute to the economic development of the region.
- Overall, enhancing the third role of the university requires a proactive approach that involves building partnerships, creating outreach programs, encouraging entrepreneurship and innovation, and commercializing research.
- By doing so, universities can play an even greater role in promoting the transfer of knowledge and technology to society.



Some early thoughts on policy options to enhance third role of the UA universities

- Policy options that governments and universities can consider to enhance the third mission of universities, which involves providing services to society and promoting the transfer of knowledge and technology to the public and private sectors
 - **Funding mechanisms**
 - **Regulatory frameworks**
 - **Innovation clusters**
 - **Entrepreneurship programs**
 - **Community engagement**



Funding mechanisms:

Governments can establish funding mechanisms that incentivize universities to engage in the third mission.

For example, they could allocate research funding based on a university's success in commercializing its research results, or provide grants to universities that partner with businesses and non-profit organizations to provide research and development services.

Regulatory frameworks:

Governments can also create regulatory frameworks that support the third mission of universities.

This could include streamlined intellectual property regulations that make it easier for universities to commercialize their research results, or regulations that encourage public-private partnerships.



Innovation clusters:

Governments can establish innovation clusters or technology parks that bring together universities, businesses, and other organizations to collaborate on research and development projects. By creating physical spaces where these organizations can work together, governments can facilitate the transfer of knowledge and technology and promote economic development.

Entrepreneurship programs:

Universities can establish entrepreneurship programs that provide support and resources for students and staff who are interested in starting their own businesses. This could include business incubators, mentoring programs, and networking events. By fostering entrepreneurship, universities can create new jobs and drive economic growth in the region.

Community engagement:

Finally, universities can enhance their third mission by engaging with the broader community. This could include hosting public lectures and seminars, offering consulting services to local businesses and non-profit organizations, or creating outreach programs that provide educational and training opportunities for community members.





Enhancing the third mission of universities requires a combination of policies and initiatives that incentivize and support universities in their efforts to provide services to society and promote the transfer of knowledge and technology.

By doing so, universities can play a key role in driving economic growth and social development in their communities.



While I was in it, a few more

Industry
partnerships

Public-private
partnerships

Intellectual
property rights

Knowledge
transfer offices

Social
entrepreneurship

Continuing
education



Industry partnerships:

- Governments can encourage universities to form partnerships with industries in order to facilitate the transfer of knowledge and technology.
- For instance, governments can provide tax incentives to industries that invest in research and development collaborations with universities. This can help foster a culture of innovation that benefits both academia and industry.

Public-private partnerships:

- Governments can also encourage universities to form partnerships with public entities such as hospitals, research institutes, and government agencies.
- These partnerships can help facilitate the transfer of knowledge and technology, and can promote the development of new products and services that address societal needs.

Intellectual property rights:

- Governments can also provide greater legal protections for the intellectual property generated by universities.
- This can include stronger patent laws, and the creation of specialized courts or tribunals to handle disputes related to intellectual property. Such protections can incentivize universities to invest in research and development, and promote the commercialization of their research results.



Knowledge transfer offices:

- Universities can establish knowledge transfer offices to facilitate the commercialization of their research results.
- These offices can help researchers identify potential commercial partners, and provide support for the patenting and licensing of intellectual property.

Social entrepreneurship:

- Universities can also promote social entrepreneurship by providing support and resources for students and staff who are interested in creating businesses that address social or environmental challenges.
- This can include incubators, funding opportunities, and mentorship programs.

Continuing education:

- Universities can also offer continuing education programs for professionals in a variety of fields.
- These programs can help individuals stay up-to-date with the latest developments in their fields, and can provide opportunities for university-industry collaborations.



Some key barriers

- There are several barriers that currently exist that hinder the third role of universities in Ukraine, which however can be solved.
 - **Lack of funding**
 - **Bureaucratic barriers**
 - **Lack of industry demand**
 - **Limited research infrastructure**
 - **Limited entrepreneurial culture**
 - **Brain drain**



Some key barriers

Lack of funding

- Many Ukrainian universities struggle with a lack of funding, which makes it difficult to engage in research and development activities or to develop partnerships with industry.

Bureaucratic barriers

- The bureaucratic processes for university-industry partnerships and collaborations can be time-consuming and complicated, which can discourage universities from engaging in these activities.

Lack of industry demand

- In some cases, there may be a lack of demand from industry partners for the research capabilities or expertise of universities in Ukraine.



Some key barriers

Limited research infrastructure

- Many Ukrainian universities lack the research infrastructure and equipment necessary to conduct cutting-edge research, which can limit their ability to engage in the third mission.

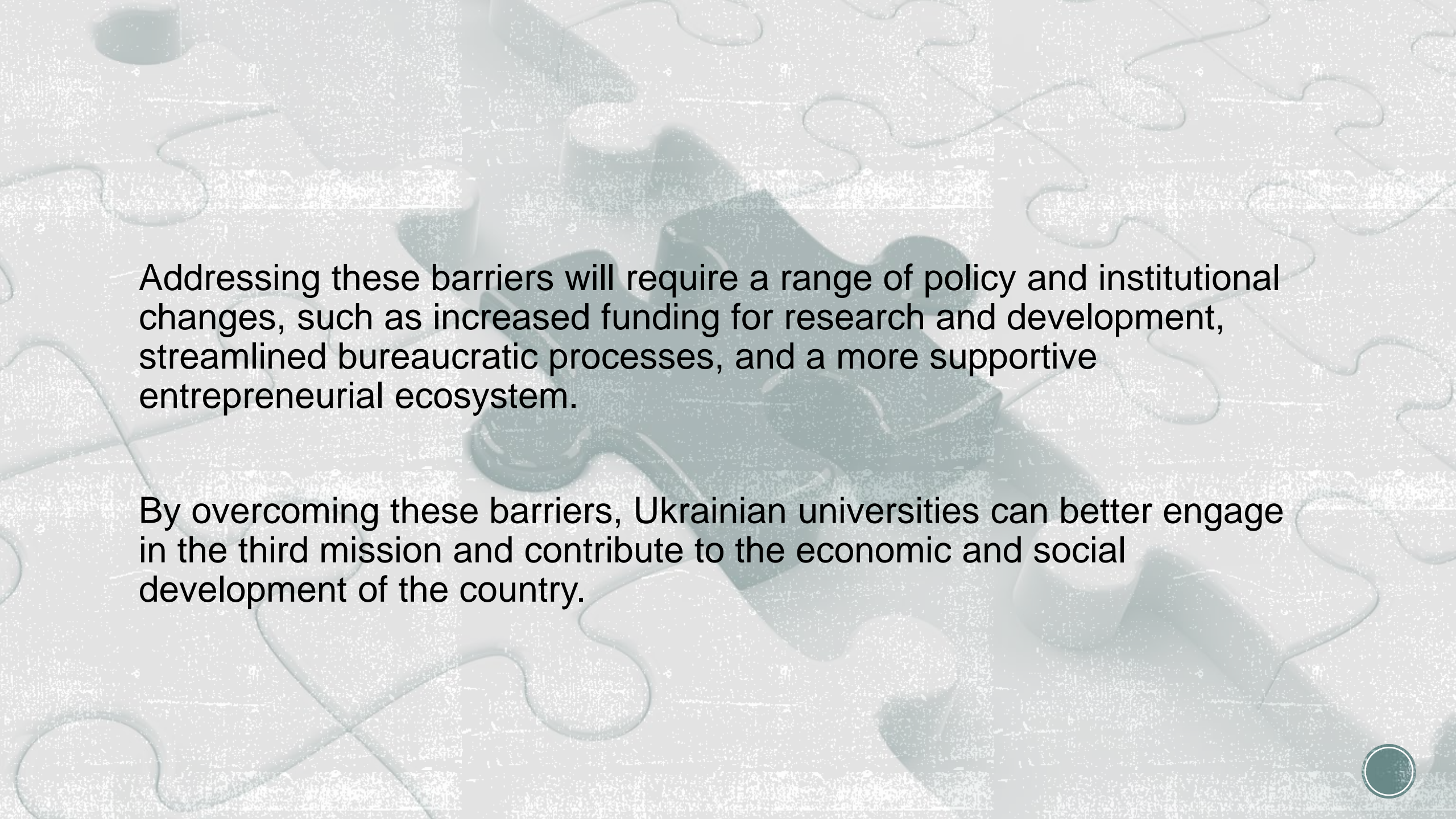
Limited entrepreneurial culture

- The culture of entrepreneurship in Ukraine is still developing, and many students and faculty members may not have the skills or resources necessary to start their own businesses or engage in entrepreneurial activities.

Brain drain

- Many highly skilled and talented individuals in Ukraine are leaving the country for better job opportunities or to pursue advanced education abroad. This brain drain can limit the talent pool available to Ukrainian universities and make it more difficult for them to engage in the third mission. Important to make sure, people will come back after the war.



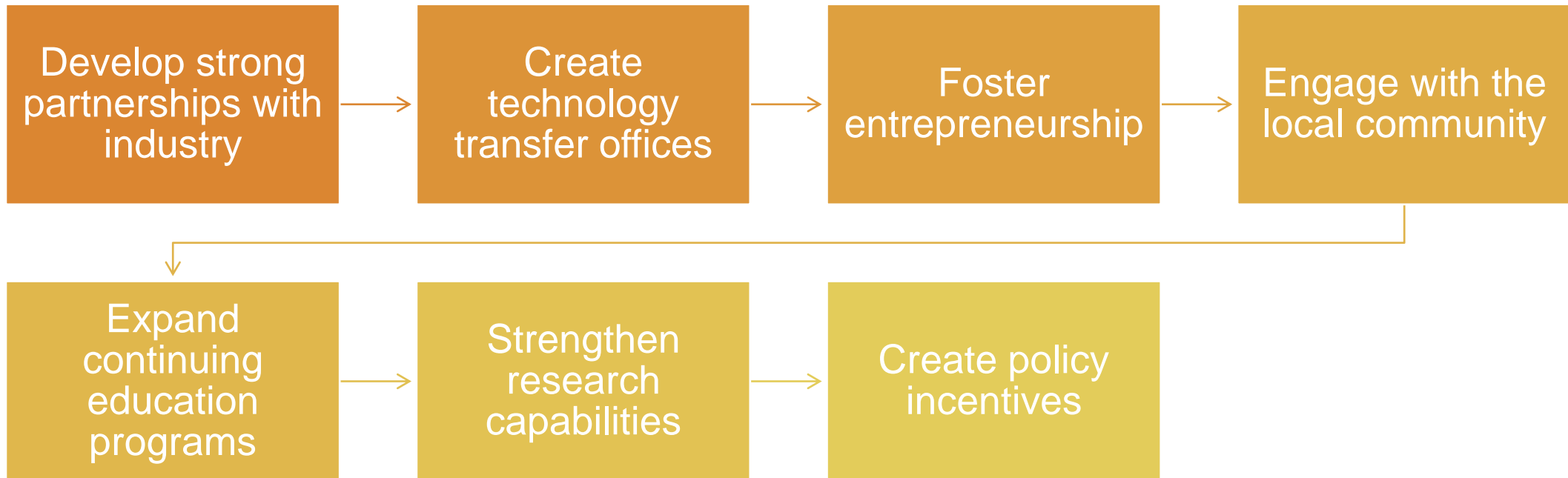


Addressing these barriers will require a range of policy and institutional changes, such as increased funding for research and development, streamlined bureaucratic processes, and a more supportive entrepreneurial ecosystem.

By overcoming these barriers, Ukrainian universities can better engage in the third mission and contribute to the economic and social development of the country.



Here are some key steps that universities in Ukraine can take to enhance their third role and better serve society:



- **Develop strong partnerships with industry:**
 - Ukrainian universities should seek to establish close relationships with businesses and industries in the region. By doing so, they can identify research needs and opportunities that align with the needs of local industry. This can also help to drive innovation and economic development in the region.
- **Create technology transfer offices:**
 - Technology transfer offices can help universities commercialize their research findings and intellectual property. These offices can also help identify opportunities for collaborative research and development with industry partners.
- **Foster entrepreneurship:**
 - Ukrainian universities should establish entrepreneurship programs to support students and faculty interested in starting their own businesses. This can include training programs, mentoring, and funding opportunities.
- **Engage with the local community:**
 - Ukrainian universities should seek to engage with the local community through outreach programs, educational initiatives, and partnerships with non-profit organizations. This can help to build relationships with local residents and businesses and promote collaboration between academia and the broader community.



- **Expand continuing education programs:**
 - Ukrainian universities should offer continuing education programs that are tailored to the needs of professionals in the region. This can help to promote lifelong learning and provide opportunities for industry-academic collaboration.
- **Strengthen research capabilities:**
 - Ukrainian universities should invest in their research capabilities by recruiting and retaining top researchers, expanding research infrastructure, and fostering a culture of innovation and collaboration.
- **Create policy incentives:**
 - Ukrainian policymakers can create policy incentives to encourage universities to engage in the third mission. This can include funding opportunities, regulatory frameworks, and tax incentives.



One more suggestion to go

- Involvement of Advisory boards (AB)
 - Not only AB on the level of university, but especially on the level of faculties and study programs
 - With all the key stakeholders relevant involved
 - Government
 - Community
 - NGOs
 - Private sector
 - etc





So, what now?

- Let's start promoting UNICOM project



Let's start promoting UNICOM

- Universities can do more than just educate students. By enhancing their third role, they can become powerful engines of innovation and social development. Let's invest in policies and programs that support this vital mission. #thirdrole #universities #innovation #development #UNICOM @CZUvPraze @CzuFTZ
- Did you know that universities can do more than just educate students? By enhancing their third role, they can become powerful engines of innovation and social development. Join the conversation on how we can support this vital mission! #thirdrole #universities #innovation #development #UNICOM @CZUvPraze @CzuFTZ

Those tweets
you can find
here



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<https://twitter.com/HynekRoubik>
@HynekRoubik



Some interesting reading

- <https://blogs.lse.ac.uk/impactofsocialsciences/2019/03/13/third-mission-accomplished-why-are-universities-bad-at-engaging-with-local-and-regional-government-and-what-we-can-do-about-it/>
- <https://www.helsinki.fi/en/about-us/university-helsinki/three-core-duties>
- <https://education.ec.europa.eu/sites/default/files/2022-01/communication-european-strategy-for-universities-graphic-version.pdf>
- <https://www.sciencedirect.com/science/article/pii/S0040162520311100>



Some blogs ready for the website

The UNICOM project aims to foster cooperation between Ukrainian universities and their surrounding communities by incorporating best practices from EU states such as Italy, Germany, Sweden, Latvia and Czech Republic. The project activities include developing policies to enhance the third mission of universities, analyzing the needs of communities and universities across Ukraine, and capacity-building for university staff through exchange programs focused on resilience, sustainability, inclusion, entrepreneurship, environment, public health, and social cohesion.

The project will develop national models of university-community cooperation centers, known as UNICOMs, through a professional capacity-building program for communities. This program, called "Open University," applies university expertise to community needs and encourages student civic engagement through a hackathon and volunteering program.

The project will also produce a policy paper and roadmap on enhancing the third mission of universities during higher education reform in Ukraine. Dissemination activities, such as web support, social media, publications, and workshops, will present project results to stakeholders and the wider public.

UNICOM seeks to enhance universities' social role and boost university-community engagement, ensuring social cohesion, resilience, and sustainability. By incorporating efficient models of interaction between communities and universities, UNICOM hopes to foster an environment of innovation and social development in Ukraine.

The project is a promising step towards promoting the third mission of universities in Ukraine and strengthening university-community cooperation. By developing policies and implementing best practices, UNICOM has the potential to create a positive impact on Ukrainian society and contribute to the country's economic and social development.



Feel free to use / adjust



Some blogs ready for the website

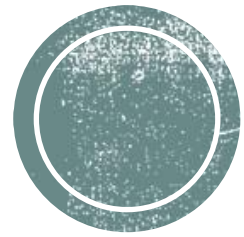
Are you interested in promoting innovation and social development in Ukraine? Look no further than the UNICOM project, which aims to enhance university-community cooperation in the country.

UNICOM incorporates best practices from EU states such as Italy, Germany, Sweden, Latvia and Czech Republic, and seeks to develop national models of university-community cooperation centers, known as UNICOMs. These centers will apply university expertise to community needs and encourage student civic engagement through hackathons and volunteering programs.

But UNICOM isn't just about fostering university-community engagement. It also aims to boost social cohesion, resilience, and sustainability in Ukraine. The project's activities include developing policies to enhance the third mission of universities, analyzing the needs of communities and universities across Ukraine, and capacity-building for university staff.

By promoting the third mission of universities and strengthening university-community cooperation, UNICOM has the potential to create a positive impact on Ukrainian society and contribute to the country's economic and social development. So join the conversation on how we can support this vital mission, and learn more about UNICOM's exciting efforts to promote innovation and social development in Ukraine.





Thank you for your attention!

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And some more interesting information

On the following slides some more interesting information can be found (which did not fit into our busy time limit during in-person meeting)





GEPS (Global Engagement and Partnership)

- Developing strong collaborations is a key factor in CZU networking strategy and the GEPS is working to create a supportive environment for building collaborations with international partners and organizations.
- Main aims:
 - Create a space for networking and connecting CZU and its employees with relevant actors (within international organizations and NGOs with a global-scope in particular).
 - Reinforcing the international prestige and recognition of the CZU as well as increasing its visibility by transferring experience, contacts and success stories.
 - Mapping and identifying relevant opportunities for CZU.
 - Long-term high quality partnership development and their expansion.

GEPS intends to collaborate with:

- Food and Agriculture Organization
- United Nations Development Programme
- United Nations Environment Programme
- World Health Organization
- World Bank
- World Food Programme
- International Centre for Migration Policy Development
- Global Environment Facility
- International Union for Conservation of Nature
- International Fund for Agricultural Development
- Intergovernmental Panel on Climate Change
- International Renewable Energy Agency
- Sustainable Energy for All
- Renewable Energy and Energy Efficiency Partnership
- International Solar Alliance
- International Energy Agency
- Organisation for Economic Co-operation and Development
- World Trade Organization
- Young Professionals for Agricultural Development
- Chinese Academy of Agricultural Sciences
- International Young Naturefriends
- BCFN - Barilla Center for Food and Nutrition

Some example of good networking practice



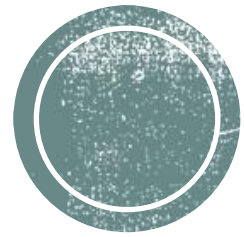
AgriSci-UA

„We connect universities and
research institutions.“

The platform aims to strengthen the capacities and cooperation of young teachers, researchers and masters and doctoral students at selected **Ukrainian** universities by creating a platform – **AgriSciences Platform** for sharing information on Agrarian Sciences.

<https://agrisci-ua.com/>





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