

MAPPING OF R&I AND S3 NEEDS

PRESENTATION OF THE NEEDS ASSESSMENT *REPORT SUMMARIZING KEY FINDINGS (MOLDOVA)*

Linköping University
08/04/2025

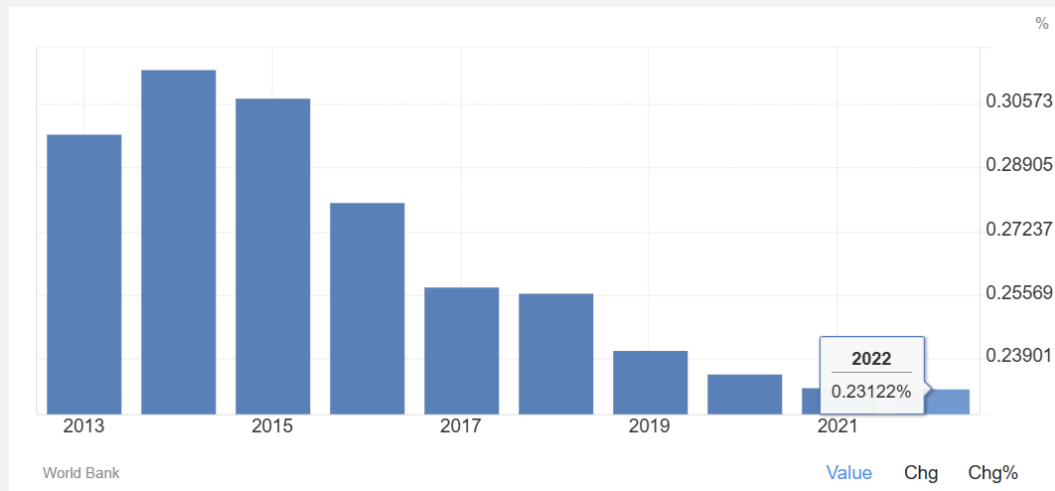
Report developed: Dr. (Habil.), Prof. Alla LEVITSKAIA
Dr., assoc.prof. Tatiana RACOVCEA, Dr., assoc.prof. Nadejda IANIOGLO

SMART SPECIALIZATION CONCEPT

The concept of SMART SPECIALIZATION emerged in the early 2000s as an innovative strategy for regional development in the European Union (EU). This approach emerged from the need to increase economic competitiveness and reduce regional disparities.

Initially proposed by the Knowledge for Growth expert group, nominated by the European Commission in 2005 and led by economist Dominique Foray

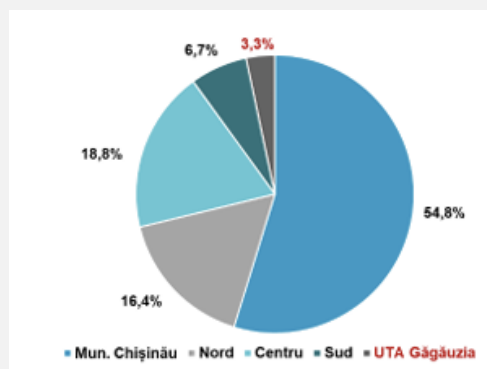
RESEARCH AND DEVELOPMENT EXPENDITURE (% OF GDP) IN MOLDOVA WAS REPORTED AT 0.23122 % IN 2022



The Republic of Moldova has been benefiting since 2017 from the assistance of the Joint Research Centre (JRC) of the European Commission and has benefited from the expertise of European experts in order to map the national economic, scientific and innovation potential.

- National Development Strategy "European Moldova 2030"
- Smart Specialization Program for 2024-2027 "Smart Moldova"

STRUCTURE OF INNOVATIVE ENTERPRISES BY DEVELOPMENT REGIONS, 2021-2022

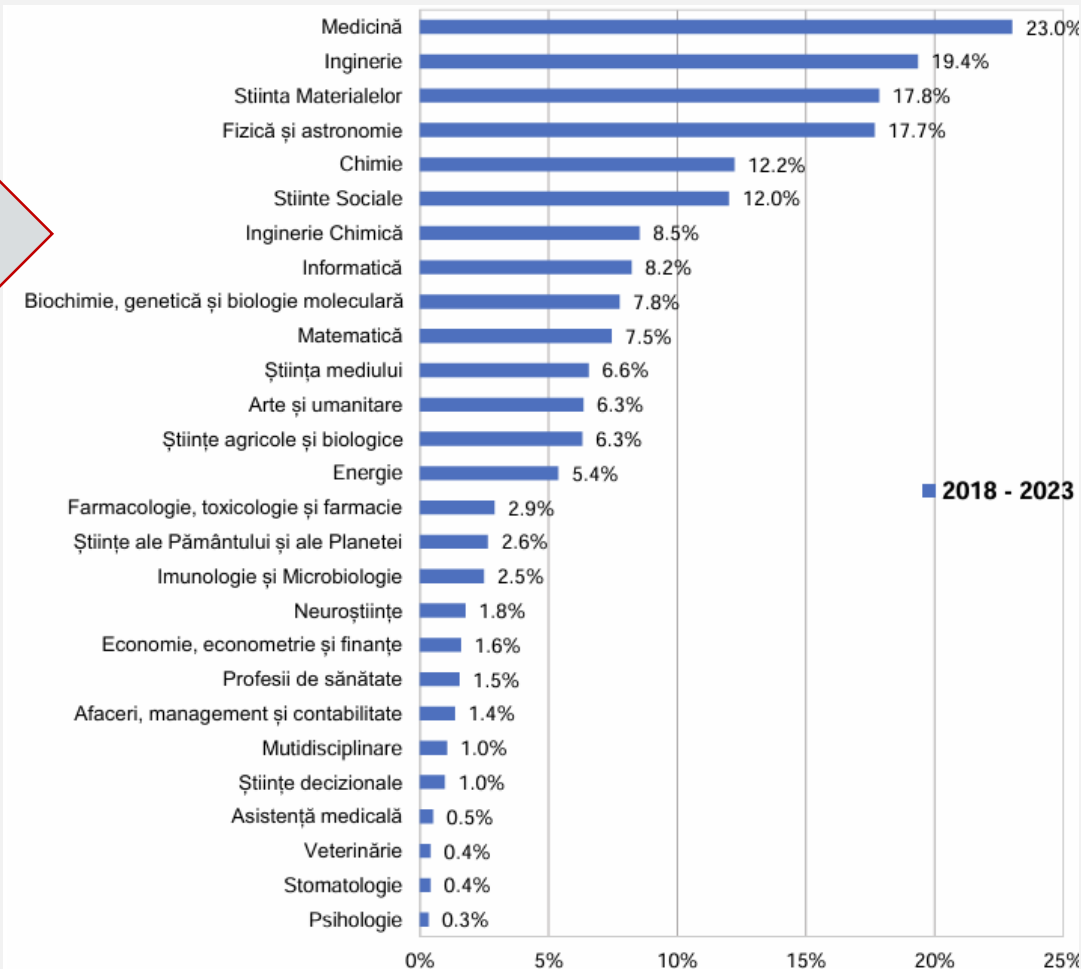


THESE PUBLICATIONS HIGHLIGHT THE INNOVATION POTENTIAL AND HUMAN RESOURCES IN STRATEGIC SECTORS IDENTIFIED FOR SMART SPECIALIZATION, CONTRIBUTING TO THE OBJECTIVES OF ECONOMIC DEVELOPMENT AND INTERNATIONAL COMPETITIVENESS.

REGIONALS CONTRIBUTION FOR PATENT APPLICATIONS

	Inventatori naționali ¹⁸		Brevete acordate: Prima secțiune, clasă și subclasă IPC						
	Volum (persoane)	%-pondere	Volum (număr)					%-pondere	
			2019	2020	2021	2022	2023	Total	
Chișinău	4336	83.0%	524	439	482	433	363	2241	88.5%
Nord	250	4.8%	15	11	12	13	5	56	2.2%
Centru	404	7.7%	34	44	41	28	32	179	7.1%
Sud	102	2.0%	6	5	3	1	4	19	0.8%
UTA Găgăuzia	51	1.0%	9	3	1	9	3	25	1.0%
TDS Nistrului	84	1.6%	1	0	6	1	3	11	0.4%
Moldova	5227		589	502	545	485	410	2531	

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■ 2018 - 2023

PRELIMINARY PRIORITIES FOR SMART SPECIALIZATION WERE IDENTIFIED, IN ACCORDANCE WITH THE JRC METHODOLOGY:

The detailed analysis of the innovation potential highlights the diversity and importance of strategic sectors for the regional economy. This assessment was carried out by applying precise criteria – such as critical mass, the economic specialization index (LQ) and patenting activity – to identify industries that present a high potential for innovation and technological development, thus supporting the economic transformation of the region.

AGRICULTURE AND FOOD PROCESSING

- Advanced and sustainable biotechnologies for agriculture
- Sustainable agriculture, including organic
- Value-added processed food

INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)

- Materials/nano-materials and electronic components
- Interoperability, open data and e-infrastructures
- Mobile applications, software, coding, Cloud computing

ENERGY

- Energy-efficient technologies
- Alternative energy sources
- Heating solutions

BIOMEDICINE AND BIOPHARMACEUTICALS

- Biomedicine
- Biopharmaceuticals
- Bioinformatics & e-health

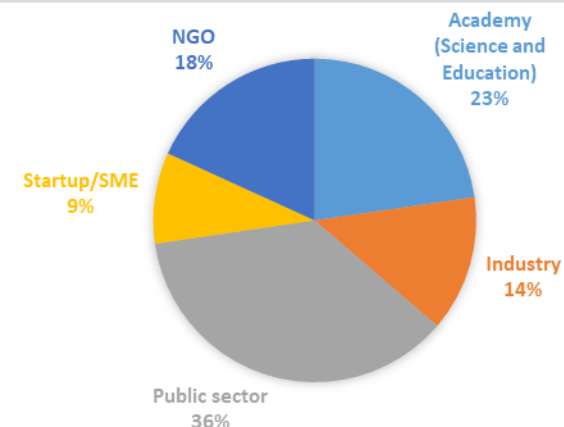


PORTRAIT OF RESPONDENTS

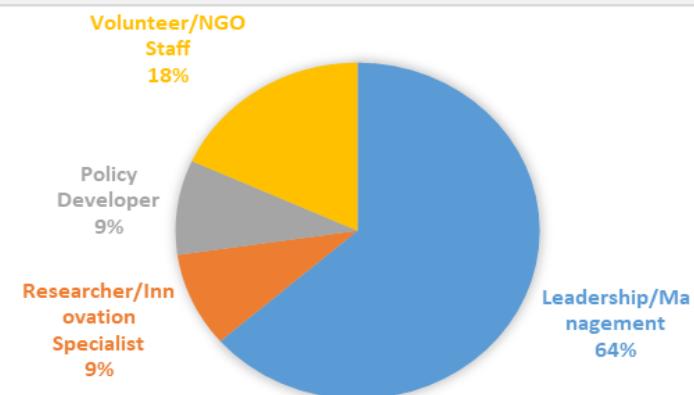
- ☐ State University Cahul
- ☐ State University Comrat
- ☐ Institutul National de Cercetari Economice al ASEM, Chisinau,
- ☐ Innovation Incubator IT4BA at the Academy of Economic Knowledge, Chisinau
- ☐ Main Department of Economic Development of Gagauzia ATU Gagauzia, mun. Comrat
- ☐ Electronice și Tehnologiilor Inovaționale (ACETI) mun. Bălți
- ☐ Business Association, Comrat
- ☐ National Agency of R&D, Chisinau
- ☐ Primaria mun. Comrat mun. Comrat
- ☐ Innocentre of KSU Comrat
- ☐ Skat Consulting Project Manager, Chisinau

- ☐ Regional Development Agency Gagauzia
- ☐ Regional Development Agency North
- ☐ Regional Development Agency South
- ☐ Association for the Development of Electronic Communications and Innovative Technologies (ACETI), mun. Bălți
- ☐ AO Pro-Europa ATO Gagauzia, mun. Comrat
- ☐ SRL Meatpromcom Moldova, UTA Gagauzia, Ceadir-Lunga
- ☐ SRL "Sushimi" mun. Comrat, mun. Cahul mun. Ceadir-Lunga
- ☐ Carcocs-impex SRL, Chisinau
- ☐ OOO "Budzhakexpobusiness", mun. Ceadir - Lunga
- ☐ FincomBank, Chisinau

Organization type:

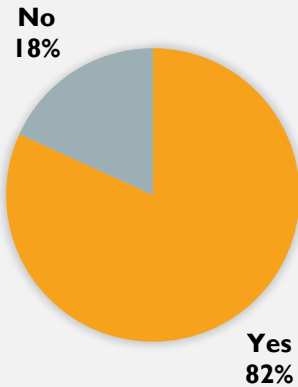


Your role in the organization



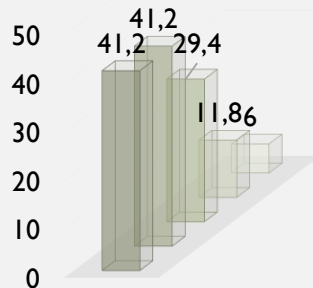
SECTION 2: INTRODUCTION TO S3 AND COLLABORATION

HAVE YOU PREVIOUSLY PARTICIPATED IN REGIONAL AND INTERNATIONAL JOINT PROJECTS?



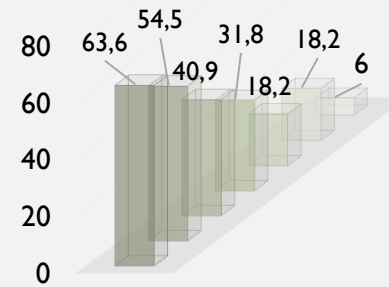
IF YES, PLEASE SPECIFY THE PROJECT(S):

- Digital Transformation
- Advanced Technologies/Materials
- Climate and Environment Action
- Health and Medicine
- Other



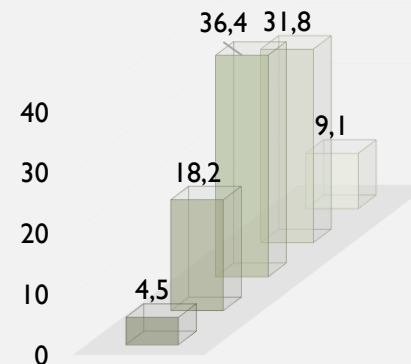
WHICH OF THE FOLLOWING S3 FOCUS AREAS ARE RELEVANT TO YOUR ORGANIZATION'S WORK?

- Sustainable Systems & Business Models
- Advanced Materials
- Energy and Climate Solutions
- Agriculture and Food Innovation
- Simulation & Visualization
- Smart, Secure, and Connected Systems

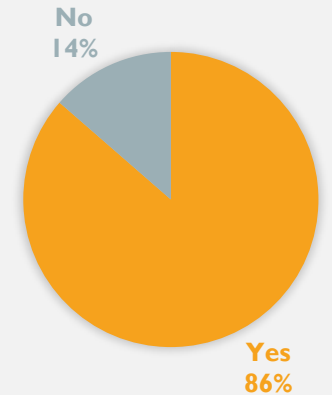


HOW WOULD YOU RATE YOUR ORGANIZATION'S ENGAGEMENT WITH REGIONAL OR INTERNATIONAL NETWORKS TO FOSTER R&I?

- Very Poor
- Poor
- Good
- Very Good
- Excellent

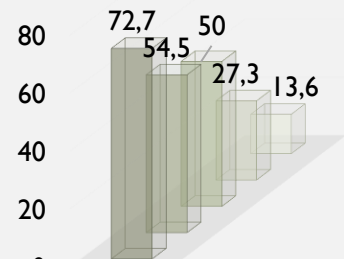


ARE YOU FAMILIAR WITH THE CONCEPT OF SMART SPECIALIZATION (S3) STRATEGY?



WHAT ARE THE MAIN CHALLENGES YOUR ORGANIZATIONS FACES IN ESTABLISHING CROSS-BORDER?

- Lack of funding
- Insufficient collaboration opportunities
- Limited access to skilled personnel
- Difficulty accessing markets
- Regulatory or policy barriers

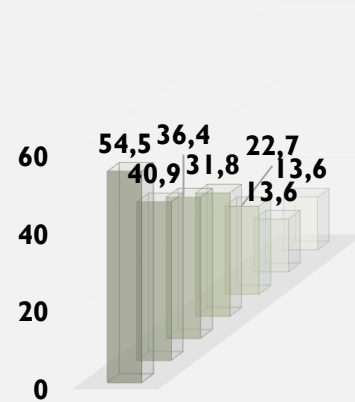


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SECTION 3: RESEARCH & INNOVATION NEEDS

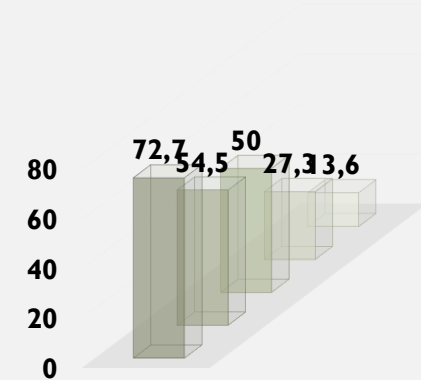
WHAT ARE YOUR ORGANIZATION'S PRIMARY R&I PRIORITIES?

- Digital Transformation
- Circular Economy
- Agriculture and Food Systems
- Advanced Materials and Manufacturing
- Environment and Water
- Health and Well-being
- Climate Action and Energy Transition



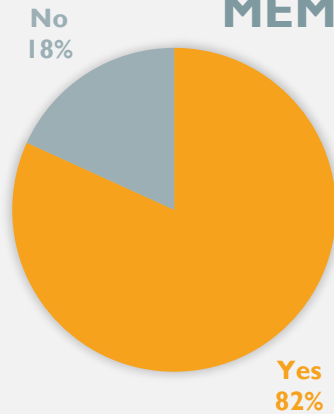
WHAT ARE THE BIGGEST CHALLENGES YOUR ORGANIZATION FACES IN ADVANCING R&I?

- Lack of funding
- Insufficient collaboration opportunities
- Limited access to skilled personnel
- Difficulty accessing markets
- Regulatory or policy barriers

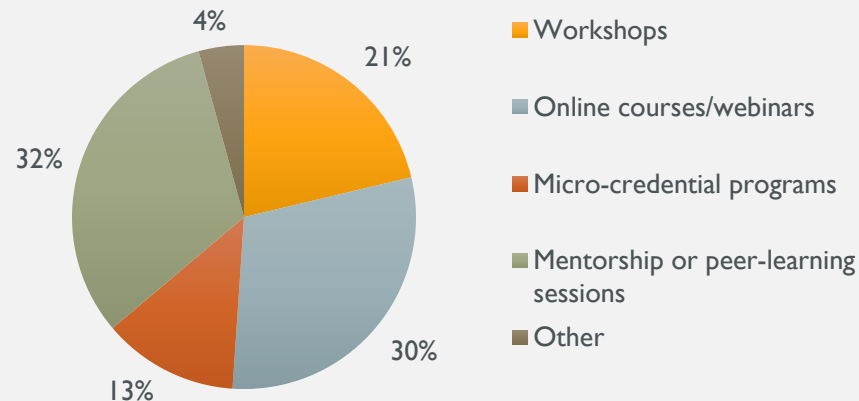


SECTION 4: SKILLS AND CAPACITY BUILDING

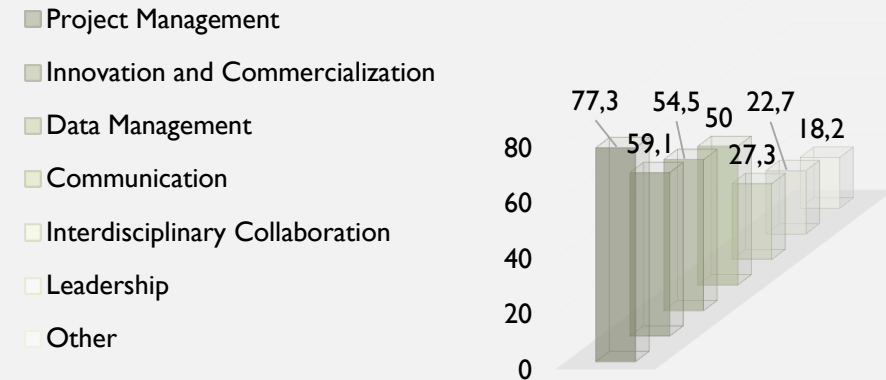
DOES YOUR ORGANIZATION FOCUS ON DEVELOPING TRANSFERABLE SKILLS AMONG ITS MEMBERS?



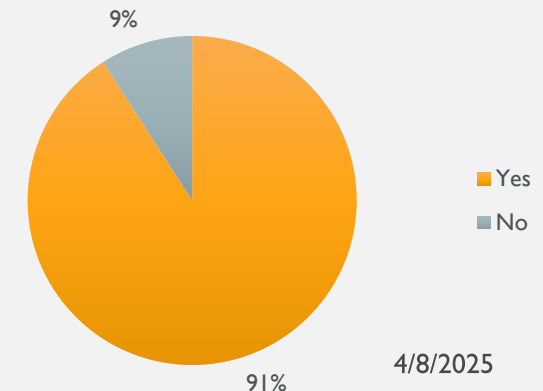
WHAT TYPE OF TRAINING RESOURCES WOULD MOST SUPPORT YOUR ORGANIZATION'S GOALS?



IF YES, WHICH TRANSFERABLE SKILLS ARE MOST EMPHASIZED?

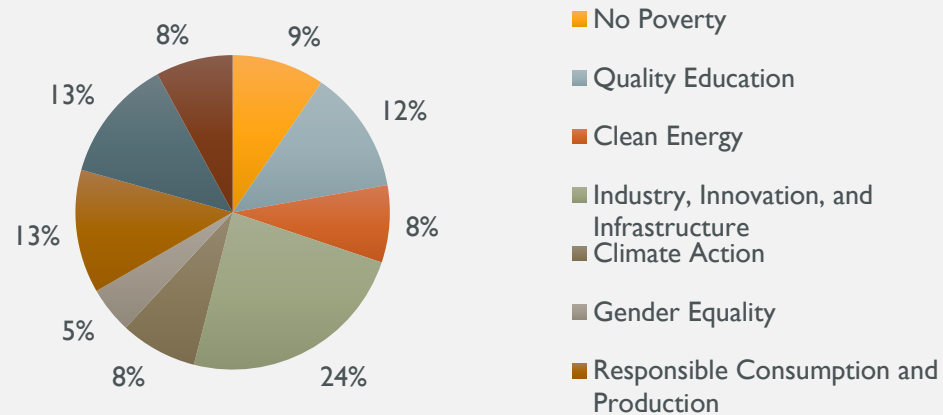


WOULD YOU BE INTERESTED IN PARTICIPATING IN MICRO-CREDENTIAL TRAINING ALIGNED WITH SKILLS NEEDED IN MODERN R&I ENVIRONMENTS?

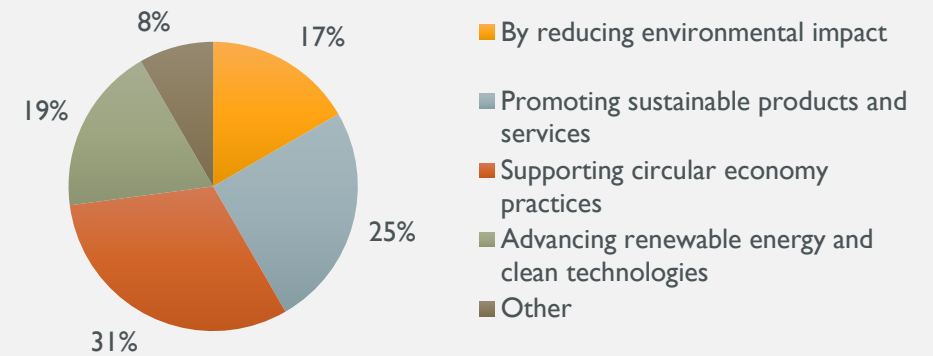


SECTION 5: SUSTAINABLE DEVELOPMENT AND IMPACT

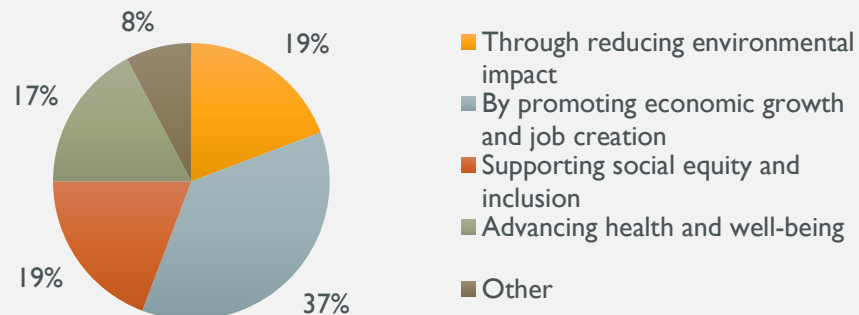
WHICH SUSTAINABLE DEVELOPMENT GOALS (SDGS) DOES YOUR ORGANIZATION ACTIVELY ADDRESS?



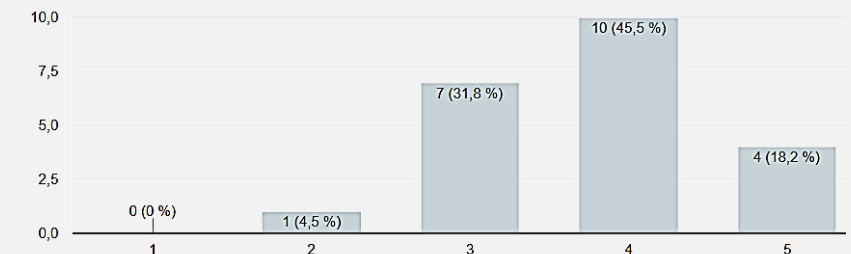
HOW DOES YOUR ORGANIZATION INTEGRATE SUSTAINABILITY INTO R&I ACTIVITIES?



HOW DOES YOUR ORGANIZATION CONTRIBUTE TO THE SUSTAINABLE DEVELOPMENT GOALS (SDGS)?

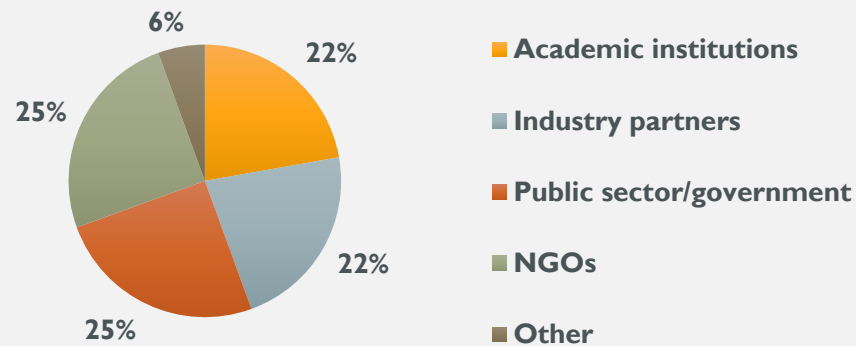


HOW WOULD YOU DESCRIBE THE POTENTIAL SOCIETAL AND ECONOMIC IMPACT OF YOUR WORK?

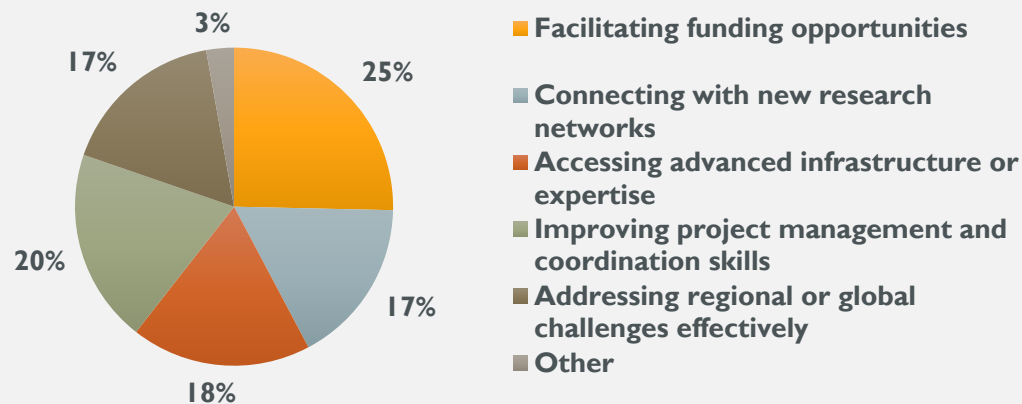


SECTION 6: NETWORKING AND COLLABORATION

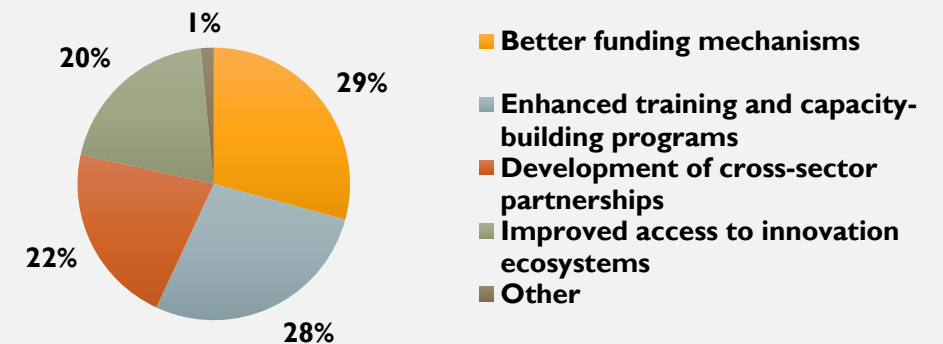
WHAT TYPES OF PARTNERSHIPS OR NETWORKS DOES YOUR ORGANIZATION CURRENTLY ENGAGE WITH?



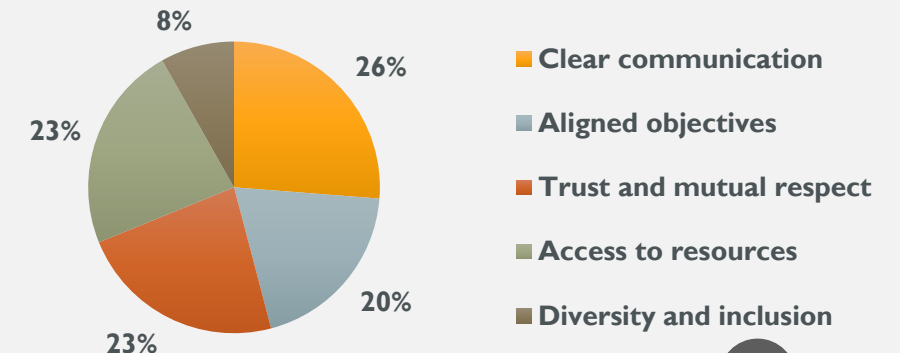
HOW CAN REGIONAL AND INTERNATIONAL COLLABORATION INITIATIVES LIKE HORISON ENHANCE YOUR R&I OUTCOMES?



WHAT ACTIONS OR POLICIES SHOULD BE INCLUDED IN A ROADMAP TO STRENGTHEN R&I AND S3 COLLABORATION IN YOUR COUNTRY/REGION/CITY?



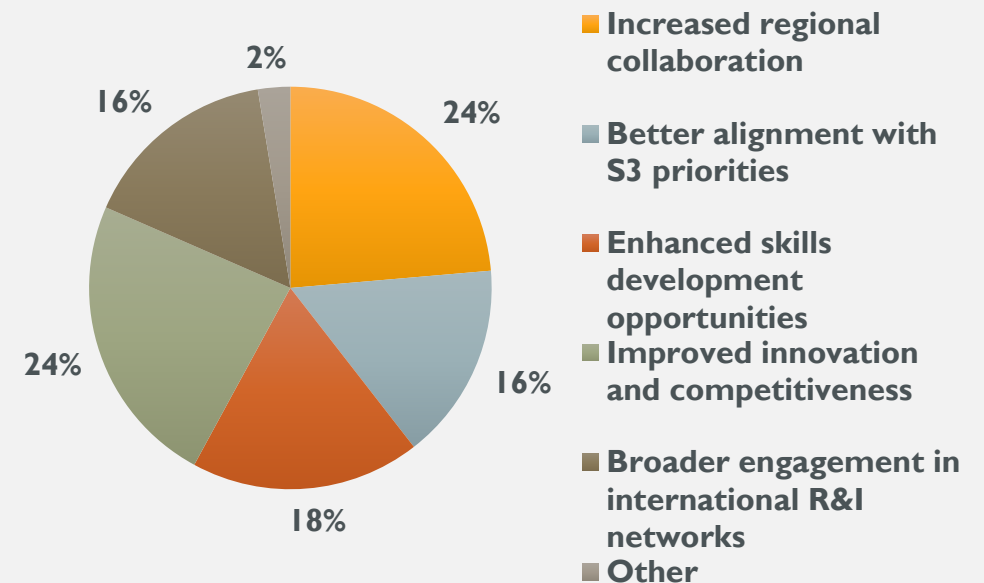
WHAT ARE THE MOST CRITICAL ELEMENTS OF SUCCESSFUL COLLABORATIONS IN YOUR EXPERIENCE?



WHAT RECOMMENDATIONS WOULD YOU MAKE TO STRENGTHEN THE IMPLEMENTATION OF S3 IN YOUR COUNTRY/REGION/CITY?

1. More interaction between actors and participation of as many actors as possible.
2. Needed to provide widening territorial mapping S3-related priorities and/or the specialization capabilities for enhanced multilevel governance of S3 (including at the local levels) in context of European Spatial Planning and Development Perspective (ESDP) based on "Regional dimensions of European research area" (ERA)
3. Programming the digital transformation of rural settlements within the framework of the structuring of the European Agricultural Fund for Rural Development (EAFRD) in Moldova
4. Building and Connect national portals to the European Rural Observatory, which supports the knowledge production and aims at improving data collection and dissemination related to EU rural areas
5. Building and Connect Data hubs in EU border regions, which can allow to collect harmonized geo-spatial data on cross-border interactions and robust socio-economic indicators, empowering policymakers with critical insights to draw on the untapped potential of these territories

WHAT OUTCOMES DO YOU EXPECT FROM THE HORISON PROJECT?



WHAT RECOMMENDATIONS WOULD YOU MAKE TO STRENGTHEN THE IMPLEMENTATION OF S3 IN YOUR COUNTRY/REGION/CITY?

- Developing an innovation ecosystem: promote the creation of platforms for cooperation between business, science, education and government.
- Support for startups and innovative enterprises: develop support programs for startups and innovative enterprises, including financial assistance, consultations and training.
- Attracting investment: create favorable conditions for attracting investment in innovative projects, including foreign ones.
- Developing innovative approaches in agriculture focused on digital technologies and environmental sustainability.
- Attracting investment in research and development (R&D), especially in related sectors of the traditional economy.

Thank you for your Attention!

Questions?