



ONLINE WORKSHOP ON AGRICULTURAL RESEARCH AND KNOWLEDGE TRANSFER IN WESTERN BALKAN COUNTRIES

23 – 24 November 2020





AGRICULTURAL RESEARCH, INNOVATION AND KNOWLEDGE TRANSFER

NORTH MACEDONIA

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PRESENTATION OUTLINE

1. Current research areas and capacity
 - Human research capacities
 - Financial research capacities
2. Scope and extent of the EU, international and regional cooperation so far
3. Cooperation among ministries, universities, research facilities, farmers and businesses-research strategies
4. Capacity of advisory services to provide support to research facilities, to bring together researchers and businesses/farmers
5. Needs and potential of the research sector in the country and the region

CURRENT RESEARCH AREAS AND HUMAN RESEARCH CAPACITY

- Research areas:

- **General research areas:** **Agricultural and food sciences**, and **Biotechnology and food technology sciences**
- **Research projects** in agricultural sciences (run by higher education institutions): **53** completed or running **projects (mostly applied research)** - *Official records for 2018 (SSO, 2019)*
- **Published works** in agricultural sciences: **86 works**, out of which **79 papers** published in **national** and only **7 in international journals** - *Official records for 2018 (SSO, 2019)*
- **Country's rank** in agricultural and biological sciences: **110th** out of 232 **world** countries, and **18th** out of 23 **Eastern European countries** - *SCImago Journal & Country Rank (2019)*

- Research capacity (HR):

- **Number of faculties:** **15 faculties** (agricultural sciences: 3 faculties, biotechnological sciences: 1 faculty, (food) technology: 5 faculties, veterinary sciences: 2 faculties, tourism and logistics: 2 faculties)
- **Number of researchers** employed in the agricultural science sector: **382 researcher** or **11.2% of total** researchers; **51%** of these researchers **are women** - *Official records for 2018 (SSO, 2019)*
- **Number of graduated MSc students** from faculties in agricultural and biotechnological sciences (**total for 3 years**): **152 MSc graduates** (64 from UKIM, 43 from UKLO, 37 from UGD, and 8 from DUT) - *Official records for 2016, 2017 and 2018 (SSO, 2020)*
- **Number of graduated PhD students** from faculties in agricultural and biotechnological sciences (**total for 3 years**): **23 PhD graduates** (15 from UKIM, 6 from UGD, and 2 from UKLO) - *Official records for 2016, 2017 and 2018 (SSO, 2020)*

CURRENT FINANCIAL RESEARCH & INNOVATION CAPACITY



TYPE OF FUNDING	EDUCATION AND RESEARCH INSTITUTIONS	AGRI-FOOD SECTOR
NATIONAL FUNDS (support)	LACK	AVAILABLE
NATIONAL FUNDS (loan support)	NOT AVAILABLE	AVAILABLE
INTERNATIONAL FUNDS (support)	AVAILABLE	AVAILABLE

MON
MAFWE
MoE
FITR

DB
MAFWE

EU
Embassies
Devel. Ag.
Organis.



SCOPE AND EXTENT OF THE EU

INTERNATIONAL AND REGIONAL COOPERATION SO FAR

- EU Programmes:
 - Support education and research institutions, agri-business sector, and their mutual collaboration: **HORIZON 2020**, **COST**, **Cross border cooperation**, **Erasmus** etc.
 - Support agri-business sector: **IPARD**
 - Support Ministries (MAFWE etc.), in collaboration with education and research institutions and agri-business sector: **different projects**
- Organisations (FAO, SWG etc.):
 - Support Ministries (MAFWE etc.), in collaboration with education and research institutions and agri-business sector: **different projects**
- Donors (Embassies, Development Agencies etc.):
 - Support Ministries, researchers and educators and agri-business sector: **different projects**
- Regional funds (Visegrad Fund, Western Balkan Fund etc.):
 - Support regional cooperation: **different projects**

COOPERATION AMONG

MINISTRIES, UNIVERSITIES, RESEARCH FACILITIES, FARMERS AND BUSINESSES-
RESEARCH STRATEGIES

MINISTRIES - HIGHER EDUCATION	HIGHER EDUCATION – FARMERS/BUSINESSES
<ul style="list-style-type: none">• Experts/consultants (mostly EU funded)• MAFWE Commissions' members	<ul style="list-style-type: none">• University education (three cycles)• Trainings
	<ul style="list-style-type: none">• Fundamental and applied research<ul style="list-style-type: none">• Working groups' members• Participation on events
	MINISTRIES - FARMERS/BUSINESSES

CAPACITY OF ADVISORY SERVICES

TO PROVIDE SUPPORT TO RESEARCH FACILITIES TO BRING TOGETHER RESEARCHERS AND BUSINESSES/FARMERS

- Advisory services:

- **National Extension Agency (NEA):** 30 working units, grouped into 6 regions, >130 employees
 - Provides assistance to farmers: technical assistance for subsidies and investment support application, practical implementation of technologies, technical information on agricultural production etc.
 - Maintains the Farm Monitoring System as a source of information on profitability and economic efficiency of agricultural production
 - Undertake activities supported by different donors

- Private consultants:

- Consultancy agencies, associations, etc. => not embedded in formal advisory system

Well developed informal network of information sharing



Cooperation between advisors and researchers/educators

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NEEDS AND POTENTIAL OF THE RESEARCH SECTOR

RESEARCH AND INNOVATION CAPACITY DEVELOPMENT

Raising the number and quality of researchers and educators to be a strategic national issue

NEEDS

- Strengthen **cooperation** between education/research institutions, at national level primarily and thus, internationally; and between different agri-food stakeholders
- Enhance **alumni networks** to collaborate, promote and support R&I
- Continuously adapt **study programs** to the changing labor market in the agri-food sector
- Develop national R&D **database/platform**
- Improve agri-food sectors' capacity to **absorb** knowledge and innovations
- Make **funds** for R&I and knowledge transfer available at all levels

POTENTIAL

- Existing R&I **legislative framework**
- Developed **research capacities** through FP7, Horizon 2020, COST, Erasmus, bilateral and multilateral project participation
- Initial setup of **technology parks** and **business accelerators** as a result of SMEs participation in Horizon 2020
- **Smart Specialization Strategy (S3):** MON & MoE
 - ✓ **Priority areas** (6 sectors selected): **3 agri-food**
 - *Sustainable food and beverage production and value chains*
 - *Sustainable tourism and catering*
 - *Energy for the future*

THANK YOU FOR YOUR ATTENTION!

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