



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

**STATE OF PLAY WITH RESEARCH, KNOWLEDGE TRANSFER AND INNOVATION  
BOSNIA AND HERZEGOVINA  
FEDERATION OF BOSNIA AND HERZEGOVINA**

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23 – 24 November 2020



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# Introduction remarks

- Introduction of new technologies and innovations in agricultural production depend on the work of several ministries at both the federal (entity) and cantonal levels.
  - Federal (entity) level: Federal Ministry of Education and Science and the Federal Ministry for Encouraging Development, Entrepreneurship and Crafts
  - Cantonal level: Ministry of Education and Science
- Real activities have cantons that have their own laws on administration and ministries
- There is no Strategy for the Development of Science at the federal level, there is just proposal which never adopted because of proposal 1% of GDP for implementation
- The annual budget of the Federal Ministry of Education and Science for the field of science in the last few years is around EUR 1.3 million (about 0.1% of the total annual budget, or 0.01% of total GDP)



# Current research areas and capacity

## Inventory of all relevant agri-food research capacities

- Research institutions (4)
  - Institute of Biotechnical Engineering and Biotechnology of the University of Sarajevo - INGEB
  - The Federal Institute of Agropedology
  - The Federal Institute of Agriculture
  - The Federal Agro-Mediterranean Institute
- Faculties (5)
  - The Faculty of Agriculture and Food Sciences, the University of Sarajevo
  - The Agro-Mediterranean Faculty of the University "Džemal Bijedić" in Mostar
  - The Faculty of Agriculture and Food Technology of the University of Mostar
  - The Biotechnical Faculty of the University of Bihać
  - The Faculty of Technology of the University of Tuzla
- Advisory and Extension Services (10 cantonal extension services as a part of their MoA or other relevant ministries)
- Business incubators (11)
- Clusters (5 clusters under IFAD project)



# Current research areas and capacity

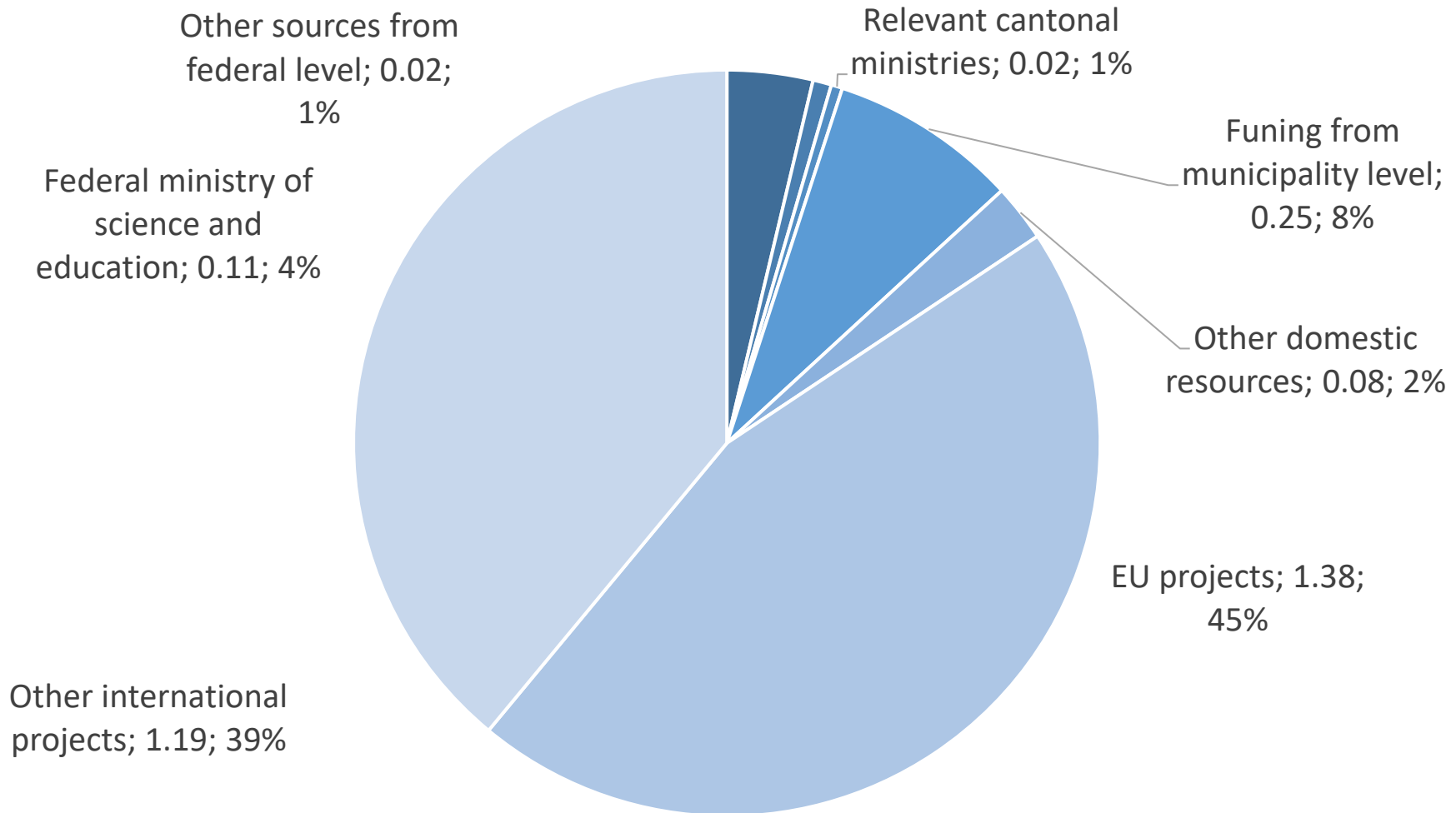
## Research staff and Research focus

- Research staff
  - Total number 186, fulltime research staff 123 (includes 4 faculties and 1 institute)
  - Structure of researchers: PhD 69%, 43:57 (M:F), 36% - age 41-50, 33% age 51- 60
- Research focus
  - Crop production
  - Animal production
  - Natural resources
  - Food technologies
  - Economics of agriculture and food industry
- Main themes of the research
  - Genetic research of fruit crops
  - Plant protection – research of economically important pests
  - Research in fisheries
  - Research related to soil
  - Research related to water quality, natural resources,
  - Rural development and agricultural policy research
  - Animal production research



# Current research areas and capacity

Structure of funding of scientific research work in the FBiH in the period 2014-2018 (millions of EUR)



# Cooperation among ministries, universities, research facilities, farmers and businesses-research strategies

- Cooperation among MoE&Sc (all level) and universities
  - Funding of research project on the basis of public call
  - 3-5 projects from agriculture and food processing (annually), budget per project EUR 10-20,000;
  - Very often the project is accepted but with a significantly smaller budget than proposed
- Cooperation among MoA (all level) and universities
  - Low level of cooperation (especially in last 5 years)
  - Engagement of the university mainly for the needs of drafting strategic documents and in the field of legislation<sup>9</sup>
  - In last two years training of agricultural advisers (certification)
- Cooperation among universities and research institutions
  - It exist but is very modest
- Cooperation between the academy (universities and institutes) and the economy (business) is almost non-existent
- Modest cooperation between universities and extension services



## Capacity of advisory services to provide support to research facilities, to bring together researchers and businesses/farmers

- Advisory services in FBiH undeveloped and one of the weakest links in the agricultural sector.
- There is no capacity for support to research facilities, to bring together researchers and businesses/farmers
- The work of advisory services is organized on cantonal level and they mainly work on FMAWMF implementation of AP and DP, not for technology transfer
- There is no any kind of cooperation of extension services with research institutions
- Advisory services in FBiH need serious reforms and government support from both levels (entity and cantonal).





# Scope and extent of the EU, international and regional cooperation

- Participation in EU projects (Erasmus, Interreg, Cost)
- In the period 2014-2019 there were no participation in Horizon projects
  - There is experience from previous period (FP6 and FP7 projects)
- There is regional cooperation mainly within international projects (important role of SWG)
- Significant support from international community and GO's and NGO's in research activities (UNDP, FAO, USDA, Caritas, Czech Development Agency..)
- BiH still does not have access to IPARD funds, but some projects have been approved through UNDP – EU4-Agry Program



# Needs and potential of the research sector in FBiH (BiH)

- There is scientific and research potential but missing funds for research
- Needs for research of numerous actual topics:
  - Food and nutrition security
  - Sustainable agriculture and food systems (food system transformation)
  - Climate changes and risk management
  - Utilization of natural resources
  - Green economy and Green deal (BiH approach and answer)
- Permanent needs for modern research equipment (including ITC devices)
- Problems:
  - Decreasing number of enrolled students in the faculties of the agro-food sector and the emigration of the educated workforce (researchers)





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**THANK YOU FOR YOUR ATTENTION!**

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