



Experience of the Agricultural University of Plovdiv in grant writing and management

Prof. Vladislav Popov
Vice-rector Agricultural University of
Plovdiv

Approach to participation in research projects and programs

What we can do at the organization level?

Information

- Idea
- Experience / profile(s)
- Concept

Communication

- Departments
- Research topics
- Priorities
- Communication (inter)national

Team work

- Interdisciplinary
- Inter-departmental
- Systemic level
- Transfer of knowledge – (inter)national

Project proposal

- Partners
- Consortium
- Content
- Proposal
- Application
- Implementation

What we can do at the personal (professional) level?

1. Information

Idea

- You are interested in specific area (check the call text) / or you have valuable findings
- Your Research group is working in similar field
- You have individual partners /groups from (inter)national institution(s)

Experience / profile(s)

- Identify and describe **research profile(s)** of your organisation
- Locate a **granting organization or source** that funds proposals like yours
- Screen the profiles against the donor's call

Concept

- Write and circulate 1 page proposal **Concept** (goal, objectives, approach, impact, results..)
- Screen the Concept against the donor's call
- Collect feedback from potential partners
- **Screen the research profile(s)** of your organization against the Concept

Horizon Europe: structure

Pillar 1

Excellent Science

European Research Council

Marie Skłodowska-Curie
Actions

Research Infrastructures

Pillar 2

Global Challenges and
European Industrial
Competitiveness

Clusters

- Health
- Culture, Creativity and Inclusive Society
- Civil Security for Society
- Digital, Industry and Space
- Climate, Energy and Mobility
- Food, Bioeconomy, Natural Resources, Agriculture and Environment

Joint Research Centre

€10 billion

Pillar 3

Innovative Europe

European Innovation Council

European innovation
ecosystems

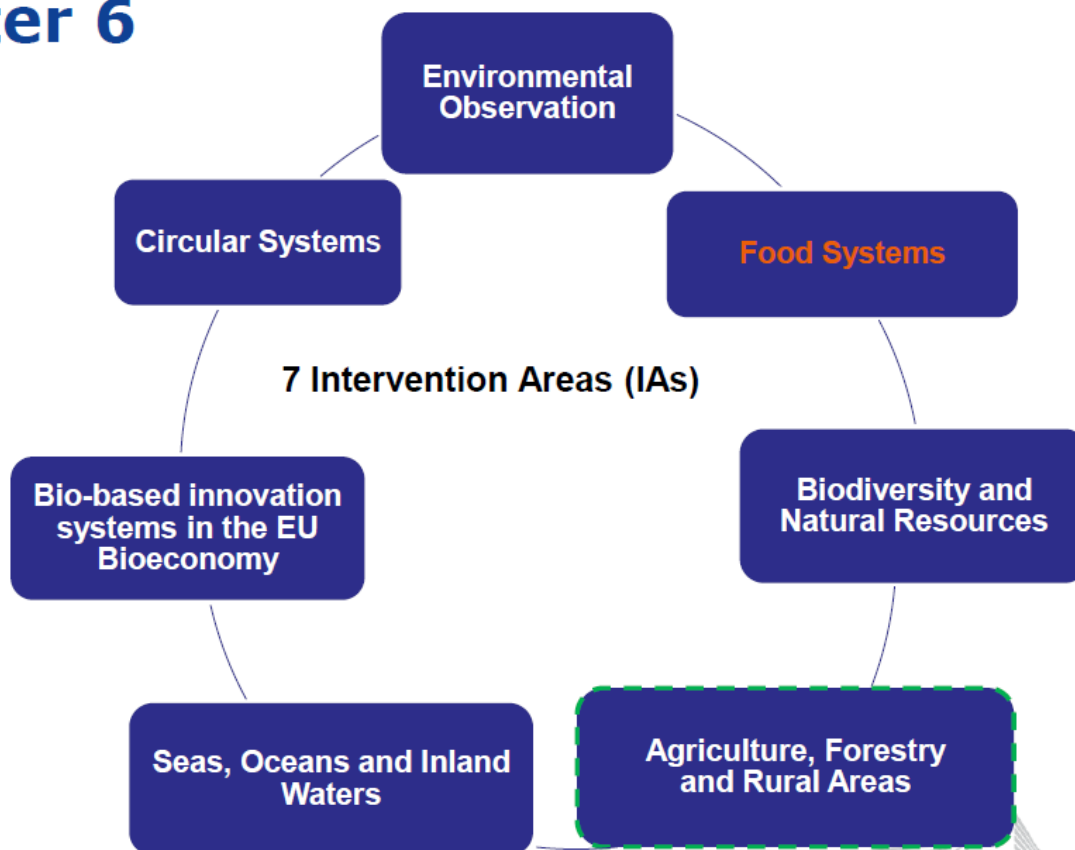
European Institute of
Innovation
and Technology

Widening Participation and Strengthening the European Research Area

Widening participation and spreading excellence

Reforming and Enhancing the European R&I system

Cluster 6

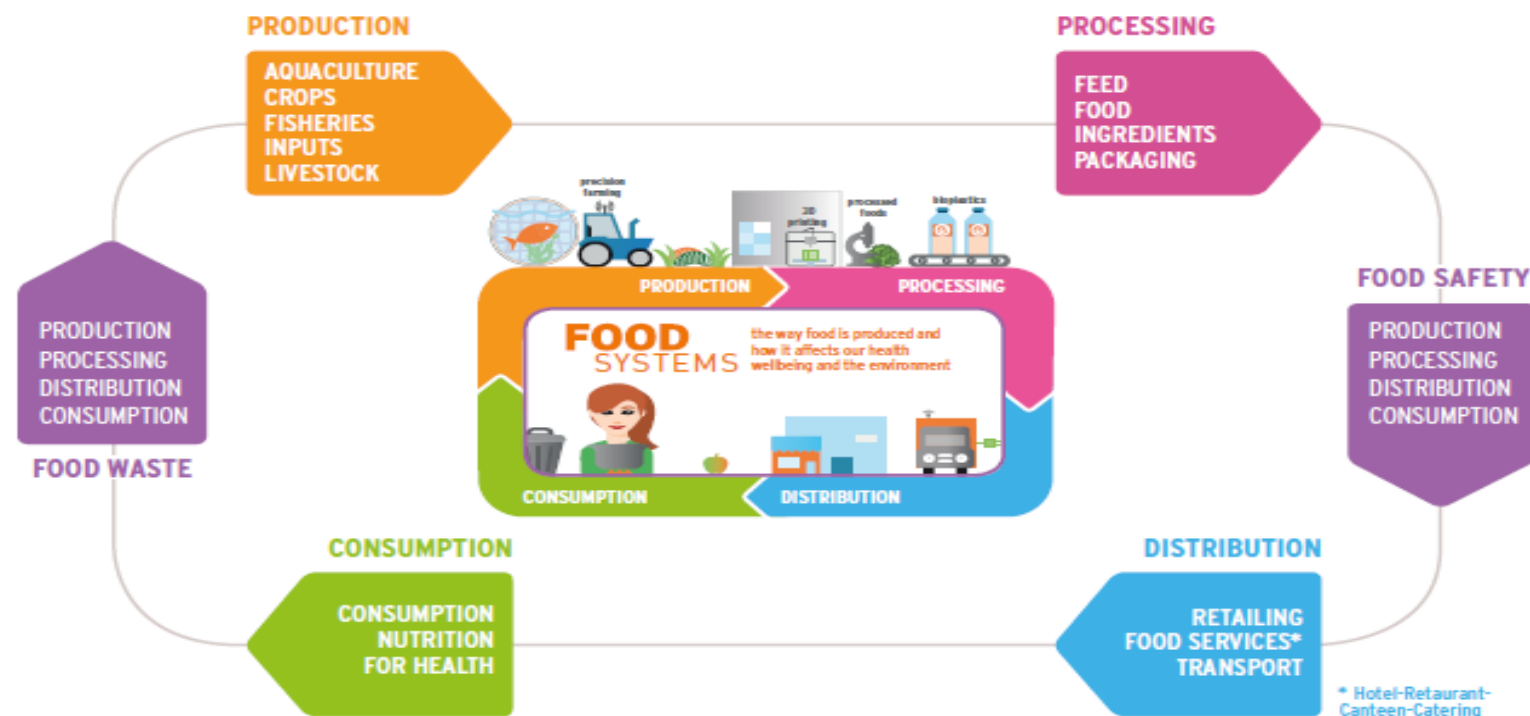




Reflect changes in the focus of research in the agri-food sector – FOOD 2030

https://ec.europa.eu/info/research-and-innovation/research-area/bioeconomy/food-2030_en

Figure 6: The food system categories and sub-categories used in the quantitative mapping



Information on Food Systems and Food 2030:

- https://ec.europa.eu/info/research-and-innovation/research-area/food-systems_en
- https://ec.europa.eu/info/research-and-innovation/research-area/food-systems/food-2030_en

Matrix/Template for expertise and knowledge in Research and Innovation - AGR-EU project Network

1	2	3	4	5	6	7	8	9
Organisation	Research profile/groups	Area of expertise/specialism	Doctoral Programmes	Research Projects at the EU-level	History and Achievements	Research facilities and infrastructure	Possible topics of research collaboration	Other suggestions

AUP RESEARCH PROFILES:

[Agroecology and biodiversity](#)

[Plant health](#)

[Plant eco-physiology](#)

[Bioeconomy](#)

[Digital technologies in agriculture](#)

[Climate change and sustainable agriculture](#)

[Sustainable horticulture /Hortbio/](#)

[Sustainable agriculture /Fruit growing/](#)

[Agroecological approaches for sustainable mechanized production of fruit and rootstocks](#)

[Plant systematics and floristic studies](#)



AGRICULTURAL UNIVERSITY - PLOVDIV
4000 Plovdiv, Bulgaria 12, Mendelev Blvd.
tel. +359/32/654300 www.au-plovdiv.bg



Research and Innovation Profile

General information

Description

Title of the research entity/group

AGROECOLOGY AND BIODIVERSITY

Field of expertise
/in conjunction with Horizon
2020-Societal Challenge
2 (SC2): 'Food Security,
Sustainable Agriculture and
Forestry, Marine, Maritime and
Inland Water Research and the
Bioeconomy'/

Priority 3: Fostering functional ecosystems, sustainable food systems, healthy lifestyles:

- Assessment of agroecological conditions in conventional and organic agriculture (OA) and adaptive solutions to climate change
- Smart technological solutions for OA based on new approaches (e.g. digital tools, decision support systems, modeling and prognosis).
- Ecofunctional biodiversity in agroecosystems and relation to intensification of agricultural practices
- Sustainable practical models for valuation of agrobiodiversity in organic farming
- Temporal and spatial scale in assessing the dynamics of biodiversity and its relation to farming systems, the surrounding landscapes and throughout value chains. Impact of agrobiodiversity on quantity and quality of agri-food production
- Ecosystems services for crop production, in relation to pest and disease control, nutrient cycling, soil fertility and productivity.
- Carbon sequestration in grassland ecosystems.
- Investigating the impact of bio-fertilisers and bio-pesticides on target agroecosystems and crops.

Research products and services
provided by the entity/group

Research results, technological solutions, advice and knowledge transfer to farmers, advisers, decision-makers, state control bodies, policy (ministerial) work-groups, etc. on:
transition to more sustainable (incl. organic) farming practices that maximise the use of ecological processes,
• transition to more sustainable (incl. organic) farming practices that maximise the use of ecological processes,
• alternative practices that rely on functional agrobiodiversity

Example: Identify the trends by (inter)national organisations e.g. BIOEAST suggestion for topics under Horizon Europe, Cluster 6

Priority topic: Biodiversity and Ecosystem Services

- Measurement of ecosystem land use services and monitoring of changes related to cultivation methods
- Supporting climate-adapted agricultural technologies and selection
- Promoting participatory breeding practices with multi-stakeholder and interdisciplinary activity
- Boosting the organic seed production sector
- Measuring the impact of agricultural diversification on biodiversity
- Development and use of innovative integrated pest management methods and practices using agrofunctionality
- Adapting to climate change – monitoring and prediction of old and new pests and invasive species
- Biodiversity of microorganisms and their application in the crop production
- Development of precise and economical methods of water use and management in the technology of agricultural cropping
- Organic and sustainable cultivation technologies of horticultural and agricultural plants with the use of microbiologically enriched biofertilizers based on biochar.

2. Communication

Departments

- Find researchers working in complementary fields
- Form a core group
- Organise work meetings / introduce Concept / get commitment

Research topic(s)

- Identify capacities (knowledge, experience, equipment) to execute research on the Concept topic(s)
- Identify the need to employ a **Multi-actor and Multi-stakeholder approach..?**

Priorities

- Circulate a Matrix / Template for expertise and knowledge in Research and Innovation topics
- Screen against Uni **Research Groups priorities** and against the Uni **R&I Strategy**

Communication (inter)national

- Find instruments for contacting consortiums
- (Virtual) **brokerage events**
- Exchange of data
- Info-seminars, workshops

Formation of an interdisciplinary group

- Define the target topics according to researchers' specialisation
- Screen these with the call topic
- Define the input /contribution of your group to the proposal e.g. core research, testing, validation, communication...
- How do you establish your credibility? Present it in the partner profile sheet i.e. knowledge, skills, capacities, project expertise, etc.
- Put value on your input i.e. rate per person (man-day/ man-month) and how many are needed
- Define the need for equipment, additional experts, external services, etc.



Multi-actor and multi-stakeholder approach

https://ec.europa.eu/eip/agriculture/sites/default/files/eip-agri_brochure_multi-actor_projects_2017_en_web.pdf

How to build a successful Horizon 2020 multi-actor project?



Target real-life needs, problems or opportunities



Choose consortium partners with complementary types of knowledge and skills (for "cross-fertilisation")



including farmers, foresters or other end-users to benefit from their entrepreneurial skills



Involve "multipliers" - people who can bring in practical knowledge and help disseminate the results in the long term



Set up a plan with a clear role for each of the different partners



Organise knowledge exchange activities between the partners

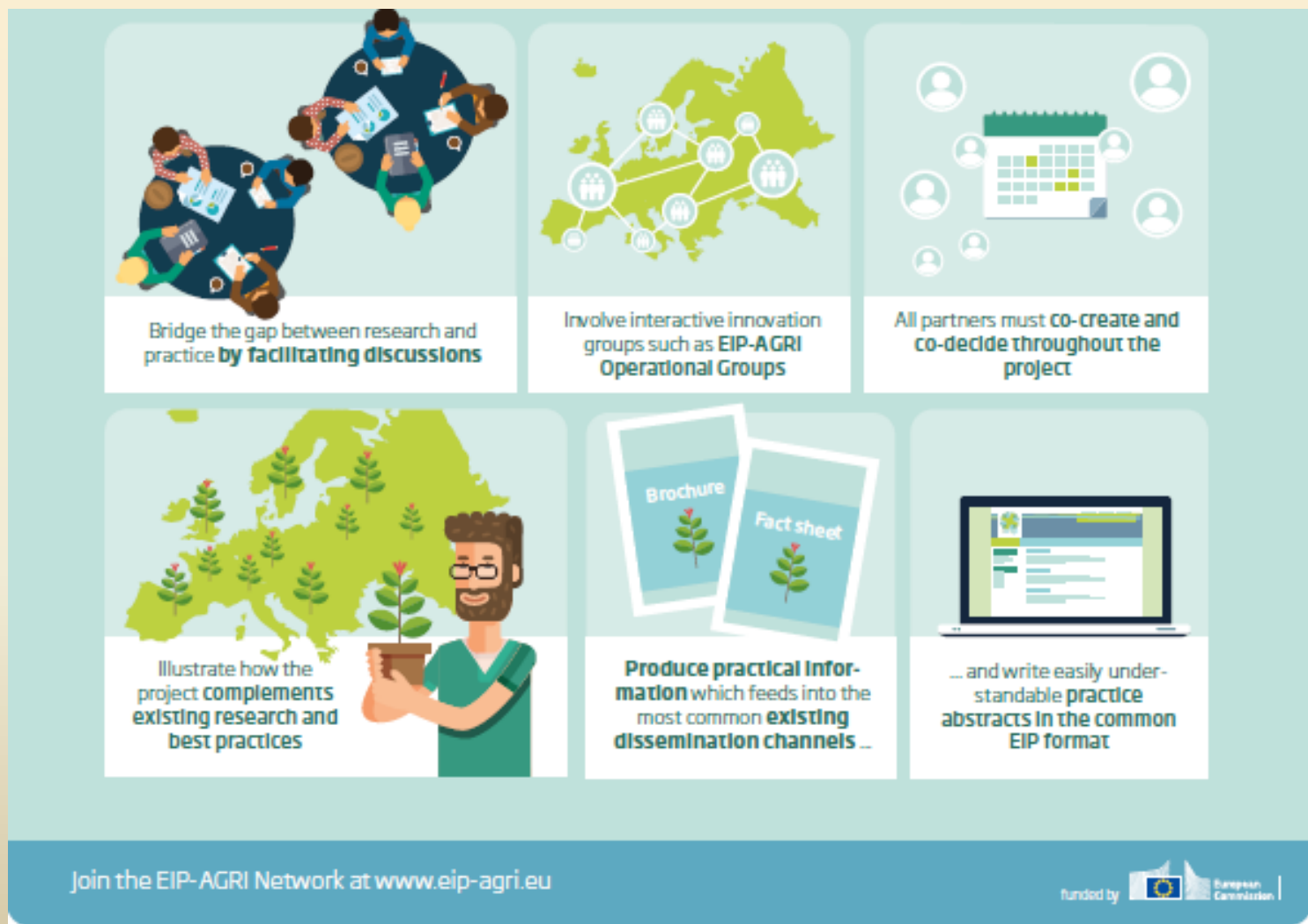
MAA projects need to demonstrate:

- how the project proposal's objectives and planning are targeted to needs / problems and opportunities of end-users
- complementarity with existing research and best practices
- sufficient involvement of key **actors** with complementary types of knowledge (scientific and practical) - to be reflected in the project consortium composition to reach the project objectives and disseminate results broadly.

Actor: a partner taking part in project activities

Stakeholder: person expressing a view/ stake at a certain moment(s) during the project

Multi-actor approach



Identification of funds and organisations

Agricultural University of Plovdiv: Section Science/ Research Profiles	https://www.au-plovdiv.bg/наука/семинари-и-конференции
Ministry of Education and Science (MES)	https://www.mon.bg/bg/13 https://www.mon.bg/bg/4
Portal Science of MES	https://naukamon.eu/
National Fund “Science”	https://www.fni.bg/?q=node/9 https://www.coreorganic.org/
National Scientific Programmes	http://www.nnp-food.au-plovdiv.bg/ https://nnp-ir.bg/
Framework Programme of the EU – Horizon Europe	https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/funding-programmes-and-open-calls_en
European Institute of Innovation and Technology	https://www.eitfood.eu/ https://businesscreation.eitfood.eu/
European Commission – Funding and Tenders Portal	https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/home
ENRD – European Network for Rural Development	https://enrd.ec.europa.eu/
Embassies and Missions	https://bg.usembassy.gov/bg/education-culture-bg/grant-opportunities-bg/
European Research Council	https://erc.europa.eu/
FACCE-JPI	https://www.faccejpi.net/en/FACCEJPI/About.htm
Small projects	Small-scale projects Innovation and Networks Executive Agency (europa.eu)

Get people behind your Concept – European Commission brokerage events

<https://he-2022-cluster6.b2match.io/page-01>



RESOURCES:

[CL6 Work Programme 2021-22](#)

[RIA/IA Standard Proposal Template](#)

[CSA Standard Proposal Template](#)

Horizon Europe Cluster 6 Work Programme 2021-2022

The Horizon Europe Cluster 6: 'Food, Bioeconomy, Natural Resources, Agriculture and Environment' Work Programme 2021-2022 can be found [HERE](#).

3. Team work

Interdisciplinary

- Work with the group of researchers from diverse but complementary fields
- Distribute the work-load (person-months) accordingly

Inter-departmental

- Give opportunity to use different equipment/ fields / people
- Comply to the required level of system approach to the topic

Systemic level

- Provides for targeted and shared use of different equipment/ fields / people
- Usually addresses the requirement of the call topic

Transfer of knowledge – (inter)national

- Ask the team members to acquire knowledge / know-how from their (inter)national partners
- Identify the most useful instruments of transfer

Experience in searching and applying to research projects and programs

Search for projects and programs

- Through the AUP website
- Discussions with Departments or Dean / Deputy Dean
- Discussions with departments' staff
- Weekly inspection of the websites of the Ministry of Education and Science (MES), MAF, agencies, embassies, etc.

Involvement in current projects and programs

- The National Scientific programmes of BG MES, calls of the National Scientific funds, etc.
- Call of the Centre for Scientific Research at the AUP (from state budget)
- Formation (or use existing) research group e.g. inter-dept. or/and interdisciplinary

Regular information and coaching

- Collect info on calls
- Use e.g. (inter)national web-sites/ publications, internal sources, etc.
- Contact colleagues from abroad by e.g. e-letters, central Uni invitations, conferences, etc.
- Setup webinar(s) for formation of consortium and discussions/training

Identify possibilities to attract researchers interested in changes / transformations



Key approach: Promote Synergy



What?

Improving the capacity of the AUP in new (on-demand) areas e.g.:

- Bioeconomy
- EU “Green Deal”
- EU Strategy "From the Farm to Fork“
- EU Strategy "Biodiversity",
- Action Plan for Organic Agriculture



How?

Identify and promote instruments e.g.:

- National research programs - clear and focused research tasks.
- International projects e.g. CAPBIO4BG
[/https://capbio4.bg/](https://capbio4.bg/)
- Partnership projects in the country - between universities, research institutes, businesses, municipalities, regional governments, others....



Result:

Provided scientific and applied products, technologies, models, etc. to agro-producers, agro-business, recycling, logistics business, environmental protection bodies, MAF and others.

Involve and engage Early-stage researchers (ESR)

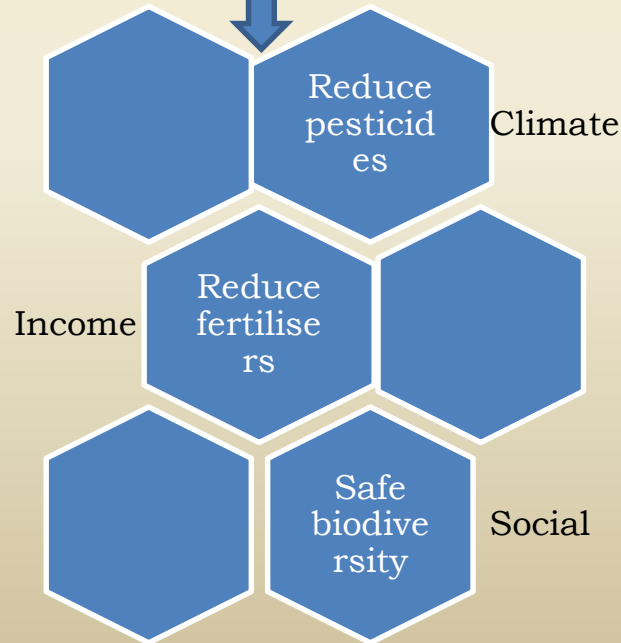


Goal: build core capacity in ESR



Requirement for all project proposals in HORIZON EUROPE related to the Green Deal, Strategy "From Farm to Table", Biodiversity Strategy, Action Plan for Organic Farming:

To focus on **systemic innovations** that increase synergies and reduce trade-offs - solutions for the 3 pillars of sustainability - climate / environmental, economic, and social / health, incl. biodiversity and animal welfare, which increase the resilience of food systems to stress, develop in a safe environment and offer sufficient safe and nutritious food for all.



4. Project proposal

Partners

- Each partner has a relevant role i.e. clear distribution of tasks/ work
- Participation in Implementation (WPs and Tasks) is balanced

Consortium

- Regular meetings
- Reach consensus
- Relevant management structure

Content

- Regular meetings
- Reach consensus
- Relevant management structure

Application

- Organise the preparation much in advance e.g. 6 months
- Don't wait for the last day

Implementation

- Get acquainted with financial rules
- Find a skillful communication expert
- Be punctual in the daily management

Project proposal – evaluation criteria

Innovation Action (I A)	EXCELLENCE	IMPACT	IMPLEMENTATION
	Clarity and pertinence of the objectives;	The extent to which the outputs of the project would contribute to each of the expected impacts mentioned in the work programme under the relevant topic;	Quality and effectiveness of the work plan, including extent to which the resources assigned to work packages are in line with their objectives and deliverables;
	Soundness of the concept, and credibility of the proposed methodology;	Any substantial impacts not mentioned in the work programme that would enhance innovation capacity, create new market opportunities, strengthen competitiveness and growth of companies, address issues related to climate change or the environment, or bring other important benefits for society;	Appropriateness of the management structures and procedures, including risk and innovation management;
	Extent that the proposed work is beyond the state of the art, and demonstrates innovation potential (e.g. ground-breaking objectives, novel concepts and approaches, new products, services or business and organisational models);		Complementarity of the participants and extent to which the consortium as whole brings together the necessary expertise;
	Appropriate consideration of interdisciplinary approaches and, where relevant, use of stakeholder knowledge and gender dimension in research and innovation content.	Quality of the proposed measures to: - Exploit and disseminate the project results (including management of IPR), and to manage research data where relevant; - Communicate the project activities to different target audiences.	Appropriateness of the allocation of tasks, ensuring that all participants have a valid role and adequate resources in the project to fulfil that role.

Project proposal – additional requirements

Scope of the Proposal

A proposal should correspond to the topic to which it is submitted.

This means that the work should address the specific challenge, and fall within the specified scope, set out in the WP.

Management of the Consortium

Management of the IPR

Gender and Ethics

Operational Capacity

Check it to ensure that the **participants have** (or will have by the time of implementation) **sufficient professional competencies and qualifications** (quantity and quality) to implement the action (and in particular their action tasks). This assessment is based on the information provided by the applicant in the proposal:

- CV or description of the applicant profile;
- Relevant publications or achievements;
- Relevant previous projects or activities;
- Description of any significant infrastructure or any major items of technical equipment.

Example:

Subtopic C. [2021] Reducing the dependence on hazardous pesticides; reducing the losses of nutrients from fertilisers, towards zero pollution of water, soil and air and ultimately fertiliser use

Proposals have to address all challenges (those related to pesticides, and to fertilisers, and to losses of nutrients) specified under Subtopic C.

Applying system thinking/system approaches to define the challenge...

Adopting a multi-actor^[14] and cross-sectoral approach...

Delivering and implementing an action plan for dissemination, communication and engagement..

Cross-cutting

Priorities:

[Blue Growth](#)

[Open Innovation](#)

[International cooperation](#)

[Socio-economic science and humanities](#)

Focus on upscaling innovations (TRL level 5-7), and can include limited research activities....

Including the most appropriate mix of innovations, such as novel, digital and space-based technologies...

Expected Impact:

Proposals are expected to:

- Demonstrate innovative systemic solutions that have the potential to generate significant positive impacts by 2030 with regards to:
 - ✓ Decreasing the dependency on the use of hazardous pesticides (Subtopic C);
 - ✓ Reducing loss of nutrients from fertilisers and ultimately fertiliser use; increasing the efficiency of fertilisers (Subtopic C).
- Providing sufficient, safe, nutritious, healthy and affordable food for all;
- Improving the overall sustainability of food systems (social/health, climate/environmental and economic);
- Improving the resilience of food systems to shocks and stresses.
- Contribute significantly to the achievement of the objectives and targets of the Farm to Fork Strategy^{[\[17\]](#)} and The European Green Deal^{[\[18\]](#)}, and in particular to:
 - Reducing the overall use and risk of chemical pesticides by 50% and the use of more hazardous pesticides by 50% by 2030 (Subtopic C);
 - Reducing nutrient losses by 50%, which will reduce the use of fertilisers by at least 20% by 2030 (Subtopic C);
- Achieve an increase in awareness among policy makers, businesses, investors, entrepreneurs, institutions, stakeholders and citizens of selected innovative systemic solutions, of their potential and of the main instruments and policies that will support EU and national

Opportunities for additional training

Horizon Europe:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/programmes/horizon>

[Go/No-Go service - Enspire Science Ltd.](#)

Europa Media Trainings

https://europamediatrainings.com/?utm_campaign=EMTD&utm_source=EMTD20220412&utm_medium=e-mail&utm_contact=156170

<https://horizoneuropetraining.com/>

Project proposal – Evaluation criteria EIT

CALL 2021: EVALUATION CRITERIA	
Excellence	Explanation
Demonstration of market need / demand	The proposal demonstrates a good understanding of the market / landscape and the existing solutions / offerings.
	The proposal addresses a societal challenge and/or illustrates a credible need or potential for the proposed solution / offering.
Innovativeness of the proposed solution / offering	The proposal clearly sets out the state-of-the-art in the sector.
	The activity is likely to lead to breakthrough innovations or bring about novel concepts or approaches that go beyond the state-of-the-art.
Soundness and credibility of the concept	Proposed action is feasible and appropriate to successfully address the identified market need or societal challenge.
	The proposed methodology is based on robust models or assumptions which are valid and convincing.
	The proposal can demonstrate or anticipates consumer involvement in the validation of the proposed solution/offering.
Value for Money of the proposed activity	The proposed budget is adequate for the scope of the action (in view of the planned outputs, KPIs).
	The proposed budget is realistic for the implementation of the activities in the proposed timeline
	The budgeted costs are sufficiently explained and justified in the proposal.
Impact	Explanation
Demonstration of distinctive EIT/EU added value, especially regarding Knowledge Triangle Integration (KTI)	The proposal demonstrates a clear impact on the competitiveness and growth of the food system in the EU.
	The synergy and collaboration resulting from the KTI is an important pre-requisite for the successful implementation of the action.
	The KTI is reflected in the distribution of the roles and budget allocated to the partners.

Project proposal – Evaluation criteria EIT

CALL 2021: EVALUATION CRITERIA

Contribution to EIT Food's Strategic Objectives / Focus Areas	The proposal demonstrates a clear impact on society and economy.
	The proposed action will contribute to the advancement of at least one EIT Food Focus Areas (Innovation projects only).
	The proposed action will have a positive impact on at least one of the challenges defined for a Focus Area (Innovation projects only).
Contribution to KPIs (incl. societal impact indicators)	The selected KPIs are adequate and relevant for the proposal and achievable withing the proposed timeline.
	The proposal is likely to have a positive contribution to EIT Food's societal impact indicators.
Contribution to the Financial sustainability strategy	Based on the proposed source of revenue/ROI plan, the proposal is likely to succeed in exploiting the results of the KAVA.
	Proposed implementation of the ROI mechanism is efficient, i.e. the proposed timeline is feasible, high likelihood of the plan generating revenue.
	If the action proposes own mechanism to contribute to the EIT Food Financial Sustainability plan, is own FS mechanism (business model) clearly explained, are revenues realistic?
Quality and efficiency of implementation	Explanation
Effectiveness of the workplan	The proposed workplan is coherent with clear and feasible milestones to successfully implement the proposal within the proposed timeline.
	The planned resources are adequate for completion of the tasks of the proposal.
	Outputs and deliverables have been clearly described and are consistent with proposal objectives, tasks and the selected KPIs.
Management structures and procedures	The proposed management structure is adequate for the complexity of the proposal.
	The proposal demonstrates an understanding of the potential risks and proposes adequate mitigation measures.
Competences, experience and complementarity of the consortium	The consortium as a whole brings together the necessary expertise to ensure successful implementation of the action.
	Each partner has a clear role in the implementation of the action.
	Resources committed by partners are adequate to fulfil their role in the action.
Robustness of implementation	The proposal clearly demonstrates how the activity will scale up the outcomes achieved by EIT funding into impact. - This is copied from last year's document. but personally I would like to

Objective: An independent EU institution working to increase Europe's ability to innovate by promoting entrepreneurial skills and supporting new ideas.

Specific Objectives:

- To increase Europe's competitiveness, sustainable economic growth and job creation by promoting and strengthening cooperation between leading business, education and research organizations.
- Powerful innovation and entrepreneurship in Europe by creating an environment for creative and innovative ideas and initiatives to flourish.

Strategy 2021-2027:

1. Increasing the regional impact of Knowledge and Innovation Communities (KICs): In the future, the EIT will strengthen its networks by involving more higher education institutions, businesses and research organizations by developing regional strategies. KICs will develop links with smart specialization strategies, an EU initiative to stimulate economic growth and job creation, allowing each region to identify and develop its own competitive advantages.
2. Increasing the innovation capacity of higher education: The EIT will support 750 higher education institutions with funding, expertise and coaching, which will allow them to develop economic activities in their area of interest. The institute will design and launch activities, especially in countries with lower innovation capacity.

Пример: EIT-Food Portfolio 2021

EIT обявява ежегодни конкурси по тематични фокус-области, изграждащи синергия с темите на Х2020 и Хоризонт Европа

3.1. The 6 selected Focus-areas



**ALTERNATIVE
PROTEINS**



**SUSTAINABLE
AGRICULTURE**



**TARGETED
NUTRITION**



**SUSTAINABLE
AQUACULTURE**



**DIGITAL
TRACEABILITY**



**CIRCULAR
FOOD SYSTEMS**

CONSUMER CENTRICITY

DIGITAL TRANSFORMATION OF THE FOOD SYSTEM



COVID-19 PARTNERS RISINGFOODSTARS EVENTS NEWS BLOG JOBS PODCAST CONTACT

What we do ▾ Our Projects ▾ Get Involved In Your Country About EIT Food

Funded by the
European Union



EIT-Food /<https://www.eitfood.eu/> - core topics



Consumer
Behaviour



Consumer Trust



Digitalisation



Entrepreneurship



Food Loss &
Waste



Food Production



Food Safety &
Quality



Food
Technology



Health &
Nutrition



Learning &
Development



New Product
Development



Sustainability



CLEANTECH
BULGARIA

