HORIZON-CL6-2021-FARM2FORK-01-08: Uncovering lock-ins and levers to encourage farmers to move to and stay in sustainable, climate-neutral and biodiversity friendly food production systems: from experiments to systemic mechanisms

Specific conditions	
Expected EU contribution per project	The EU estimates that an EU contribution of around EUR 4.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
Indicative budget	The total indicative budget for the topic is EUR 12.00 million.
Type of Action	Research and Innovation Actions
Eligibility conditions	The conditions are described in General Annex B. The following exceptions apply: The Joint Research Centre (JRC) may participate as member of the consortium selected for funding.

Expected Outcome: In line with the European Green Deal, notably the Farm to Fork and Biodiversity Strategies, Climate Action as well as the Common Agricultural Policy (CAP), the successful proposals should support development of policies, business models and market conditions that enable sustainable, productive and climate-smart agricultural systems. The farming systems should provide consumers with affordable, safe, healthy and sustainable food, improving public health, minimising pressure on ecosystems and enhancing biodiversity, and generating fair economic returns for farmers.

Projects results are expected to contribute to all of the following expected outcomes:

- Improved understanding of challenges and opportunities for the development of sustainable, climate neutral, biodiversity friendly farming systems at the farm and landscape levels;
- Improved understanding of farmer's individual (in particular behavioural) and systemic 'lock-ins' and 'levers' for moving to and staying in sustainable, climate neutral and biodiversity friendly farming systems;
- Improved understanding of consumer's decision-making and market segmentation with regard to buying food from sustainable, climate neutral and biodiversity friendly farming systems;
- Improved understanding of decision-decision making of actors operation in the upstream and downstream of agri-food value chains with regard to sustainable, climate neutral and biodiversity friendly production and consumption systems;

- Better design and implementation of relevant policies, in particular CAP and Farm to Fork and Biodiversity Strategies, that effectively incentivise large-scale and long-term behavioural shifts among farmers to sustainable, climate neutral and biodiversity friendly farming systems;

- Improved business strategies and relationships building collective interests between relevant food systems' actors across sectors supporting farmers to produce in a more sustainable manner, contributing to climate neutrality and reversing biodiversity decline;

- Improved capacities of researchers in behavioural and experimental research, as well as systems thinking.

Scope: Although the EU has made strides in improving the sustainability of agriculture, substantial efforts are still needed to achieve the ambitious targets of the European Green Deal, in particular the Farm to Fork Strategy and the objectives of the future CAP. There are many approaches emerging, such as agroecology[1], including organic farming, etc., that have the potential to make the farming systems more sustainable in climate, environmental, economic and social dimensions. There are, however, multiple lock-ins that are preventing farmers from scaled-up and -out transition to more sustainable production systems. Policy and business shifts are needed to help farmers escape from the lock-ins and accelerate the pace of change required. An in-depth understanding of the 'lock-ins' and 'levers' is key to spur large-scale behavioural shifts. Behavioural and experimental research that unpacks the decision-making related to the adoption of sustainable practices holds significant potential to identify the lock-ins and levers, thereby improving the effectiveness of the CAP and contributing to the successful implementation of the Farm to Fork Strategy. In addition to unpacking the different pieces of the decision-making puzzle, it is also important to achieve a more comprehensive picture of the food systems, in which farmers operate, and of the governance, structures, mechanisms and dynamics that lock them in unsustainable practices or incentivise them to get and stay on a sustainable path.

Proposals should investigate farmers' decision-making and the broader food systems / environment (context) within which they have to operate (and create collective action) to uncover what locks them in unsustainable practices and incentivises them for moving to and staying in sustainable production systems. Attention should be paid to the multiple factors (related to, e.g., behavioural, economic/regulatory, knowledge, biophysical, gender, cultural aspects, etc.) as well as structures, mechanisms and dynamics (e.g., feedback loops, etc.).

Proposals should take a comprehensive behavioural approach and investigate proximal as well as distal factors to better understand farmers' decision-making with the objective to inform the design and implementation of policies, in particular the CAP, as well as the European Green Deal initiatives, notably Farm to Fork and Biodiversity Strategies. An extensive experimental research should be conducted, for instance (but not limited to) as it pertains to "nudges", voluntary schemes or regulation that makes adoption mandatory, to fill policy-oriented research gaps and support effective evidence-based policy design and implementation.

[1] http://www.fao.org/3/i9037en/i9037en.pdf

It is important to analyse also the role of other food system actors in hindering or incentivising farmers to adopt and continue applying sustainable practices in the long-term. To this end, proposal should thoroughly analyse consumers' decision-making and shopping behaviour, in particular by looking at market segmentation as well as willingness to pay versus buying acts, in various contexts. The knowledge on consumers' behaviour, buying acts/market segmentation should be shared with farmers, so that they can better respond to changes in consumer demand, which is a strategic CAP objective. Besides, proposals should explore the decision-making of operators across the downstream and upstream of agri-food value chains (e.g., input industry, food companies, retailers, HoReCa, etc.) that lock farmers in unsustainable practices or enable them to adopt sustainable practices as well as stimulate or hinder consumer demand for more sustainable foods.

With an interdisciplinary lens, proposals should consider also the "whole-systems" in which farmers operate and analyse the systemic mechanisms and dynamics that lock farmers (and landowners) in unsustainable states and ways to break away, build collective interest for and keep them in a sustainable state.

Concurrent research should be conducted using the same (or at least similar) methods in a variety of settings (i.e., a wide range of farm typologies, diverse farming systems, including various agroecological approaches and organic farming, sectors, commodities and value chains, communities, collective actions, regions etc.) representative of the diversity of the agri-food sector in the EU and Associated Countries, to derive meaningful conclusions on the external validity of behavioural factors and systemic mechanisms across countries and contexts.

Proposals should also explore and propose ways to engage farmers, consumers and other food systems' actors through, for instance, innovative policies, improved farmers' organisation, social innovation or new business models, in enabling farmers move to and stay in sustainable farming systems.

Based on the research results, proposals should formulate and widely disseminate to relevant actors: (1) policy recommendations and innovative policy options, in particular for the CAP, environmental policies, and other relevant Green Deal initiatives, etc.; (2) business strategies (including the identification of end markets for sustainable products on a cross-sectoral basis); for encouraging farmers to adopt more sustainable practices on a long-term basis.

Proposals should build on and expand the achievement of past and current R&I projects, for example (but not limited to), funded under the topic SFS-29-2017[2] as well as collaborate with future projects to be selected under the topic *HORIZON-CL6-2021-FARM2FORK-01-09*. This topic should involve the effective contribution of SSH disciplines.

[2] https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/sfs-29-2017