

H2020 SC2 - CEMA selected calls 2018-19						
Topic	Action type	Year	Call Budget	Num of (expected) funded projects	Short description	Expected impacts
SFS-08-2018/2019 : Improving animal welfare Subtopic A-2018: Precision livestock farming	Research & Innovation Action (RIA)	2018	10 mln €	2	Research is needed to further improve the management of animal welfare, by looking into new opportunities offered by technological developments, development of appropriate business models and linking animal welfare with other production parameters. Projects may cover development of early warning systems; increased monitoring of behaviour, stress or other animal-based welfare indicators and effects on production efficiency; development of related intervention mechanisms.	<ul style="list-style-type: none"> a better understanding of animal welfare and associated behaviour; develop innovative approaches to measuring animal welfare at various stages of the production system; increase the range of animal welfare management strategies and tools. <p>In the long run, projects shall contribute to an increased sustainability of the livestock sector by better responding to consumer demand and/or increased competition.</p>
LC-SFS-19-2018/2019: Climate-smart and resilient farming Subtopic A-2018: Microclimate management: from field to landscape	Research & Innovation Action (RIA)	2018	7 mln €	1	Actions shall improve the resilience of farming systems including the livestock sector to variable climatic conditions and more extreme weather events through risk management strategies and innovations in field and regional landscape design. Work will take into account the potential of traditional and new innovative techniques and sensors and test their effectiveness in mitigating/buffering the effects of different weather events (such as drought, heat and cold waves, wind, heavy rain and flooding). Activities should look at the wider impacts of trade-offs between microclimate management and related policies (water framework directive, biodiversity action plans, common agricultural policy) on agri-ecosystems and their surroundings	<ul style="list-style-type: none"> Deliver effective solutions for ensuring the highest level of implementation on the farm and landscape scale regarding climate smart and resilient systems and provide decision support systems adapted to mixed farming and agroforestry systems in heterogeneous landscapes; Unlock and improve viability and replicability of efficient and resilient farming systems by leading to the development of modern land use systems, value chains and infrastructures; Reduce the environmental impact of farming and contribute towards mitigation and adaptation to climate change Provide ecosystem services through integrated and small-scale land management.
RUR-02-2018 : Socio-economic impacts of digitisation of agriculture and rural areas	Research & Innovation Action (RIA)	2018	5 mln €	1	Proposals shall analyse the social and economic impacts of digitisation on agriculture and rural areas, looking into costs, benefits and possible trade-offs. Beyond the impacts of past and ongoing developments, the action shall explore future scenarios for digitisation in the coming decades, characterising drivers and barriers which are likely to accelerate or hamper their development	<ul style="list-style-type: none"> fill the socio-economic knowledge gaps on digitisation of agriculture and rural areas, including impacts on existing and future challenges; develop the most plausible future scenarios for the development of digitisation; raise awareness among key stakeholders about digital game changers, allowing for the development of appropriate coping strategies, in particular at policy level; and improve the uptake of societal concerns in ICT-related policy and innovation, by liaising with on-going projects on the digitisation of agriculture and rural areas.
DT-RUR-12-2018 : ICT Innovation for agriculture – Digital Innovation Hubs for Agriculture	Innovation Action (IA)	2018	20 mln €	2	The topic calls for promoting Digital Innovation Hubs in agriculture. It should address the adoption of ICT-based solutions for more productive and sustainable agriculture systems. The focus is on innovative technologies which need to be customized, integrated, tested and validated not only by technology developers but also the farming community before being released on the market.	<ul style="list-style-type: none"> Attract a significant number of new users of ICT in the agricultural sector. Attract a significant number of innovative and competitive technology suppliers (start-ups and SMEs) able to supply the farming community with new solutions for improving farming operations. A critical mass of pan-European experiments that explore new application areas for ICT in agriculture at large. Increase deployment of technologies in the agriculture sector
RUR-13-2018 : Enabling the farm advisors' community to prepare farmers for the digital age	Coordination & Support Action (CSA)	2018	7 mln €	1	Proposals should aim at collecting best practice ICT applications and sharing them in a network of independent advisors. Projects are furthermore expected to develop advisors' support to novel on-farm technologies (e.g. robots, IoT technologies, AI, etc.), including related costs and benefits and the role and position of farmers in a digital environment.	<ul style="list-style-type: none"> Networking farm advisors across the EU serving a systematic delivery of knowledge and resources to support digital innovation and making advisors able and eager to spread application of digital advisory tools; Spill-over effects of digital tool infrastructures between agricultural advisors across Member States; Development of new types of advisory activities with a focus on making farmers better able to handle involvement and investments in digital technologies.
RUR-14-2018 :Digital solutions and e-tools to modernise the CAP	Innovation Action (IA)	2018	10 mln €	1	The current infrastructure governing the CAP (the Integrated Administration and Control Systems, IACS) which includes 44 different implementations across Member States, contains important amounts of detailed and valuable data. The proposal should support the development of the next generation of the IACS (the Integrated Administration and Control Systems). The proposal should ensure that appropriate and relevant data collected at the source become a reliable input for subsequent processes of payment and performance monitoring. The cross-border dimension of this pilot is essential to define a pan-EU standardised IACS. The pilot should demonstrate how cross-border information could contribute to simplifying the administrative burden by reusing (open) data and contribute to increasing the overall social, economic and environmental performance of the CAP measures for all actors, including the farmers. The project will also identify the drivers, barriers, potential vulnerabilities and legal issues for the implementation of the new system in the EU	<ul style="list-style-type: none"> evaluate the reduction of the socio-economic costs and barriers for a wide range of stakeholders involved in the implementation of the CAP; improve the potential of IACS for monitoring, analyses and control, by incentivising administrations to share part of their national land parcel information with EU bodies, academia and research institutes; achieve a higher level of interoperability of systems and standardisation of (meta-)data, allowing innovative ways to use and combine agri-environmental data; achieve user acceptance validation addressing privacy, security, vulnerability, liability, identification of user needs.
RUR-15-2018/2019 : Thematic networks compiling knowledge ready for practice	Coordination & Support Action (CSA)	2018	10 mln €	5 (2018) 5 (2019)	Despite the continued funding of scientific projects, innovative ideas and methods from practice are not captured and spread, while also research findings are often not integrated into agricultural and forestry practice. It is essential to close the research and innovation divide and to act at EU level. The activities of thematic networks focus on summarising, sharing and presenting, - in a language that is easy to understand and is targeted to farmers and foresters - existing best practices and research findings that are near close to being put into practice, but not sufficiently known or used by practitioners. The specific themes of the networks can be chosen in a 'bottom-up' way and must focus on the most urgent needs of farmers and foresters. The result of the project should be an extensive range of appealing end-user material. This information should be easily to access and understand.	<p>Activities must contribute to the collection and distribution of easily accessible practice-oriented knowledge on the thematic area chosen, including delivering as many as possible "practice abstracts" in the common EIP-AGRI format. The aim is to:</p> <ul style="list-style-type: none"> conserve the practical knowledge for the long term - beyond the project period - using the main trusted dissemination channels which farmers/foresters consult most often, and also serve education and training purposes; increase the flow of practical information between farmers/foresters in Europe in a geographically balanced way, creating spill-overs and taking account of the differences between territories; achieve greater user acceptance of collected solutions and a more intensive dissemination of existing knowledge.
SFS-31-2018/2019 : ERANETs in agri-food Subtopic A-2019 : ICT-Enabled Agri-Food Systems	COFUND	2019	6 mln €	1	Today, despite increased information demand from consumers and food chain players alike, Europe's food businesses and farmers are slow at adopting digital technologies. Relevant technologies may include Internet of Things, Artificial Intelligence, Big Data technologies, remote and localised sensing. When relevant, projects should consider synergies with the Thematic Smart Specialisation Platform on Agri-food (TSSP-AF) and related interregional partnerships under the Research and Innovation Strategies for Smart Specialisation (RIS3).	<ul style="list-style-type: none"> Improve coordination between national and EU funding and ensure better use of resources in the priority research areas above [A, B, C]; Reduce the environmental footprint of the sector by reducing inputs and waste [A, B]; Realise the potential of ICT and digital technologies to share data throughout the food value chain, thereby driving greater sustainability, offering new business models and helping to empower consumers to make smarter, more sustainable, healthier and more personal food and dietary choices, taking into account data regarding environmental impact, origin, nutrition, safety, integrity, etc., underpinned by the concept of transparency [A]; Integrate effectively with major digital platforms from food actors, ICT solution providers and consumers [A];
SFS-35-2019 : Sustainable Intensification in Africa Subtopic A-2019 : African Farming Systems, sustainable intensification pathways	Research & Innovation Action (RIA)	2019	7,5 mln €	1	The proposed research should address the improvement of agricultural practices by tackling land and water management (including land degradation where appropriate) and sustainable soil management (including its quality and nutrients uptake) for sustainable intensification. The importance of traditional agricultural practices like grazing methods, livestock, crops and legumes should be duly reflected. Emphasis should be given to farming systems that support restoration of land, increase land productivity and/or bring land back into production.	<ul style="list-style-type: none"> Boost the impact of Africa-EU joint research at local level by addressing the entire value-chain, strengthening capacity-building and focusing on demonstration projects and pilot actions to bring research and innovation results to the users (sub-topic A); Provide simple tools and solutions for preserving and increasing natural resources of specific agro-system (sub-topic A); Identification of methods and tools for improving soil condition for water retention, increase in nutrient and organic matter (sub-topic A); Proposed methods and solutions for different farming systems should include potential of transferability and scale at which solution can be implemented (sub-topic A). Solutions and tools for increasing farm income within sustainability of long term farming (sub-topic A);