

# **2<sup>nd</sup> Joint Call for Proposals**

**ERA-NET Cofund on Sustainable Crop Production** 

- SusCrop -



# Deadline for submission of pre-proposals:

April 9, 2020, 13:00 h (CEST)

# Deadline for submission of full proposals:

September 10, 2020, 13:00 h (CEST)

# Call Announcement 2<sup>nd</sup> Transnational Call for Proposals (Guidelines for Applicants)

published on February 10, 2020





# Content

ANNEX 2	Plan for Communication, Dissemination and Exploitation of the results 25				
ANNEX 1	Data Management Plan				
14. Quick gu	ide "How to apply to the SusCrop Call"21				
13. Project st	art and follow-up of the projects19				
12. Conflict o	f Interest19				
11. Confident	tiality19				
10. Open Acc	ess19				
9. Communication, dissemination and exploitation of the results 18					
8. Data management issues 18					
7. Life Cycle Assessment (LCA) 18					
6. Ethical, Legal and Social Aspects (ELSA)17					
5. Ethical asp	ects17				
	nation, communication & further assistance for applicants17				
4.3.3 Se	lection16				
4.3.2 Ev	aluation				
4.3.1 Su	bmission				
4.3. Full p	roposal stage				
4.2.3 Se	lection				
4.2.2 Ev	aluation12				
	bmission				
	roposal stage12				
	cation scheme11				
_	n procedure11				
_	3.2. Project funding				
-	3.1. Responsibility of the project coordinator				
	3. SusCrop eligibility requirementsg				
2.2. Budge	et & funding modalities8				
2.1. Projec	ct budgets and project duration8				
2. Project are	. Project areas and scope6				
ı. Background4					
Summary	3				



#### Summary

This document announces the second transnational Call in the field of sustainable crop production, within the framework of the ERA-NET-Cofund on Sustainable Crop Production (SusCrop). The main purpose of the Call is to improve the sustainability and resilience of crop production within the European Research Area (ERA) by supporting transnational research projects on this topic. Joint projects must have a minimum of three independent eligible partners applying for funding from different SusCrop partner countries. A partner is defined eligible, if the applying entity is legally eligible to receive funding by a SusCrop funding agency according to the relevant national/regional funding regulations. The Call will consist of two stages:

- 1) A submission deadline for pre-proposals of April 9, 2020 (13:00 CEST),
- 2) A submission deadline for full proposals of **September 10, 2020 (13:00 CEST)**.

Projects should aim to start from March 2021, depending on individual grant negotiations with the relevant national funding organisation(s). A harmonised start date for each project agreed among all partners within a given consortium is highly recommended. Table 1 outlines the Call timeline.

Table 1 Indicative Call timeline

January 21, 2020	Call Pre-Announcement
February 10, 2020	Call Announcement and launch
April 9, 2020 (13:00 CEST)	Deadline for submission of pre-proposals
Mid-June 2020	Letters to applicants / invitation to submit full proposal
September10, 2020 (13:00 CEST)	Deadline for submission of full proposals  (only for projects that pass the pre-proposal phase)
December 2020	Communication of the evaluation outcome to the applicants and start of grant negotiations
Between March - July 2021	Initiation of funded projects

SusCrop Call Office and technical helpdesk for the submission system

Project Management Jülich, 52425 Jülich Germany

ptj-suscrop@fz-juelich.de

SusCrop Submission Webpage: <a href="https://submission.suscrop.eu/">https://submission.suscrop.eu/</a>
SusCrop webpage: <a href="https://www.suscrop.eu">https://www.suscrop.eu</a>



## 1. Background

One of the Grand Societal Challenges of the 21<sup>st</sup> century is to ensure food and nutrient security for a growing population under climate change and pressure on natural resources.

Thus, sustainable crop production needs to be secured and enhanced. Current food production methods utilise excess energy, water, pesticides and chemicals. New ways of sustainable crop production are necessary to increase productivity, reduce the amount of chemicals and CO<sub>2</sub> emissions and/or improve the quality of the crops. This will be crucial to maintain access to affordable safe and nutritious food for a healthy life, and to serve the increasing demand for industrially used biomass whilst keeping and improving a healthy environment, natural habitats and increasing biodiversity. Indeed all aspects of sustainability need to be covered: environmental, economic, social and cultural.

Modern crop production must be addressed by taking into account the whole food value chain, crop diversity and resilience, resource use efficiency, nutrient recycling, ecosystem services, limiting negative environmental impacts, integrated pest management, reducing and re-using waste and achieving food and nutritional security. To meet this challenge, the EU Member States established *inter alia* the Joint Programming Initiative on Agriculture, Food Security and Climate Change: FACCE-JPI (<a href="https://www.faccejpi.com/">https://www.faccejpi.com/</a>). FACCE-JPI developed a strategic research agenda focusing on five core research themes. In this context the ERA-NET Co-fund activity 'SusCrop' was initiated to address the core research Theme 2 "Environmentally sustainable intensification of agricultural systems".

SusCrop brings together owners and managers of national and regional R&D&I programmes of EU Member States, EU-associated States and Third countries with significant experience in research funding and coordination.

This SusCrop joint Call aims to attract proposals focused on Sustainable Crop Production in order to tackle the societal challenges of the 21<sup>st</sup> century. To achieve this, funding provided by national and regional programmes of Member States and other countries will be combined to launch this joint Call for transnational research projects addressing sustainability and resilience of crop production.

SusCrop aims to connect partners with different, but complementary scientific and technological expertise to maximise resources and share risks, costs and skills.

# Participating funding organisations and countries

The following funding organisations will be participating in this joint Call for transnational collaborative research projects:

- Agence Nationale de la Recherche (ANR), France
- Deutsche Forschungsgemeinschaft e.V. (DFG), Germany
- 🤰 Türkiye Bilimsel ve Teknolojik Araştırma Kurumu (TUBITAK), Turkey
- Sihtasutus Eesti Teadusagentuur (ETAg), Estonia
- The Secretary of State for Environment, Food and Rural Affairs (DEFRA), United Kingdom
- Narodowe Centrum Badan i Rozwoju (NCBR), Poland
- Fonds de la Recherche Scientifique FNRS (F.R.S.-FNRS), Belgium

# SusCrop – ERA-NET Cofund on Sustainable Crop Production FACCEJPI

## **ERA-NET Cofund on Sustainable Crop Production**

- Ministry of Agriculture and Forestry (MMM), Finland
- Latvijas Lauksaimniecibas un meza zinatnu akademija biedriba (LAAFS), Latvia
- Ministry of Food Agriculture and Livestock (TAGEM), Turkey
- State Research Agency (AEI), Spain
- Centro para el Desarrollo Tecnológico Industrial, E.P.E. (CDTI), Spain
- Maaeluministeerium (MEM), Estonia
- Ministry of Environment and Food (MFVM), Denmark
- Unitatea Executiva pentru Finantarea Invatamantului Superior, a Cercetarii, Dezvoltarii si Inovarii (UEFISCDI), Romania
- Government of Flanders, Flanders Innovation and Entrepreneurship (VLAIO), Belgium



# 2. Project areas and scope

Following the Co-funded Call in 2018 (first call), the aim of this second call is to support scientifically excellent transnational research, development and innovation projects that contribute to the improvement of sustainability (environmental, economic and societal) and resilience of crop production.

Applicants will have to explain how the expected project results will be relevant to improved crop production under the changing climate and/or to climate change mitigation. In addition, the second transnational call of SusCrop puts greater emphasis on how projects might contribute to food and nutritional security in the light of climate change.

Crops can be in the range from staple crops to niche and marginal crops.

The submitted proposals must be **multidisciplinary** and should address **at least one** of the following topics:

- Enhancement of new and/or predictive breeding technologies and the development of new genotypes leading to new phenotypes towards the release of improved crop varieties that are capable to adapt to future changes in environmental and climatic conditions. Projects could also target improvement of variety selection processes to support agroecological practices.
- 2. Development and exploitation of integrated pest and crop management methods and practices. This includes, for example, basic and translational research leading to practical on-farm applications and/or the development of novel detection systems for integrated pest and crop management.
- 3. Improvement of resource-use efficiency of cropping systems by agroecological approaches to increase the efficiency of nutrient, water and energy utilisation. This could include the use of improved crops.
- 4. Investigations on agricultural crops as part of an ecosystem. Studies must have a clear focus on interactions between plants and other organisms leading to practices that support more sustainable agriculture.

The Call is open for both **basic** and **applied** research.

This includes research on basic biological processes relevant for crop improvement and/or industrial research and development actions.

Regarding all call topics, applying research consortia should clearly state how their project aims will be relevant and/or contribute to the UN Sustainable Development Goals (<a href="http://www.un.org/sustainabledevelopment/sustainable-development-goals/">http://www.un.org/sustainabledevelopment/sustainable-development-goals/</a>) including the sustainability and resilience of crops or cropping systems. The statement must also express in how far the project might contribute to food and nutritional security in the light of climate change. There will be a dedicated section in the pre-proposal and full proposal template for this statement.

→ Please carefully check the national/regional funding regulations (under Call Documents on <a href="https://submission.suscrop.eu/">https://submission.suscrop.eu/</a>) because some of the topics described and types of research may not be suitable/eligible for all funding organisations.



Funding will be provided for scientifically and technologically excellent projects managed by universities, other research organisations and companies from SusCrop partner countries. Funding will follow the *nationality principle* meaning each participating national or regional funding agency will fund its respective national/regional research partners in a particular project consortium.

Research project coordinators and their partners must follow the corresponding national/regional funding regulations and limitations which can be downloaded from the Call Documents in the submission portal (<a href="https://submission.suscrop.eu/">https://submission.suscrop.eu/</a>).

In addition, applying research consortia are encouraged to interact with and/or include partners of the private sector (e.g. SMEs), stakeholders and/or end-users (e.g. farmers) while preparing the proposal and/or carrying out the project. Where possible SMEs and other stakeholders should be encouraged to participate in the consortia to enhance impact, facilitate knowledge exchange and uptake of results to deliver measurable benefits to Sustainable Crop Production in Europe. However, the inclusion and support of any type of stakeholder as an active partner in the research consortia depends on the national/regional funding regulations defined by the Call **Documents** the funding organisation (see in submission system https://submission.suscrop.eu/).

Further, projects are required to consider the following principles:

- All project partners should contribute to, and benefit from, equitable and balanced cooperation.
- Results of collaborative projects must be shared within the research consortium through a controlled process that adequately protects and equitably allocates intellectual property used in, and generated during, joint research and development.
- Each **full proposal** must include a Data Management (DM) Plan (max. two A4-pages) to ensure the availability of data generated by the research proposed. Applicants are encouraged (but not obliged) to utilise available DM services. Further information on the development and preparation of a data management plan is provided in Annex 1 of this document.
- Each **pre-proposal** must allocate an appropriate budget for communication, dissemination and exploitation of the results, whereas each **full proposal** must also include a plan for communication, dissemination and exploitation of the results (max. two A4-pages) and an appropriate budget for those activities. General information on the development and preparation of a plan for communication, dissemination and exploitation of the results are provided in Annex 2 of this document. Applicants are also advised to take into consideration the guidelines on "Communicating EU Research & Innovation" by the European Commission (download from <a href="http://ec.europa.eu/research/participants/data/ref/h2020/other/gm/h2020-guide-comm\_en.pdf">http://ec.europa.eu/research/participants/data/ref/h2020/other/gm/h2020-guide-comm\_en.pdf</a>).

Exploitation of the project results can aim at different target groups, support policymakers, and be used in industry and/or education etc., as appropriate, particularly from applied research proposals.



#### 2.1. Project budgets and project duration

The project duration must not exceed 3 years. Project budgets must convincingly allow the achievement of the project goals and must not exceed national or regional funding limits for each partner.

#### 2.2. Budget & funding modalities

Funding of project partners is provided by the national or regional funding organisations according to the *national/regional funding regulations* (under *Call Documents* on <a href="https://submission.suscrop.eu/">https://submission.suscrop.eu/</a>). Note that national/regional budgets differ, which limits funding possibilities for lower ranked proposals. Funding is granted according to national or regional regulations (see Call Documents at <a href="https://submission.suscrop.eu/">https://submission.suscrop.eu/</a>).

Table 2 Available funding

Country/Region		Funding Organisation	Available Funding (€M)
		Fonds National de la Recherche Scientifique (F.R.SFNRS)	0.20
Belgium		Government of Flanders - Flanders Innovation and Entrepreneurship (VLAIO)	1.00
Denmark		Ministry of Environment and Food (MFVM)	0.50
Estonia		Sihtasutus Eesti Teadusagentuur (ETAg)	0.10
Estonia		Maaeluministeerium (MEM)	0.10
Finland		Ministry of Agriculture and Forestry (MMM)	0.30
France		Agence Nationale de la Recherche (ANR)	1.00*
Germany		Deutsche Forschungsgemeinschaft (DFG)	1.00
Latvia		Latvijas Lauksaimniecibas un meza zinatnu akademija biedriba (LAAFS)	0.03
Poland		Narodowe Centrum Badan i Rozwoju (NCBR)	0.60
Romania		Unitatea Executiva pentru Finantarea Invatamantului Superior, a Cercetarii, Dezvoltarii si Inovarii (UEFISCDI)	0.50*



	FACC		
Spain	i <b>i</b> i	Ministerio de Economia Industria y Competitividad (MINECO) a través de la Agencia Estatal de Investigación	0.40
		Centro para el Desarrollo Tecnológico Industrial (CDTI)	0.50
Turkey	C*	Türkiye Bilimsel ve Teknolojik Araştırma Kurumu (TUBITAK)	0.50
		Ministry of Food Agriculture and Livestock (TAGEM)	0.20
United Kingdom		The Secretary of State for Environment, Food and Rural Affairs (DEFRA)	0.36**

<sup>\*</sup>The contributions from ANR and UEFISCDI to the Call are preliminary. For further information, please contact their national contact points.

# 3. SusCrop eligibility requirements

SusCrop has developed formal criteria that are applied in the eligibility check after pre- and full proposal submission. These criteria have been agreed on by all participating national/regional funding organisations (the SusCrop 2<sup>nd</sup> Call Steering Committee). Only proposals, which meet **all** eligibility criteria, will be considered for evaluation.

National/regional eligibility criteria are listed in the *national/regional funding regulations* (under *Call Documents* on <a href="https://submission.suscrop.eu/">https://submission.suscrop.eu/</a>). This also includes that applications must fit to the specific remit of the respective national/regional funding organisation(s); thus, it is strongly recommended that applicants (coordinators and partners) contact their National/Regional Contact Persons (see Call Documents at <a href="https://submission.suscrop.eu/">https://submission.suscrop.eu/</a>) before submission.

In addition, all proposals must meet the following general eligibility criteria:

- Pre-proposals and full proposals must be written in English.
- Pre-proposals must be submitted by **April 9, 2020 (13:00 CEST)** via the SusCrop submission website (<a href="https://submission.suscrop.eu/">https://submission.suscrop.eu/</a>).
- Full proposals must be submitted by **September 10, 2020 (13:00 CEST)** via the SusCrop submission website (<a href="https://submission.suscrop.eu/">https://submission.suscrop.eu/</a>).
- If national/regional forms are required, these must be submitted directly to the national/regional agency by the deadlines stated in the national/regional funding regulations (see Call Documents at <a href="https://submission.suscrop.eu/">https://submission.suscrop.eu/</a>)
- The project duration must not exceed 3 years.
- Consortia must include at least three eligible partners requesting funding from at least three different SusCrop member countries who contribute funds to the Call. A maximum number of partners is not defined. However, the Steering Committee of the

<sup>\*\*</sup>The DEFRA contribution is dependent on the actual exchange rate.



call recommends that applying consortia should not include more than six partners requesting funding.

- If a proposal does not meet the minimum number of partners, or if **one or more** partners are ineligible, it will be rejected before the proposal evaluation phase.
- The requested funding budget of each partner must not exceed national or regional funding limits (please check the national/regional funding regulations (under Call Documents on <a href="https://submission.suscrop.eu/">https://submission.suscrop.eu/</a>). No single applicant, region or country can represent more than 70% of the total budget of the proposal.
- Partners from countries not participating in the Call may participate in a project at their own expense, if their contribution is important to achieve the project goals. The coordinator should take steps to ensure that sufficient funds are secured from these additional partners. Evidence for the availability of funds should be provided during the proposal submission through a "Letter of Commitment" (a template is available under Call Documents <a href="https://submission.suscrop.eu/">https://submission.suscrop.eu/</a>). The same applies for partners who are not eligible for or do not seek national/regional funding from the agencies participating in the Call. Partners participating at their own expense do not count towards the minimum number of participants.
- The coordinator of any applying consortium must be from an organisation that is eligible for funding from one of the agencies participating in the Call, i.e. an organisation that plans to participate at their own expense, without public funding provided via the SusCrop joint call, cannot act as consortium coordinator.

Within a joint proposal, each partner will be the contact person for the relevant national or regional funding agency. All research groups agree to abide by the rules and agreements of the SusCrop joint Call.

#### 3.1. Responsibility of the project coordinator

- The project coordinator will lead the consortium through the application procedure and is fully responsible for the overall project coordination.
- The project coordinator has to make sure the project complies with SusCrop requirements as detailed in this document. While all partners should resolve possible queries with their respective national or regional funder(s), the project coordinator has a responsibility to coordinate these activities in close contact with the SusCrop Call Office and the contact persons of his/her national /regional funding organisation.
- All communication with SusCrop concerning the project will be through the project coordinator. Consequently, the project coordinator has to disseminate information provided by SusCrop to all consortium partners.
- Before submission of a proposal the coordinator has to make sure that all (three or more) consortium partners requesting funding from SusCrop are eligible for support from their respective national/regional SusCrop funding organisations. For additional partners who are not eligible for support from at least one of the SusCrop funding organisations (e.g. international partners from non-SusCrop countries) the coordinator has to ensure that each of these partners possess the required financial security to fulfil



their tasks within the project via a "Letter of Commitment". This letter can be uploaded as pdf file (max. 5 MB size) only by the coordinator in a separate upload field in the submission system under <a href="https://submission.suscrop.eu/">https://submission.suscrop.eu/</a>. A template for such a letter is provided under the Call Documents.

The project coordinator is responsible for the timely submission of the pre- and full proposal via the submission system.

<u>Note</u> that the inclusion of a non-eligible partner without a letter of commitment in a proposal will result in the rejection of the entire proposal. The same applies to project partners that participate on their own expense.

#### 3.2. Project funding

All consortium partners must prove sufficient financial stability to conduct the project properly. National/regional funding organisations will check the financial status of partners from their respective country/region.

## 4. Application procedure

#### 4.1. Application scheme

The application process is two-phased (pre-proposal and full proposal phase).

Throughout the whole application process, the SusCrop Call Office (<a href="mailto:pti-suscrop@fz-juelich.de">pti-suscrop@fz-juelich.de</a>) is the central communication point for all applicants. This is also relevant for technical problems with the submission system.

Firstly, a pre-proposal must be submitted electronically via the SusCrop submission website (<a href="https://submission.suscrop.eu/">https://submission.suscrop.eu/</a>). Only the coordinators of pre-proposals that have passed the first evaluation step will then be invited to submit a full proposal. Only full proposals submitted by consortia explicitly invited by the Call Office will be accepted. In principle, the basic project data, such as project title, project acronym, project area, project duration, consortium composition, project coordinator, total requested funding, requested funding by each partner etc., provided in the pre-proposal is binding and can only be changed in the full proposal phase for exceptional reasons. Thus, changes between pre- and full proposals must be communicated without any delay to the SusCrop Call Office (<a href="ptj-suscrop@fz-juelich.de">ptj-suscrop@fz-juelich.de</a>) with detailed justifications. The Call Office will forward the information to the SusCrop 2<sup>nd</sup> Call Steering Committee. The Steering Committee will only approve changes under exceptional circumstances.

Detailed instructions for the use of the electronic submission are described in the submission system (<a href="https://submission.suscrop.eu/">https://submission.suscrop.eu/</a>).

If national/regional forms are required for individual partners, these must be submitted directly to the national/regional agency by the deadlines stated (see Call Documents at <a href="https://submission.suscrop.eu/">https://submission.suscrop.eu/</a>).



#### 4.2. Pre-proposal stage

#### 4.2.1 Submission

In the first step, pre-proposals must be submitted via the SusCrop submission system (<a href="https://submission.suscrop.eu/">https://submission.suscrop.eu/</a>) before the submission deadline of April 9, 2020, 13:00 (CEST).

Pre-proposals that are submitted correctly and within the deadline will be checked for eligibility according to the requirements defined above in section 3. **Non-eligible pre-proposals will result in rejection of the entire project.** Only proposals, which meet **all** eligibility criteria, will be considered for evaluation.

#### 4.2.2 Evaluation

Eligible pre-proposals will undergo peer-review evaluation by an international expert panel (IEP) according to the following criteria (including the sub-criteria mentioned below):

Relevance of the project to the call scope

#### Excellence

- Clarity and pertinence of the objectives,
- Soundness of the concept,
- Credibility of the proposed methodology,
- Quality and expertise of the consortium as a whole,
- Degree of novelty and innovation of the proposed research.

## Impact

Extent to which the outputs of the project will be relevant for, or contribute to, impacts on:

- Economic aspects,
- Environmental aspects,
- Potential future contribution to the UN's SDGs,
- Potential of the expected project results to contribute to climate change mitigation and/or improved crop production under the changing climate.
- Societal aspects such as Ethical, Legal and Social Aspects (ELSA),
- Transnational added value,
- Knowledge generation.

<u>Note:</u> Depending on the type of the research project, **basic** or **applied** research, the expected relevance for or contribution to impacts on the different sub-criteria may vary.

Each reviewer/expert will be independent of any funding organisation involved in this call. The SusCrop Call Office will ensure that no Conflict of Interest exists concerning the experts and the proposals evaluated. Each pre-proposal will be reviewed by up to three reviewers/experts from different institutions.



For pre-proposals evaluation scores will be awarded for each of the three main criteria by the international experts. Sub-criteria are aspects that the expert will consider in the assessment of that criterion. Each criterion will be scored out of 5 (half scores allowed) and equally weighted.

The 0-5 scoring system for each criterion indicates the following assessment:

- $m{0}$  The proposal fails to address the criterion or cannot be assessed due to missing or incomplete information.
- 1 Poor. The criterion is inadequately addressed, or there are serious inherent weaknesses.
- **2** Fair. The proposal broadly addresses the criterion, but there are significant weaknesses.
- **3** Good. The proposal addresses the criterion well, but a number of shortcomings are present.
- **4** Very Good. The proposal addresses the criterion very well, but a small number of shortcomings are present.
- **5** Excellent. The proposal successfully addresses all relevant aspects of the criterion. Any shortcomings are minor.

The scores of the three evaluators will be averaged for each criterion and agreed on. The sum of the three agreed scores for each criterion will equal the final score for each pre-proposal. All pre-proposals will be ranked according to the final scores.

#### 4.2.3 Selection

The SusCrop 2<sup>nd</sup> Call Steering Committee will select proposals for the second application step based on the ranking provided by the international panel of external reviewers (top-down). The number of selected projects for the second phase will depend on the available budget of the involved funding organisations.

The SusCrop Call Office will inform the project coordinators about the results of the first assessment step via e-mail from **Mid-June**, **2020**. Coordinators of selected pre-proposals will be invited to submit a full proposal via the SusCrop submission website (<a href="https://submission.suscrop.eu/">https://submission.suscrop.eu/</a>).

#### **Completing the pre-proposal form**

- Please fill in the pre-proposal form in the SusCrop submission system under https://submission.suscrop.eu/ and check that all fields are completed with the required information.
- The project description should:
  - provide the state-of-the-art,
  - specify the expected project impact and relevance to the call scope,
  - describe the added value for European research and Innovation,



 provide information on the project management and responsibilities of the project partners and give a short overview of the division of the collaborative project into work packages.

The space in the pre-proposal part "Project description" is limited to 20,000 characters incl. spaces (~ 5 pages DIN A4, Arial 11pt, line pitch at least 1.15). Implementation of up to three graphics/images is allowed (formats must be jpg, png or gif, max. resolution 600x600px, max. file size 2MB). No additional documents will be considered.

Note: Although it is not foreseen to include a data management plan and a plan for communication & dissemination activities during the pre-proposal stage, the consortia must consider the costs for data management and communication & dissemination activities already at the pre-proposals stage. It is not possible to add those expenses during the full proposal stage on top of the requested budget. Please also check the national/regional funding regulations, if these costs can be covered by your funding organisation.

#### 4.3. Full proposal stage

The SusCrop Call Office will invite the coordinators of the selected pre-proposals via e-mail from **Mid-June 2020.** 

#### 4.3.1 Submission

The deadline for submitting full proposals via <a href="https://submission.suscrop.eu/">https://submission.suscrop.eu/</a> is **September 10**, **2020 (13:00 CEST)**. Only full proposals submitted by consortia explicitly invited by the Call Office will be accepted.

As described in section 4.1, in principle, the basic project data, such as project title, project acronym, project area, project duration, consortium composition, project coordinator, total requested funding, requested funding by each partner etc., provided in the pre-proposal is binding and can only be changed in the full proposal phase for exceptional reasons. Thus, considered changes between pre- and full proposals **must** be communicated without any delay to the SusCrop Call Office (<a href="mailto:ptj-suscrop@fz-juelich.de">ptj-suscrop@fz-juelich.de</a>) with detailed justifications. The Call Office will forward the information to the SusCrop 2<sup>nd</sup> Call Steering Committee. The Steering Committee will only approve changes under exceptional circumstances.

Formal changes that are requested by a funding agency after the pre-proposal stage are mandatory.

#### 4.3.2 Evaluation

Full proposals that are eligible according to the above stated eligibility criteria, submitted correctly and within the deadline will undergo peer-review evaluation by an international panel of experts with relevant expertise in the scientific field(s) concerned. Each expert is independent of any funding organisation involved in this call and no Conflict of Interest will exist in relation to the proposal evaluated. Each proposal will be reviewed by at least three external reviewers/experts from different institutions. The composition of the international evaluation panel is decided by the SusCrop Call Steering Committee. Full proposals are subjected to a thorough quality assessment according to the following evaluation criteria:



#### Excellence

- Clarity and pertinence of the objectives,
- Soundness of the concept,
- Credibility of the proposed methodology,
- Quality and expertise of the consortium as a whole,
- Degree of novelty and innovation of the proposed approach.

#### Impact

Extent to which the outputs of the project will be relevant for, or contribute to, impacts on:

- Economic aspects,
- Environmental aspects,
- Potential future contribution to the UN's SDGs,
- Potential of the expected project results to contribute to climate change mitigation and/or improved crop production under the changing climate.
- Societal aspects such as Ethical, Legal and Social Aspects (ELSA),
- Transnational added value,
- Knowledge generation.

<u>Note:</u> Depending on the type of the research project, **basic** or **applied** crop research, the expected relevance for or contribution to impacts on the different sub-criteria may vary.

## Quality and efficiency of the implementation

- 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,
- Appropriateness of the management structures and procedures, including risk and innovation management,
- Complementarity of the participants and extent to which the consortium as a whole brings together the necessary expertise,
- Appropriateness of the allocation of tasks, ensuring that all participants have a valid role and adequate resources in the project to fulfil that role,
- The project budget is appropriate to the planned work and allows the achievement of the project goals.

For the full proposal stage evaluation scores will be awarded for each of the three main criteria. Sub-criteria are aspects that the expert will consider in the assessment of that criterion. Each criterion will be scored out of 5 (only full scores) and equally weighted.

The 0-5 scoring system for each criterion indicates the following assessment:

- **0** The proposal fails to address the criterion or cannot be assessed due to missing or incomplete information.
- 1 Poor. The criterion is inadequately addressed, or there are serious inherent weaknesses.



- **2** Fair. The proposal broadly addresses the criterion, but there are significant weaknesses.
- **3** Good. The proposal addresses the criterion well, but a number of shortcomings are present.
- **4** Very Good. The proposal addresses the criterion very well, but a small number of shortcomings are present.
- **5** Excellent. The proposal successfully addresses all relevant aspects of the criterion. Any shortcomings are minor.

At the end of the evaluation process, the evaluators will decide on one final ranking list of full proposals.

#### 4.3.3 Selection

Based on the ranking list and the available funding, the SusCrop Call Steering Committee will decide which projects will be recommended for funding according to national and/or regional budget availability. The final funding decisions will be made according to the national rules of the involved funders.

The coordinators of the research consortia will be simultaneously informed about funding recommendations of the Steering Committee. Evaluation summaries will be provided. The coordinators of the research consortia are responsible for forwarding all information to their consortium partners.

#### Completing the full proposal form

- Please check the information given in your full proposal and make sure it is correct.
- No changes in the core data submitted with the pre-proposal are allowed (unless requested by a funding organisation). If you feel that changes are inevitable, please contact the SusCrop Call Office under <a href="mailto:ptj-suscrop@fz-juelich.de">ptj-suscrop@fz-juelich.de</a> without delay. The Steering Committee will be informed and take a decision.
- Please follow the template and be aware that the project description should allow the evaluators to assess properly all evaluation criteria as laid down in this document.
- Your full proposal must include a separate
  - Data management plan (max. two A4 pages).
  - Communication, dissemination and exploitation plan, reaching out to the wider public (max. two A4 pages).
- The project description is limited to a maximum of ~20 DIN A4 pages (Arial 11pt, line pitch at least 1.15). Up to 1 additional DIN A4 page (Arial 11pt, line pitch at least 1.15) is foreseen for the publishable project summary. Different subsections may vary in length. Implementation of up to six graphics/images is allowed (formats must be jpg, png or gif, max. resolution 600x600px, max. file size 2MB). No additional documents will be



considered. More updated details on the full proposal submission will be published on <a href="https://submission.suscrop.eu/">https://submission.suscrop.eu/</a> when the server is re-opened for full proposal submission.

#### 4.4. Information, communication & further assistance for applicants

- Each funding organisation has nominated contact persons (see Call Documents in the submission system at <a href="https://submission.suscrop.eu/">https://submission.suscrop.eu/</a>) who will provide information about specific national or regional regulations and requirements. It is strongly recommended to contact the relevant contact persons prior to the proposal submission process. For some funding organisations this might be mandatory.
- The SusCrop Call Office is the central contact point for all official communication between the project consortium and the SusCrop Call Steering Committee. The project coordinator is the only contact person for the SusCrop Call Office in all relevant questions during the application procedure. The project coordinator must provide all relevant information to the partners (see also Section 3.1).
- For technical questions and problems with the submission system, please also contact the SusCrop Call Office at Project Management Jülich (<a href="mailto:ptj-suscrop@fz-juelich.de">ptj-suscrop@fz-juelich.de</a>).
- For additional information and support, please refer to the nominated contact person of the relevant national/regional funding organisation(s) listed under the Call Documents.

# 5. Ethical aspects

Ethics is an integral part of research activities funded by the European Union within the H2020 and ethical compliance is considered as pivotal to achieve research excellence. Therefore, all proposals must describe ethical issues raised and how they will be addressed so as to conform to National, European and International regulations. Guidance on ethics within H2020 is provided in the H2020 online manual and a guideline for self-assessment can be found here.

If any ethical issues are expected to arise during the proposed project, these must be addressed in the pre- and full proposal. Proposals may be rejected from funding on ethics grounds if they do not comply with the European and national/regional legislation.

# 6. Ethical, Legal and Social Aspects (ELSA)

Ethical, Legal and Social Aspects (ELSA) approach refer to research activities that anticipate and address ethical, legal and social aspects of emerging life scientific fields like, genetics, genomics, biotechnology and nanotechnology but also information and computer technologies. The basic principles of almost all ELSA methodologies are proximity, anticipation and interaction and interdisciplinarity<sup>1</sup>. Applicants may apply ELSA approach for studying the possible societal impact of their project in the near or distant future related to their research topics within the current call.

<sup>17</sup> 

<sup>&</sup>lt;sup>1</sup> Zwart H., Nelis A. (2009) What is ELSA genomics? Science and Society Series on convergence research. EMBO Reports 10 (6), 1-5. http://link.springer.com/article/10.1186/s40504-014-0011-x



# 7. Life Cycle Assessment (LCA)

LCA is an internationally standardised methodology (<u>ISO 14040</u>: 2006) which helps to quantify the environmental pressures related to goods and services (products), the environmental benefits, the trade-offs and areas for achieving improvements taking into account the full lifecycle of the product<sup>2</sup>.

The applicants in this SusCrop call are encouraged to use <u>LCA</u> or another internationally accepted methodology in order to assess the environmental implication and potential environmental and social benefits of products, services, processes and technologies to be developed or improved within the project.

# 8. Data management issues

Data Management (DM) is an essential component to the success of projects using systems/synthetic biology approaches and/or tools in bioinformatics. Representatives from academia, industry, funding agencies, and scholarly publishers designed and jointly endorsed a concise and measurable set of principles referred to as FAIR Data Principles<sup>3</sup> with the intention to provide a guideline for reusability of data holdings. Four foundational principles – Findability, Accessibility, Interoperability and Reusability – are a necessity of data management. The EU Commission promotes the <u>FAIR Data Management</u> approach within H2020.

Participation in this SusCrop call requires high quality DM standards to ensure the overall sustainability of crop production research and its expected outcome(s). Thus, each **full proposal** must include a two A4- pages Data Management Plan to ensure the availability of data generated by the research proposed. Applicants are encouraged (but not obliged) to utilise available DM services. The DM plan should be written according to the information in *Annex 1* of this document **only during the full proposal stage**. In case the proposed measures and activities of the DM Plan are expected to cause additional costs, **an appropriate budget must be included already during pre-proposal submission**.

## 9. Communication, dissemination and exploitation of the results

Communication and dissemination of project activities and exploitation of the results are essential part of the Responsible Research and Innovation approach. Responsible Research and Innovation means that societal actors (researchers, citizens, policy makers, business, third sector organisations, etc.) work together during the whole research and innovation process in order to better align both the process and its outcomes with the values, needs and expectations of society.

Each consortium passed into the full proposal phase has to develop and submit a two A4-pages plan for communication, dissemination and exploitation of the results. Further guidance to write this plan is described in *Annex 2* of this document.

In addition, general guidance on communication planning for projects within the H2020 programme is available under:

http://ec.europa.eu/research/participants/data/ref/h2020/other/gm/h2020-guide-comm\_en.pdf.

<sup>&</sup>lt;sup>2</sup> http://ec.europa.eu/environment/ipp/lca.htm

http://www.nature.com/articles/sdata201618



Proper reference must be given to **FACCE-JPI** and **SusCrop** in all related publications, exhibitions, lectures and press information.

## 10. Open Access

Correspondingly with the EU Commissions <u>Guidelines on Open Access to Scientific Publications</u> <u>and Research Data in Horizon 2020</u> where possible, research data and scientific publication generated with SusCrop funding should be made available in an open access repository whenever feasible, but taking account *inter alia* of European and national data protection rules.

Further to ensuring adherence with the principles of open access all beneficiaries of SusCrop funding will be encouraged to:

- As soon as possible and at the latest on publication, deposit a machine-readable electronic copy of the published version or final peer-reviewed manuscript accepted for publication in a repository for scientific publications.
- Aim to deposit at the same time the research data needed to validate the results presented in the deposited scientific publication(s).
- Ensure open access to the deposited publication via the repository at the latest:
  - on publication, if an electronic version is available for free via the publisher,
  - or
  - within six months of publication (twelve months for publications in the social sciences and humanities) in any other case

# 11. Confidentiality

SusCrop ensures complete confidentiality to applicants, i.e., the proposal will only be read by the national or regional funding organisations involved and by the international experts, and be handled by the SusCrop Call Office. All persons in charge will have signed a Confidentiality Agreement and/or a Joint Controller Agreement before they get access to the proposals.

#### 12. Conflict of Interest

In order to exclude individual conflicts of interest, the applicants are encouraged to provide a maximum of two persons (e.g. direct competitors), who should be excluded from reviewing the proposal. The full name(s), affiliation (research institution, organisation) and reason for refusal of the expert(s) has to be provided during proposal submission. The information will be treated confidential.

# 13. Project start and follow-up of the projects

All project partners are required to sign a Consortium Agreement (CA) before the official project start or in any case no later than three months after the project start. On request, the CA must be made available to the national or regional funding organisation(s), together with any other



information required by national or regional regulations. The <u>DESCA model</u>, recommended by the European Commission can be used, but it is not an obligation.

The follow up of each project is conducted by each of the national or regional funding organisations involved, according to national or regional regulations and to individual contracts between applicants and agencies/ministries.

In addition, project coordinators are required to provide both a **mid-term and final report** as well as a non-confidential **summary of the outcomes** of their project for publication via the website (<a href="https://www.suscrop.eu">https://www.suscrop.eu</a>) and the SusCrop newsletter. Hereby, SusCrop wants to reach out to the wider research community and interested public, therefore a summary of research results is needed that can be understood by a wide audience. SusCrop will provide a template for this summary as well as for the mid-term and final reports.

The coordinators of the funded projects are also obliged to present their projects at three seminars to the ERA-NET SusCrop partners, other interested parties and relevant stakeholders:

- an initial research project seminar (kick-off meeting), explaining objectives and expected results;
- a midterm seminar (mid-term meeting), presenting the mid-term reports including project status, preliminary results and future work;
- a final seminar (end term meeting) presenting the final reports including research results and assessment of possible impact on sustainable crop production and future actions required.

The three seminars will be organised by SusCrop. The costs for attending the status seminars should be covered by the allocated project budget. The objective of the status seminars is the monitoring of the projects funded through SusCrop as well as providing networking and future collaboration opportunities. Please note that the mid-term seminars are confidential and the final seminars non-confidential – presentations from final seminars will be disseminated and shared outside SusCrop.

#### SusCrop Call Office and technical helpdesk for the submission system

Project Management Jülich, 52425 Jülich
Germany
ptj-suscrop@fz-juelich.de

SusCrop Submission Webpage: <a href="https://submission.suscrop.eu/">https://submission.suscrop.eu/</a>
SusCrop Webpage: <a href="https://www.suscrop.eu/">https://submission.suscrop.eu/</a>



#### 14. Quick guide "How to apply to the SusCrop Call"

#### Pre-proposal phase

Check the call scope and project topic areas
Check the general eligibility criteria and principles of the 2nd call!
Build a consortium
Check the National Regulations of all consortium partners!
Check the application procedure
• contact the National Contact Points
• contact SusCrop Call Office
Complete your pre-proposal according to the requirements in the Call
Announcement and National/Regional Regulations
• Take into account the SusCrop requirements regarding:

- data management concept (dedicate appropriate ressorces for data management)
- communication of project results (dedicate appropriate resources for activities regarding communication, dissemination and exploitation of the results)
- The project description should not exceed max. 5 pages

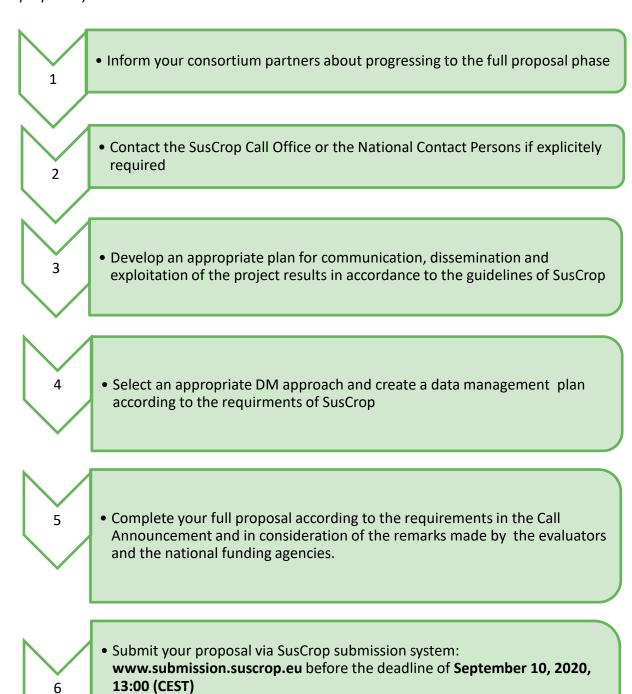
7

- Submit your pre-proposal via SusCrop submission system: www.submission.suscrop.eu before the deadline of April 9, 2020, 13:00 (CEST)
- it is possible to submit your proposal several times old versions will be replaced electronically by the newest version until the deadline



#### **Full-proposal phase**

(Only relevant for consortia explicitly invited by the SusCrop Call Office to submit full proposals)



• it is possible to submit your proposal several times - old versions will be

replaced by new versions until the deadline



# **ANNEX 1** Data Management Plan

Data management is an essential component to the success of projects using systems/synthetic biology approaches and/or tools in bioinformatics. Representatives from academia, industry, funding agencies, and scholarly publishers designed and jointly endorsed a concise and measurable set of principles referred to as FAIR Data Principles<sup>4</sup> with the intention to provide a guideline for reusability of data holdings. Four foundational principles – Findability, Accessibility, Interoperability and Reusability— are a necessity of data management. The EC recently published Guidelines on FAIR Data Management in Horizon 2020.

Fulfilling the FAIR principles needs the use of software platforms that enable capturing, cataloguing, and annotating data, associated with well documented SOPs, and supports interlinking data from specialized, as well as local collections. Moreover, in a systems approach, well annotated models (including parameters) must be catalogued and interlinked with relevant data. Each project should have one single starting point starting at which one can find out everything about the project.

Participation in this call requires fulfilling the FAIR principles, including the use of a cataloguing platform as described above. Therefore research data and non-data assets like algorithms, tools and workflows or metadata produced in the projects funded under this call must be: (i) machine-readable (ii) citable and (iii) must be published in a registered repository and (iv) interlinked with other project outcomes in a cataloguing platform. Privacy sensitive data that cannot be published needs to be catalogued, such that the creator of the data can be easily found for possible questions and collaboration. Data that is subject to Intellectual Property for Patents needs to be recorded and published in due course.

The repository must be registered in as a "trustworthy repository" in (i) BioSharing or (ii) re3data (Registry for Research Data Repositories). For this, resources of existing community knowledge and data management platforms in Europe shall be preferably used.

No section for data management is foreseen in the pre-proposal template.

However, the projects must consider already the cost of data management in their proposals. The help given to the applicants should enable them to (i) properly estimate what cost will be incurred by performing FAIR data management, and (ii) provide a section in the template for full proposals.

Building the data management plan should be based on existing check lists, such as the FAIRDOM checklist document.

The checklist addresses: (i) responsibilities; (ii) types of study, data and models; (iii) volume and life cycle of the data; (iv) data and model processing and access policies; and finally (v) documentation and metadata.

Answering the questions in the checklist, applicants will identify and resolve key questions about their data, models, SOPs and associated metadata. The data management plan will outline how data flows and the requirements on data, metadata, storage and data transfer throughout the project and beyond the project.

<sup>23</sup> 

# SusCrop – ERA-NET Cofund on Sustainable Crop Production FACCEJPI

#### **ERA-NET Cofund on Sustainable Crop Production**

The costs associated to the data management plan (e.g. travel expenditures of staff to data management training; salary costs of staff curators; costs of servers, storage, archiving and backup) must be derived from this and clearly presented.

Guiding questions include the following:

Generate and Store

Who will generate the data/model/SOP?

Who will receive the data/model/SOP?

What does the user need from the generator?

Where will you store data/model/SOP?

How much storage capacity will you need short term?

How will you transfer it?

How much will you keep for longer? Who is responsible for this step?

How will the data be made available for processing?

#### Curate

Who will curate the data/model/SOP?
How will the data/model/SOP be interlinked?
How is data tracked through processes?
How are versions of models and SOPs tracked?

#### Access

Are you allowed to share data?

Where, when and how will you make the data/model/SOP available?

Which public archives will you deposit your data/model/SOPs in?

How will you make the project's data/model/SOPs available in a unified way through a one-stop single starting point starting at which one can find out everything about the project?

In the pre-proposal phase, these questions can be answered in a preliminary fashion.

While developing answers for the proposal, it will also become clear who is **responsible as a contact person**, for which parts of the data management of the project.



# ANNEX 2 Plan for Communication, Dissemination and Exploitation of the results

Communication and dissemination of project results is requested through various communication routes including scientific papers, presentations at scientific conferences, workshops, poster sessions, etc. Proper reference must be given to SusCrop and FACCE-JPI in all related publications, exhibitions, lectures and press information. Additionally, each project proposal should go beyond dissemination and envision how it will communicate and reach out to a more general public.

Each project has to submit a one A4 page plan for communication, dissemination and exploitation of results in the full proposal stage, specifying how the planned activities, including dissemination, communication and stakeholder interaction, will contribute to the impact of the project.

To fulfill the plan for communication, dissemination and exploitation of results, **projects must dedicate appropriate resources for those activities already during the pre-proposal stage.**For a well-elaborated communication and dissemination strategy, applicants also are advised to take into consideration the EC guidelines on "Communicating EU research and innovation guidance for project participants" and read the guidelines below on communication with a wider public.

# Communication and Dissemination – why is this important in planning, developing, delivering and evaluating a successful research project?

**Communication** is here defined as the work you do and the effort you put into informing and engaging with the wider public so they are aware of the issue your research is addressing, the question you are posing, the methods you are using to answer that question and the anticipated outcomes. Communication is in addition to 'dissemination', the latter being focused on the production of scientific papers, posters and presentations at closed scientific congresses, and work with specialist stakeholder groups. Please include both communication and dissemination activities in your plan.

**Communication activities** may include activities, such as development of a website and/or app, media communications programme, social media programme, videos/podcasts, infographics/project literature, creative artwork/exhibition stands, quizzes / games / serious gaming, science fairs/open houses intended for wider audiences, meetings of targeted stakeholders, training for Consortium on aspects of communication. Please consult the national annexes of your respected funding agency for potential limitations to funding certain communication activities.

There are four clear reasons **why effective communication** is an essential element of any SusCrop funded research project:



- European tax-payers are providing the funding for your research and are interested in knowing where their money goes and that they are receiving 'value for money'.
- Communicating about the relevance of your research work and its potential outcomes to society and the everyday life of citizens will help ensure that your innovations – products, knowledge and thinking – are accepted and utilised by society – not ignored, nor opposed.
- Everyone is a citizen whether President, MEP, policy-player, teacher, student, entrepreneur or industrialist who watches TV, reads the news, accesses online sources and has interests beyond their immediate network. Effective communication raises awareness of your research project and of the professionals working on it to mutual advantage, potentially laying the ground for more funding or support.
- SusCrop wishes to ensure that the projects it selects to fund make the best use they can of the 'results' each of them generate that means ensuring that as many groups in society know about the excellent work that is being conducted and their potential results so they will be taken up by decision-makers in policy, industry or science itself creating impact.

#### What is a Plan for Communication, Dissemination and Exploitation of the results?

It is a document that demonstrates that a Consortium has clearly thought through the rationale, target stakeholders, activities, timescales, budgets and measures incl. their key performance indicators of success behind the dissemination / communications activities it will implement as an integral part of its project plan.

The elements of a Communication Plan that will demonstrate clarity of thought and planning are likely to be:

- Evidence that the whole Consortium are 'on board' with the plan and that all partners will support the actions
- Focus on purpose/objective of each selected dissemination/communication action Who is it for? What do we want to happen as a result?
- Clarity on the messages that the project wishes to communicate overall and to specific groups
- Clear understanding of what success looks like for each action
- Description of the method to be used for delivery
- Utilisation of resources and talents within the consortium
- Realistic assessment of the potential impact of each action
- Built-in time points for review and adjustment
- Appropriate focus on internal communications within the Consortium
- Appropriate utilisation of the services and channels provided by the EC

The Plan should be able to answer the following questions clearly:

- What are the objectives of our Communication Plan?
- Who are our priority audiences and why?
- When is the most appropriate time to engage with each audience and why?
- How does our Communication Plan create synergy with the rest of the project plan?

# SusCrop – ERA-NET Cofund on Sustainable Crop Production FACCEJPI

#### **ERA-NET Cofund on Sustainable Crop Production**

- How do we justify the budget allocated to each of our proposed communications actions?
- How are we splitting responsibility for the resources and actions across the Consortium?

**Exploitation of the project results** can aim at different target groups, support policymakers, and be used in industry and/or education etc., as appropriate, particularly from applied research proposals.