

Green Development and Demonstration Programme (GUDP)

Invitation of applications for The Organic Research, Development and Demonstration Programme (Organic RDD) 4

Application deadline 11 June 2018 at 12:00

Colophon

Green Development and Demonstration Programme

Invitation of applications for funding under The Organic Research, Development and Demonstration Programme (Organic RDD) 4

This invitation has been prepared by the Ministry of Environment and Food of Denmark, the GUDP secretariat and ICROFS

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Call for applications and total funding available

The board of the Green Development and Demonstration Programme (GUDP) invites applications for funding of projects in which research and development and/or demonstration is accomplished in relation to business-oriented innovation within the Danish organic food sector by means of a green conversion supporting both green sustainability and financial sustainability. Applications are also invited for projects in which research and possibly development and/or demonstration is accomplished in relation to the contribution of organic farming to the public goods.

This call covers applications for research projects, and the individual projects may apply for a total grant of 0.5 to 5 million DKK.

Overall financial frame

A total funding of up to 25 million DKK is available in 2018.

Approximately 80 percent of the funding is earmarked for projects with a business plan, cf. GUDP's principles. However, up to 20 percent of the funding may be used for projects focusing on the contribution of organic farming to the public goods (without a business plan). The final distribution of funds will depend on the quality of the applications.

Formal requirements

In order for an application to be considered for funding, the application deadline and the formal requirements described in the present call and the guidelines must be met. You can find the call, the guidelines and the application templates in GUDP's funding guide on the GUDP <u>website</u>.

Important information related to the call

Deadline for applications is Monday 11 June 2018 at 12.00

Applications must be received no later than 12 o'clock. Applications received after the deadline will <u>not</u> be considered, regardless of the time they were submitted. Please be aware that you may experience a delay from the time the application is submitted until it is received at GUDP.

Also please be aware that our servers cannot handle e-mails with files exceeding a total of 25 MB.

Information on approval and rejection

Information on approval or rejection will be given before the end of 2018 at the latest.

Application forms and guidelines

The application forms and the guidelines for filling in the application forms can be found at GUDP's <u>website</u> under "Skema og vejledning" (Forms and guidelines).

Information meetings

Information meetings are held in April 2018. You will be able to hear more about how to fill in the application forms and get the opportunity to discuss your project with the ICROFS secretariat. Check the websites of <u>ICROFS</u> and <u>GUDP</u> for further information and registration.

Discussion of project ideas

In addition, the ICROFS and the GUDP secretariats provide an opportunity to discuss project ideas; preferably based on a 1-page project outline from potential applicants. You can find a template under "Om tilskuddet -> "Kan min gode idé blive et GUDP-projekt" (in Danish) and the application material at the GUDP <u>website</u>. The project outline must be sent via e-mail to the GUDP secretariat at <u>gudp@lbst.dk</u>. A processing time of up to two weeks must be expected.

Language

The application must be written in English. However, a brief project description in Danish is required in Form A.

Submission

The application must be submitted to the GUDP secretariat by e-mail. The call guidelines describes in detail the contents of a complete application.

Acknowledgement letter confirming receipt of the application

Within a few days from receiving your application, the GUDP secretariat will send an acknowledgement letter confirming that we have received the application.

Applications may be rejected

Applications may be rejected if they do not comply with the GUDP Act and the requirements stated in this call, the associated guidelines and if the deadline has not been met.

Other grant possibilities

There are a number of grant schemes in the food sector, which gives grants for research, development, demonstration and/or market development. Applicants should consider the grant scheme that is most relevant. Lists of other grant schemes can be found on among others <u>lbst.dk</u> and <u>http://icrofs.dk/soegforskningsmidler/</u>.

For special attention

We kindly urge you to read through this call as well as the Guidelines for filling in the application material for Organic RDD 4 before preparing an application. Furthermore, we recommend you take a look at the instructions on payment of grants under GUDP, which you will find on GUDP's <u>website</u> under "Skema og vejledning" (Forms and guidelines) as well as the instructions on reimbursement of grants before you submit your application.

Purpose, background and legal framework for GUDP and ICROFS

GUDP's Act

The legal framework for grants under the Green Development and Demonstration Program (GUDP) can be found on the Danish legal aid website (<u>Retsinformation</u>) and GUDP's <u>website</u>.

The applicable rules appear (in Danish) from: Consolidation Act no. 23 of 4 January 2017 and Consolidation Act no. 1069 of 13 September 2017.

The call has been prepared in cooperation with ICROFS, since the GUDP Board under the GUDP Act shall obtain recommendation from the ICROFS board on focus areas etc. in connection with specific organic research efforts that can provide the basis for implementing development and demonstration projects in the field of organic food and farming.

The legal basis for ICROFS' call is to be found here (in Danish): <u>https://ufm.dk/lovstof/politiske-aftaler/aftale-om-fordeling-af-forskningsreserven-i-2018.pdf</u>

ICROFS' purpose

The main purpose of ICROFS is to contribute to a further development of a market driven and competitive Danish organic sector and thereby promote continued growth of the organic sector in Denmark. This includes ICROFS contributing to the coordination, management and execution of strategic and user oriented, high quality research, which can move the entire Danish organic sector towards increased sustainability, increased productivity and improved economy. All initiatives must be based on the organic philosophy and the organic principles and issues.

The research must contribute to the development of organic farming and food systems in Denmark in order to increase the potential for conversion from conventional to organic farming and promote the sustainable development of farming and food systems as a whole, taking into account economic, ethical and social issues; the research must further contribute to the development of food systems that may promote the processing, product development and distribution of organic food. The research must further contribute to the development as instruments for achieving important social objectives concerning the environment, climate, nature, animal welfare and rural development.

Background for the Call

The Danish agricultural and food industry is a knowledge intensive sector, and this is in particular the case for the organic segment. The Danish organic sector has over time shown continuously high growth rates and it is an area, where we are in a leading position internationally. This development has all along been supported by an ambitious, sector oriented, and innovative research effort. ICROFS' research will continue to support growth and development of the organic sector.

Continued innovation in all areas, supported by scientific knowledge and research, is necessary to ensure development, where increased primary production and innovative product development goes hand in hand with a strengthened credibility of the organic sector, which continuously contributes to the public goods.

Overall goals and points of direction

Research in the Organic RDD programs must support continued growth in the Danish organic sector.

- The research must be practice-oriented,
- prioritized in close collaboration with the organic sector, and
- be of high international quality.
- The research must be communicated efficiently to the end-users.
- There must be a close connection between the new knowledge and practical implementation.
- The knowledge development must support the contribution of organics to public goods.

Continued growth of the organic sector is anchored in:

- 1. INNOVATION An innovative production, that ensures a strong supply of Danish raw materials and refined commodities at competitive prices
- 2. GROWTH A continued increasing demand in Denmark and internationally
- 3. CREDIBILITY High consumer confidence incl. credibility in relation to the contribution of organics to public goods

The organic research and development must be oriented towards these points of directions.

Elaborating remarks

The research and development activities must strengthen primary production, processing, marketing and demand through solving specific knowledge needs, documenting the quality and value of products, and by suggesting visionary solutions that reaches into the future.

The research must contribute to an increased value creation and product development through innovation in the value chain, gentle processing methods adjusted to the organic philosophy, and spearhead farms working on developing new qualities and products based on even higher levels of animal welfare, robust varieties and genotypes and/or locally based processing.

To ensure a sustainable growth in the supply it is important to pursue the development of efficient and robust production systems in both biological and financial terms. A higher productivity is in an organic system particularly related to the optimization of the relationship and synergy between the biological components, the farm manager's ability to balance and optimize resource use, cost cautiousness, observation of and

insight into the biological factors important for the specific farm - whether it is knowledge on the organic support functions related to the soil fertility and performance, functional biodiversity, or regulation and control of animal diseases.

It should be noticed that optimization and improved efficiency at this level requires both very detailed knowledge on elements of the production system as well as systemic knowledge and holistic approaches. In addition, it is important to analyze and review the impact of different processing methods on the quality of the products.

The consumers' confidence in the organic sector and the contribution of organics to public goods are closely connected and in combination provide the credibility of the organic sector. The organic sector must increase its credibility through improvements in the fields of climate, nature and biodiversity, environment, the basis for cultivation, animal and human health and welfare. This must be combined with a high productivity to avoid that the organic premium counteracts the growth of the sector.

The focus of Organic RDD 4

Applications for Organic RDD 4 must contribute with concrete, practice-oriented solutions on the specific conditions and challenges in the organic systems in relation to climate and environment and in relation to continued development of high standards for animal health and welfare in organic farming.

Climate and environment

The climate profile of the organic sector is crucial to its credibility. In relation to this, it is important to increase the knowledge that contributes to issues such as higher yields, increased carbon sequestration and less emission of greenhouse gasses. At the same time, efficient utilization of resources entails a higher productivity.

The organic principles of agriculture are based on living ecological systems and cycles and on optimizing the use of the biological resources of the individual farming systems. Organic farming focuses on increasing the soil fertility and the content of organic substances, which contributes to sequestration of carbon in the soil. Limitation of the fertilization calls for good nutrient management, which is important to minimize impacts on the environment through leaching, as well as impacts on climate. At the same time, lower yields (per area unit) provide a challenge e.g. related to climate footprint per unit produced.

Thus, knowledge, which can lead to increased productivity based on optimization of the cropping system and without compromising animal welfare and environment, has a dual purpose. It can ensure a better production economy and reduce the climate footprint. Optimizing the interactions between individual segments and processes creates robust production systems in terms of both environment and climate. In relation to this, it is important to be aware of the need for specific knowledge on detailed elements and functions of a system as well as their relationship and interactions. There is a potential for a higher degree of "sharing" carbon sequestration between different types of production systems in order to strengthen the performance in the fields related to climate for the sector in general.

This call is for applications, which can provide increased knowledge and concrete solutions and/or increase the knowledge on production related and societal gains within the following areas:

- Knowledge on biological processes and functions; and ecosystem services including improved carbon sequestration in soils and landscapes, as well as support and interaction with biodiversity.
- Environmental and climate aspects in animal husbandry and the relationship with animal welfare strategies, feeding and foraging strategies and fodder production, as well as derived consequences such as nutrient leaching from outdoor areas.
- Feeding and animal housing systems, and systems for the handling of manure with reduced methane and ammonia emissions, and which in combination with biogas production from green manure crops and plant residues can increase the biogas production.
- Better documentation and communication of the specific conditions, potentials and challenges associated with climate and environmental aspects of organic farming systems.

Animal health and welfare

The livestock sector holds a large potential for increased production and productivity. Animal welfare requires specific attention as it is a significant criteria in the principles of organic agriculture as well as in relation to consumers' and society's expectation to the organic production. In organic farming, animals must have access to open air and grazing areas. Today, the majority of animals in the landscape are organic. Therefore, there is a need for knowledge that address the organic animal husbandry systems specifically.

The organic methodologies for maintaining and increasing health and welfare of organic animals must be strengthened through systems design, feeding strategies and the use of probiotics as well as through combined management strategies that implement the available knowledge at farm level. In a long-term perspective, it would be beneficial to integrate animal and plant production further to optimize the systems according to the organic principles.

There is a need for knowledge that will ensure that grazing, outdoor areas and low use of antimicrobials is continuously prioritized, also in larger-scale production and large farm units. There is also a need for knowledge that supports the development of new farming systems, typically in smaller farm units, which address alternative approaches to optimization of animal welfare, which from a market perspective can be combined with value-creation.

Finally, there is a need for documentation of a positive relationship between animal health and a low level of medicine use in the animal production.

This call is for applications, which can provide increased knowledge and concrete solutions and/or increase the knowledge on production related and societal gains within the following areas:

- Development of new innovative animal housing systems that support an even more natural life and the health of the livestock, such as more access to open areas, foraging (also for non-ruminants), and late weaning of offspring taking emission of ammonia, nitrate and greenhouse gas in to consideration.
- Management strategies for the prevention of diseases and contribution to reduced mortality (particularly of piglets, calves, poultry and fish).
- Strategies for prevention of helminths in organic laying hens, slaughter pigs and calves on outdoor areas.
- Cultivation and use of plants with probiotic and/or medicinal properties
- Better documentation and communication on animal welfare in organic farming.

Interdisciplinarity

Applications must address selected topics within the two themes. Interdisciplinary applications that includes holistic approaches and synergies between themes and sub-themes, are also welcome.

The project research should preferably be undertaken in synergy with the European research collaboration in CORE Organic (please see most recent projects <u>here</u>) and, for example, continue the international perspective.

Project ideas are formulated by the applicant

You, as the applicant, are free to select the concrete challenges and solutions in the project. Based on the framework described, you are thus to define your project idea so it contributes to the solution of essential challenges within the Danish organic food, agricultural, fishing and aquaculture industries as well as to the general goals within food, industry and the environmental policy.

Concrete results with effect

A prerequisite for obtaining grants from GUDP is that the project creates concrete results, and that these can be quantified and preferably documented in the application. The application must therefore show that the grants result in a direct benefit or a derived measurable effect. The requirements for quantification and documentation of expected financial effects does not apply to projects focusing on the contribution of organic farming to public goods.

Commercialization and business plan

Funding from GUDP is granted with the expectation that the project results will be commercialized, and as part of the project application, an individual business plan must therefore be prepared for each project. The business plan is an important part of the application. However, projects focusing on the contribution of organic farming to public goods are exempted from this requirement and do not have to prepare a business plan.

Focus on the entire value chain

GUDP focuses on the entire value chain and emphasizes that the projects include participation from different parts of the value chain, e.g. production, processing, sales and transportation. However, this does not apply to projects focusing on the contribution of organic agriculture to public goods.

Bridging the food sector

GUDP wish to support bridging, cooperation and sharing of knowledge between researchers, the industry, farmers, fishermen as well as actors from other sectors with expertise that may benefit the entire food sector.

Research and justification of project knowledge

Research must make up a significant part of the Organic RDD projects. Research should constitute a relevant tool to achieve actual development and demonstration goals thus encouraging a well-documented access to the market. GUDP prioritizes that projects co-financed by public research funds to a high degree involve and engage the industry as an active partner. Furthermore, GUDP's strategy 2015-2018 requires that knowledge institutions document their engagement in the projects by contributing with a co-financing of 10 percent of their respective shares of the project costs.

International cooperation may provide added value

It is possible to use international cooperation partners and subcontractors in cases where this may provide added value to the project. See below under 'Who can apply'.

Application material

Application forms and the guideline for filling in the application forms can be found on GUDP's <u>website</u> under "Skema og vejledning" (Form and guidelines). Enclosures sent with the application, besides the ones mentioned below, will not be taken into consideration.

An application consists of:

- Form A: Main application form
- Form B: Budget form and Gantt diagram
- Form C: Participant form
- Form D: Additional business plan
- Form E: Description of project research
- CVs for project manager and relevant key persons
- Up to 4 pages of enclosures e.g. illustrations, technical drawings or supplementary calculations of the project effects.

Who can apply for grants?

The target group for the GUDP programme includes the following actors from the food industry:

- Private companies
- Producers
- Entrepreneurs
- GTS Advanced Technology Groups
- Research institutions

Grant applications may be submitted to GUDP by company registered persons, companies, trade associations, associations/unions, self-governing institutions and public research institutions which are registered in the Danish Central Business Register ("Det Centrale Virksomhedsregister – \underline{CVR} ").

In relation to grants, Advanced Technology Groups (GTS), trade/industry associations, associations and self-governing institutions are considered as private companies. Grants are not given to foreign research institutions or companies, but they may, however, participate in a project acting as external advisors.

Grants are provided for?

You may apply for grants to research projects including development and demonstration. The project must result in green as well as financially viable sustainability effects. GUDP provides grants for the development of new:

- Technologies
- Tools
- Production systems
- Analytical methods
- Processes
- Products
- Management and logistics solutions

Grants are not provided for?

GUDP does not provide grants for the following activities:

- Development of innovation competences
- Educational and course activities and similar
- Marketing and test marketing
- Collective generic campaigns
- Special innovation activities (borrowing staff)
- Pure research projects
- Pure investment projects
- Participants without a Danish company registration number (a CVR number)

Organic conditions

Grants are only given to projects if the applied methods are compatible with the organic principles¹. Project activities are expected to be accomplished according to the existing regulations² for organic farming and using experimental fields, plants, animals and other material of organic origin. In case this is not possible, this fact must be clearly indicated and accounted for in the application.

Project types

Under this call you may apply for funds to the following project types with a maximum duration period of 4 years:

- 1. Projects with research content
- 2. Projects with research content focusing on the contribution of organic agriculture to public goods

Projects with research content³

Projects with research content are projects in which one or more participants accomplish a number of interdependent and supporting activities such as:

Applied research activities as a necessary tool to achieve development and demonstration goals.

¹ <u>http://icrofs.dk/en/about-icrofs/organic-farming/</u>

² <u>http://lbst.dk/tvaergaaende/oekologi/lovstof/</u>

³ For definitions of project types etc. please see the consolidation Act, Chapter 2, § 3 here. (in Danish)

<u>Development activities</u>, including activities linked to the development of new technologies, prototypes and the accomplishment of necessary tests in real-life conditions.

<u>Demonstration activities</u>, with the purpose of disseminating knowledge on the application of research and/or development activities. This must not be confused with marketing activities. Demonstration includes scientific or technical knowledge etc. that is <u>not</u> distortive. Meaning: 1) All stakeholders can get access to the demonstrated knowledge. 2) Demonstration does not include products or services that must be bought, to make use of the demonstrated knowledge/practical solution.

Projects with research content focusing on the contribution of organic agriculture to public goods Projects with research content focusing on the contribution of organic agriculture to public goods are projects in which one or more participants accomplish a number of interdependent and supporting activities such as:

<u>Applied research activities</u> that are necessary to demonstrate the contribution of organic agriculture to public goods. The projects should illustrate the societal importance of organic farming – either by illustrating how the organic contribution to society may be increased and/or by clarifying and verifying the impact on public goods from organic food production, including synergies between the various contributions.

<u>Development activities</u>, including activities linked to the development of new technologies, prototypes and the accomplishment of necessary tests in real-life conditions.

<u>Demonstration activities</u>, with the purpose of disseminating knowledge on the application of research and/or development activities. This must not be confused with marketing activities. Demonstration includes scientific or technical knowledge etc. that is <u>not</u> distortive. Meaning: 1) All stakeholders can get access to the demonstrated knowledge. 2) Demonstration does not include products or services that must be bought, to make use of the demonstrated knowledge/ practical solution.

Co-financing and commercial issues

Active participation and co-financing

GUDP intends to further cooperation across actors and sectors to strengthen dissemination of knowledge. Therefore, GUDP emphasizes active and financial participation from trade and industry and the knowledge institutions.

GUDP requires that knowledge institutions document their project engagement by contributing with a cofinancing of 10 percent of their respective share of the project costs.

Subsidy rates

EU legislation on state subsidies sets the overall frame for the subsidy rates. It is important to use the correct rates as too much subsidy must be paid back with interest. The maximum subsidy rate is determined on the basis of project type, activity type and company size (see table 1):

Allowable expenses and costs

Expenditure items that are eligible for funding are described in the application guidelines under Form B.

Specifically for horticulture

Please notice that gardeners and horticutural companies, who are members of producer organizations receiving funds for research and development activities, are <u>not</u> eligible for GUDP funding. Please see the Danish version of the call for full details.

Tabel 1. Maximum subsidy rates for GUDP projects

Company size	Research and knowledge dissemination organizations*	Small companies		Medium-sized companies		Large companies ^{**}			
Project type		Individual	Coope- ration***	Individual	Coope- ration ^{***}	Individual	Coope- ration***		
Activity type									
Applied research	90 pct.	70 pct.	80 pct.	60 pct.	75 pct.	50 pct.	65 pct.		
Development	90 pct.	45 pct.	60 pct.	35 pct.	50 pct.	25 pct.	40 pct.		
Demonstration	70 pct.	70 pct.	70 pct.	70 pct.	70 pct.	70 pct.	70 pct.		

* Trade organizations and the like as well as private research and knowledge dissemination organizations are regarded as large companies in connection with the determination of the maximum subsidy rates. An exception can be made to this rule if documentation is presented that the institution (the entire organization or institution) fulfills the EU Commission's definition of small or medium-sized companies.

** Regarding large companies the collaboration project must include a small company or a research institution. If a research institution and a large company enter into a collaboration project then the research institution should have at least 10 per cent of the total project budget.

*** In connection with collaboration projects no individual company must account for more than 70 pct. of the total project budget. Project results must be widely disseminated via conferences, publications, open access archives, free software or open source software. However, this does not apply to confidential information.

Special focus area

Focus area within the contribution of organic agriculture to public goods

Up to 20 per cent of the funding of this call may be awarded to projects focusing on the contribution of organic agriculture to public goods⁴,⁵ within the focus of Organic RDD 4: 'Climate and Environment' and 'Animal Health and Welfare' as described above.

The objective of the special focus area is to increase knowledge that can make a better basis for decision about using organic agriculture as a societal tool, either by illustrating how the organic contribution to society may be increased and/or by clarifying and verifying the impact on public goods from organic food production, including synergies between the various contributions. The effort should through research and development contribute to strengthening the societal effects and document them further.

These particular project applications do not need to prepare a business plan. The projects should illustrate the contribution of organic agriculture to public goods – either by illustrating how the organic contribution to society may be increased and/or by clarifying and verifying the impact on public goods from organic food production, including synergies between the various contributions.

Business plan

As part of the project application, an individual business plan should be prepared for each project result entailing commercial potential and purpose. The business plan should provide an overview of the business model, organization and economy of the planned product(s). The contents of the business plan should be based on data and refer to relevant sources. It is important to substantiate the plan by means of data describing e.g. market size and growth rates.

⁴ <u>http://icrofs.dk/fileadmin/icrofs/Diverse_materialer_til_download/Vidensynte_WEB_2015_Fuld_laengde_400_sider.pdf</u>

⁵ <u>http://icrofs.dk/fileadmin/user_upload/Knowledge_synthesis_-_short_edition.pdf</u>

Projects focusing on the contribution of organic agriculture to public goods do not need to prepare business plans.

Communication

Communication plan

As a part of the project description, the applicant must make a communication plan for the project. The plan needs to address who will benefit from the project idea and the results of the project as well as how the project will communicate and share knowledge with the relevant target groups. See also prioritization criteria 6.

Project descriptions on ICROFS' website

ICROFS wishes to make project descriptions of the projects that have been approved for grants. The individual project descriptions must contain descriptions of the projects, if possible quotes for press releases and photos from the project. The project description will be published on ICROFS' website just as it will be used in connection with media coverage of the project in the daily press. No confidential information from the projects will be published.⁶.

Examples of project descriptions can be seen at GUDP's <u>website</u> (in Danish only) and on ICROFS' <u>website</u>. Moreover, please see below under publication.

Progress reports on GUDP projects

GUDP and ICROFS will follow all launched projects to support the realization of the results. ICROFS can furthermore ask to be an observer in the project steering group or in an advisory group for a group of related projects.

In addition, GUDP and ICROFS will monitor the programmes through the yearly project reports on progress and results, as well as the final report, which must be completed no later than 3 months after the project ends. ICROFS will provide instructions directly to the project leaders.

Prioritization of applications

GUDP will prioritize projects focusing on both green sustainability and economical effects in the Danish food industry. Furthermore, GUDP emphasizes that the projects are novel and relevant and that they are able to create growth and employment to the benefit of the Danish food industry and that several parts of the value chain participate in the project.

Project type 1:

Prioritization of projects with research content and a business plan

The application will be evaluated according to the following 6 prioritization criteria. Three criteria are concerned with economic sustainability, two criteria are concerned with green sustainability and the last criterion is about dissemination and user involvement. An elaboration of the criteria is provided below.

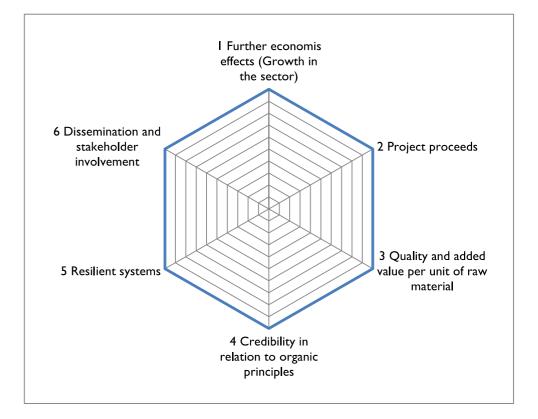
Each project will be evaluated as a whole, i.e. the total weighting of the various parameters relevant to the actual project is considered. The applicant should aim to ensure that focus and improvement in one area does not – as a consequence – impair another area correspondingly.

All applications should emphasize green sustainability as well as economic sustainability; but not necessarily within all prioritization criteria.

The project description for project type 1 must clearly respond to the following questions in relation to one or more of the project focus areas and the relevant fields of the application must be filled in:

⁶ The assessment of confidential information will be based on the current rules of administration (cf. the Danish Act on Public Administration)

- Which barriers/development potential within the organic sector is the project likely to overcome/support, and how will this contribute to market-based growth?
- Expected results of importance to the sector, and who are the primary target groups?
- How will the project ensure that project results are implemented in practice and will eventually constitute a profitable business?
- How are the contributions to society integrated in the project?



Elaboration of the 6 prioritization criteria for project type 1

1 Further economic effect

Project potential in relation to dissemination within the sector as well as the socio-economic effects yielded by the output after dissemination. Should be indicated as e.g. increased profits/yield (excluding increased costs) of e.g. 10 percent for a crop that will result in a further economic effect of 10 percent x the price x the area to which the increased yield may be distributed.

2 Project proceeds

The financial revenue generated by the project results for the grant receivers after three years. Should be indicated as the net earnings (earnings with a deduction of costs) in DKK.

3 Quality and added value per raw material unit

The added value provided by the project to a given raw material, including e.g. improved quality scaled with the dissemination/amount. Should be indicated in DKK per unit, e.g. DKK/kg – not the sales price. Dissemination opportunities should be described.

The economic effects must be described and accounted for and supplementary information, elaboration and causal relations must be stated.

4 Credibility in relation to organic principles

It is still important to develop organic agriculture based on the basic organic values and principles. The

principles of the EU regulation regarding organic agriculture⁷ include the importance of working with soil fertility, biodiversity, environment, animal welfare and careful processing. Focusing on this will make organic agriculture an important contributor to societal goals.

Focusing on how organic agriculture increasingly meets these principles may ensure that organic agriculture and aquaculture will become some of the most powerful bids for a future with more environmentally friendly primary production to support the efforts in relation to the Water Framework Directive, Natura2000 and a reduction of the pesticide consumption, e.g. as required in the EU directive concerning a sustainable application of pesticides and integrated plant protection⁸.

Research and development should support the credibility of organic agriculture by ensuring that the organic sector is constantly given the opportunity to improve its practice in relation to the principles and important societal goals as well as the consumer expectations, an open dialogue and that the impact of organic agriculture on public goods is well documented.

Contributions to an increased credibility in relation to organic principles must be described and the applicants should aim to quantify the expected project contributions in the application. Some examples are given below, and the applicants may include more.

- Improved soil fertility the project's contribution to improved soil fertility, including texture, water, biological activity, nutrition, carbon sequestration etc.
- Increased biodiversity the project's contribution to an increased biodiversity, including agricultural as well as wildlife biodiversity and preferably at the levels of gene, species and landscape
- Limited climate impact the project's contribution to a reduced emission of climate gases (CO₂ equivalents) including carbon sequestration in soil (provided that the results will be expanded subsequently)
- Sustainable use of resources the project's contribution to a sustainable use of resources and utilization of local resources, including energy consumption, optimization of nutrient cycles/recycling and an optimization of resources within food production indicated as added value per input⁹.
- Minimized nutrient surplus the project's contribution to recirculation and reduction of nitrogen and phosphorus surplus per hectare or animal unit (provided that the results will be expanded subsequently)
- Other effects for an improved environment the project's contribution to an improved environment that do not appear from other descriptions and quantifications, including water environment and ground water
- Improved animal welfare the project's contribution to improved animal welfare, including health, nutrition, natural behavior and the absence of pain, fear and stress, etc.
- Reduced use of antibiotics the project's contribution to a reduction in standard treatments with antibiotics per animal unit (provided that the results will be expanded subsequently)
- Improved human health and welfare the project's contribution to human health and welfare, including food safety, nutritionally improved diets, energy intake, dietary supplements, but also to quality of life and absence of pesticide residues, resistance to antibiotics, substances hazardous to health etc.
- o Careful processing the project's contribution to the development of careful processing of raw

⁹ Examples of effects based on sustainable utilization of resources:

Same output produced with less input Same input produces a larger output (including utilization of waste products) Same output is refined with the same or less input

⁷ Council Regulation (EC) No 834/2007 of 28 June 2007 on organic production and labelling of organic products.

⁸ DIRECTIVE 2009/128/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 21 October 2009 establishing a framework for Community action to achieve the sustainable use of pesticides

materials, use of natural conservation methods and additives, etc.

5 Resilient systems

Sustainable growth should be based on the development of resilient systems in a biological as well as economic sense.

There is a general need for increased knowledge on the interaction between organisms above as well as below the ground and how this knowledge may be used innovatively to increase agricultural resilience and similar knowledge is needed for aquaculture.

Contributions to resilient systems must be described and the applicants should aim to quantify the expected project contributions. Some examples are given below, and the applicants may include more.

- Ecosystem services: the project's contribution to augment ecosystem services such as soil fertility and yield, functional biodiversity and regulation of animal diseases and at the same time how to reduce the risks of long-term problems with e.g. pests, diseases and perennial weeds.
- Adequate access to nutrients: the project's contribution to ensure access to nutrients for the primary production e.g. through optimization of nutrient cycles/recycling.
- Resistance to external pressure and change: the project's contribution to develop production systems in which the individual elements mutually support and compensate for each other in case of unexpected changes in the environment and to resist pressure in the form of diseases/pests, climate changes and market fluctuations.
- Technology and knowledge: the project's contribution in the form of technology and knowledge that increase the capacity for observation/monitoring, prevention, decision support and control/management including the implementation of managerial diversity in the form of multifunctionality, farm collaboration and/or integration of the value chain in order to ensure a natural foundation and financial profitability (social innovation).
- Resource management and cost optimization: the project's contribution to e.g. increased recycling/reuse of resources on the farm/company, implementation of renewable energy etc.

6 Dissemination and user involvement

The project application must include an action plan for communication activities. This plan must include a description of the parties interested in the project idea and results, how the primary target groups have been identified, how target group representatives/stakeholders will be involved in the project and how the project will include, communicate and disseminate to relevant target groups in order to include the users in an on-going dialogue about the project. In the communication plan there should be emphasis on making the project efforts and results visible to others, including as scientific publications, how to inspire them through communication and other activities as well as how the results may be implemented. User involvement and the estimated project impact will be evaluated and must be clearly described in the application.

During the project period, the project must continuously contribute to dissemination in Danish as well as English via ICROFS. The project manager and 1-2 project participants should participate in annual status meetings and sufficient time and funds should be allocated to travels and/or other meeting expenses in relation to these meetings. The project manager is expected to contribute to the dissemination of project results at the end of project as well as at the end of the entire programme.

Project type 2:

Prioritization of projects with research content within the specific action area (without business plan): The contribution of organic agriculture to public goods

Projects under project type 2, focusing on the contribution of organic agriculture to public goods, are not expected to contribute directly to solutions to the existing challenges within the food sector. They will be

evaluated in relation to their perspectives and potential to encourage new development concerning the contribution of organic agriculture to public goods, including an elaboration of these contributions and the opportunities to increase these.

Applications under project type 2 will be evaluated according to their contribution to criterion 4: Credibility in relation to organic principles, and criterion 6: Dissemination and stakeholder involvement. See the descriptions of these criteria under project type 1. In addition to these, the projects will also be evaluated according to a specific criterion: the contribution of organic agriculture to public goods.

The project contributions must be described and quantified, if possible, for criterion 4 and criterion 6 as described above. In relation to criterion 4 research and development should support the credibility of organic principles by ensuring that 1) the organic sector is constantly given the opportunity to improve its practice in relation to the principles and important societal goals as well as the consumer expectations, 2) an open dialogue and that 3) the importance of organic farming to society is well documented. The projects are expected to focus on organic agriculture as a tool to achieve sustainable agriculture. It is presupposed that the exposure and development of the contribution of organic agriculture to public goods will strengthen the entire sector.

Contributions to the exposure of or development of the impact of organic agriculture on public goods should be described and applicants should aim to quantify the expected project contributions. Some examples are given below but the list is not exhaustive.

- Rural development and employment project contribution to illustrate the contribution of organic agriculture within this area.
- Economic growth and value project contribution to illustrate the contribution of organic agriculture to economic growth.
- Social development and social innovation project contribution to illustrate the contribution and possibilities of organic agriculture to improve social development e.g. by implementing managerial diversity in the form of multi-functionality, farm collaboration and/or integration of the value chain.
- Capacity building/knowledge accumulation project contribution to increase the capacity building in society/local communities, social and human capital, development of value chains, education etc.

In case the applicants consider that the projects may also contribute to the other criteria applying to project type 1 (with a business plan), they are free to quantify the economic criteria as well as the criterion applying to resilient systems (1, 2, 3 and 5).

Information on project impact

When describing project contributions according to the different parameters it is important to indicate the starting point in order to be able to identify and quantify the project contributions. The applicant should state the current situation within the area and how the project may contribute to improvement.

Projects with special risks

GUDP also provide funding for projects that include certain risks but also have correspondingly large potentials. In such cases, GUDP may approve funding that is conditional on the applicant providing a supplementary practicability study to further expose the project's risks and ensure that the potential benefits have been sufficiently described and illustrated.

Applicants asked to perform practicability studies will be notified by the GUDP secretariat and information on the conditions and details will be given.

Procedure for the processing of applications

The processing of applications received will be based on the submitted material. The six parameters that are used to evaluate the green and economic sustainability effects of the projects as well as dissemination and stakeholder involvement are included in the concrete evaluation of the applications. Furthermore, the

novelty, relevance and professional/technical quality of the projects as well the anchoring in the industry are also emphasized. From this material and in consideration of the economical frame of the call, the GUDP board decides on a number of applications to receive grant approval.

Advice during the processing of applications

ICROFS will procure scientific advice from external experts during the handling of the applications. The GUDP secretariat will ensure that external experts do not have conflict of interests and they are covered by an obligation of confidentiality in relation to the consideration of the application material.

The applicant may also be contacted in connection with the case handling in case clarification of questions are needed.

The ICROFS board plays a central role in the assessment of applications with due respect of the general rules of impartiality and confidentiality.

- The ICROFS board evaluates all applications and based on this evaluation as well as the decision
 made by the international panel of experts submits to the GUDP board a substantiated proposal for
 program composition.
- Based on the recommendation from the ICROFS board the GUDP board will make the final decision about the composition of the organic programme.

Scientific evaluation

Innovation Fund Denmark (InnovationsFonden) has approved that the ICROFS secretariat will be performing the scientific evaluation of the projects based on input from an international panel of researchers, which has been approved by Innovation Fund Denmark, cf. the Fund's model 1 for scientific evaluation. The international expert panel is evaluating both the scientific quality as well as the relevance of the applications. If the scientific quality is not considered eligible for support, the project cannot receive a grant. If the scientific quality is considered eligible for support, the ICROFS board will use the other comments from the panel as basis for their decision, but may interpret e.g. relevance differently than the expert panel.

In Form E, the research content of the application must be described including the thesis/problem statement and the hypothesis of the research part, state of the art research of today, the theoretical background, methods, timing, results as well as the participating researchers' qualifications. Form E must be submitted as a separate file – i.e. <u>CV's must be attached separately even though they are also included in the main application.</u>

Information for the scientific evaluation <u>must</u> be prepared as an independent account of the research part and the entire application <u>must</u> be written in English. If the research is not considered eligible for support, GUDP is not able to support the project.

The applicant is responsible for indicating that the project contains research.

Consultative procedure in relation to scientific evaluation

In cases where external scientific advice is used – including research related advice provided by the international expert panel – and the evaluation is to the disadvantage of the applicant, the applicant will be given the opportunity to comment on the external evaluation via consultative procedures. This is done in order to clarify whether the external evaluation is based on misunderstandings in relation to the application. The applicant's comments may be presented to the persons responsible for the external scientific advice in order to clarify any misunderstandings. The external scientific advice will form part of the GUDP board's basis for decision.

Confidentiality

All applications will be handled with utmost confidentiality within the framework of the Danish Act on Public

Administration (Lov om offentlighed i forvaltningen).

Publication

Upon receiving the application, the GUDP secretariat reserves the right to publish a list of the applications received. Once the board has made its final decision as to which projects will receive grants, a list of project titles, grant sums and beneficiaries will be published on the GUDP website. Furthermore, GUDP is going to publish the following information for the projects that have received grants: names and CVR numbers of the project participants as well as the project time schedule. The grant sums may appear in total and/or distributed on the individual participants.

We cooperate with the InnovationDanmark database, which is a date base for researchers, etc. with information on all state research and innovation tools/resources. We forward project title, grant status, application year, project start and end dates, CVR number, organization/company type as well as grant sum/budget per project and per participant. Furthermore, the statutory information is reported to the EU Commission's funding recipient register [The financial transparency system]¹⁰.

¹⁰ Further information on the Danish Business Authority (Erhvervsstyrelsens) website under 'EU statsstøtteregistrets indberetningssystem'.