



Green Development and Demonstration Programme (GUDP)

Invitation of applications for
The Organic Research,
Development and Demonstration
Programme (Organic RDD) 5

Application deadline 21 May 2019 at 12.00

Colophon

Green Development and Demonstration Programme

Invitation of applications for funding under The Organic Research, Development and Demonstration Programme (Organic RDD) 5

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 which carry out research and development and/or demonstration in relation to business-oriented innovation within the Danish organic food sector by means of a green conversion. The projects must support both green as well as financial sustainability.

This call covers applications for research projects including development and/or demonstration, and the individual projects may apply for a total grant of 0.25 to 6 million DKK.

Overall financial frame

A total funding of up to 29.5 million DKK is available.

At least 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, see below.

Important information related to the call

Deadline for applications is Tuesday 21 May 2019 at 12.00

Applications must be received no later than 12:00. Applications received after the deadline will not 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.

Information on approval and rejection

Information on approval or rejection will be given before the end of 2019 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 [website](#) under "Ansøgningsmateriale" -> "Indkaldelse, vejledning og ansøgningsmateriale" ("Application material" -> "Call, guidelines and forms").

We kindly urge you to read through this call as well as the [Guidelines](#) for filling in the application material for Organic RDD 5 as well as the strategy of the GUDP Board 2019-2022 before preparing an application. Furthermore, we recommend that you take a look at the instructions on payment of grants under GUDP, which you will find on GUDP's [website](#) as well as the instructions on reimbursement of grants before you submit your application.

Information meetings

Information meetings are held in Copenhagen on 11 March 2019 and on 13 March in Aarhus or Foulum. At the information meetings you will be able to hear more about the call themes, the assessment criteria and how to fill in the application forms and you will also get the opportunity to meet other interested parties

and discuss your project with the ICROFS secretariat. Check the [website](#) for further information and registration.

Discussion of project ideas

In addition, the ICROFS secretariat provides an opportunity to discuss project ideas based on a 1-page project outline. You can find the template for the project outline at the [website](#) under "Om tilskuddet" -> "Kan min gode idé blive et GUDP-projekt" (in Danish). The 1-page project outline must be sent via e-mail to the GUDP secretariat at gudp@lbst.dk. A processing time of up to two weeks must be expected. Furthermore, it is possible to get feedback at our information meetings.

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: gudp@lbst.dk. The [Guidelines](#) for this call describes in detail the contents of a complete application.

All relevant application forms, CVs and enclosures must be gathered and submitted in one pdf-file. Form B and Form E including relevant CV's must also be attached in separate files (1 Excel file and 1 PDF file respectively). The total PDF file should be submitted in a non-scanned version without signatures as well as a scanned version with all signatures.

Please be aware that e-mails with a total file size of more than 25 MB cannot be handled by our servers.

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 schemes

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 among others at lbst.dk and <http://icrofs.dk/soeg-forskningsmidler/>.

Purpose, background and legal framework for GUDP

Introduction

The funds for this call have been made available to GUDP as part of the political agreement on the distribution of the research reserve for 2019. The funds are earmarked for organic agriculture, and they are implemented in a collaboration between GUDP and ICROFS (International Center for Research in Organic Agriculture and Food Systems). Within the framework of GUDP – the legal basis and GUDP's strategy 2019-2022 - this application round is targeted to selected challenges in organic food production, and the call as well as the application material are adapted to this.

GUDP's Act

The legal framework for grants under the Green Development and Demonstration Program (GUDP) can be found on the [Danish legislation information website](#) and GUDP's [website](#).

The applicable rules appear (in Danish) from:

Lovbekendtgørelse nr. 23 af 4. januar 2017(Consolidation Act no. 23 of 4 January 2017)

Bekendtgørelse nr. 1069 af 13. september 2017(Consolidation Act no. 1069 of 13 September 2017)

The legal basis for ICROFS' call is to be found here [here](#).

ICROFS' purpose and background for the call

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. All initiatives must be based on the organic philosophy and the organic principles¹ and issues. In addition ICROFS contributes to the coordination, management and execution of strategic and stakeholder oriented, high quality research, that supports development of new solutions and adaptations in the production, which can move the entire Danish organic sector towards increased sustainability, increased productivity and improved economy.

Through the research activities ICROFS will 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; and further contribute to the development of food systems that may promote the processing, product development and distribution of organic food.

Through the research activities ICROFS will further contribute to the development and expansion of organic farming and food systems as instruments for achieving important societal objectives concerning the environment, climate, nature, animal welfare and rural development.

On behalf of GUDP, the Ministry of Environment and Food of Denmark, ICROFS coordinates the national research programmes that are launched based on funds allocated in the National Budget for organic research.

Background for the Call

The Danish organic sector is competitive, produces sustainable foods, and contributes to important societal objectives concerning the environment, climate, nature, animal welfare and rural development. It is continuously being developed on the basis of demands and market needs and according to the organic philosophy and the organic principles¹ and related challenges and dilemmas. 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 Denmark is 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 research based knowledge and development, is necessary to ensure progress, where increased primary production and innovative product development is supported by the credibility of the organic sector, which continuously contributes to the public goods.

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

Overall goals and points of direction

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

- Be practice-oriented, ensuring a close connection between the new knowledge and practical implementation,
- Be prioritized in close collaboration with the organic sector,
- Be of high international quality.
- Be communicated efficiently to the stakeholders.
- Through knowledge development support the contribution of organic agriculture to the 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. DEMAND – A continued increasing demand in Denmark and internationally
3. CREDIBILITY – High consumer confidence incl. credibility in relation to the contribution of organic farming to public goods.

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

Elaborating remarks

INNOVATION - The research and development activities must strengthen primary production, processing, marketing and demand by suggesting innovative and visionary solutions to concrete knowledge needs.

DEMAND - The research must contribute to an increased value creation and product development through innovation in the value chain, gentle production and processing methods adjusted to the organic philosophy as well as ensure documentation of the quality and value of the products.

CREDIBILITY - The consumers' confidence in the organic sector and the contribution of organic agriculture to the public goods are closely connected and in combination provide the credibility of the organic sector. The credibility of the organic sector must be secured and strengthened through improvements in the fields of climate, nature and biodiversity, environment, soil fertility, animal and human health and welfare. This must be combined with an effective production to avoid that the organic premium counteracts the growth of the sector.

The focus of Organic RDD 5

Applications for Organic RDD 5 must contribute with innovative, concrete, practice-oriented solutions on the specific conditions and challenges in the organic systems in relation to climate and environment and in relation to recirculation and nutrient supply.

Climate and environment

The climate and environmental impact of the organic sector is crucial to its credibility. Increased knowledge that contributes to e.g. higher productivity, energy production, increased carbon sequestration and less emission of greenhouse gasses can ensure a better production economy and reduce the climate impact. It is central to the organic principles to increase the soil fertility and optimize the use of the biological resources of the farming system. At the same time, efficient utilization of resources entails a higher productivity. Optimizing the interactions between the individual segments and processes of the production system and utilizing the byproducts and side streams creates robust production systems in terms of both economy, environment and climate. The knowledge need includes specific knowledge on detailed elements and functions of the system as well as broader knowledge on their relationship and interactions. For

example, there is a need to develop concepts for and knowledge on climate-neutral organic meat and dairy production.

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

- Organic farming systems that increase the resource efficiency and reduce the climate impact, e.g. perennial crops, better interaction between plant and livestock production and increased utilization of by-products and side streams.
- Biological processes and functions; and ecosystem services and soil fertility including improved carbon sequestration in soils and landscapes, methods for documentation of the soil's fertility as well as support and interaction with biodiversity.
- The environmental and climate impacts of organic livestock production including the relationship with animal welfare and health, productivity, feeding and foraging strategies and fodder production, as well as derived consequences such as nutrient leaching from outdoor areas.
- Simultaneous production of foodstuffs, feed, fertilizer and energy, e.g. by combining biorefining and biogas production.
- Further development of sustainability tools that can support the individual farms in saving resources, reducing leaching, improving biodiversity and animal welfare and acting more climate smart.
- Reduction of the climate impact of farms both within the individual farms and in the interaction between farms through an integrated optimization, analysis and/or modelling of the climate impacts.

Recirculation and nutrient supply

Organic food production is based on a fundamental principle of recirculation of resources. Ideally, the necessary nutrients are supplied through the use of nitrogen fixing crops, optimized use of nutrients on the farm and through recirculation of nutrients from the rest of the society. Recirculation of nutrients from food productions and cities may also take place as a result of increased use of side streams for feed or as the basis of insect production or for fermentation. There are, however, also considerable amounts of products including waste and by-products that are moved across national borders, and it may be of significant importance to clarify how these may contribute to recirculation within organic farming. There is a need for increased knowledge which can form the basis of risk evaluations, e.g. knowledge on the influence of micro-plastic and other unwanted components, and thus form the basis of the development of the best systems for safe recirculation. Due to the organic principle of care and the uncertainty about the consumer acceptance, recirculation from the cities (e.g. household waste) or the industry only happens to a limited extent. Therefore, there is need for knowledge on consumers' and also the industry's views and understanding of the dilemmas related to recirculation (and the principle of care).

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

- Optimal utilization of nutrients on the farm or between farms, including both the allocation of animal manure, intercropping, combinations of animals and plant, agroforestry, etc.
- Precise nutrient management based on greater knowledge on the of the mineralization ability of the soil and innovative fertilizer strategies.
- Recirculation of nutrients and waste products from other parts of society, including utilization of side streams and by-products as fertilizer, for feed or as the basis for production of insects or for fermentation. This also includes increased knowledge which may form the basis of risk evaluations and thus form the basis of the development of the best systems for safe recirculation
- Business models for a circular bio-economy to be established between society's nutrient management (waste water and source separated organic household waste) and organic agriculture, e.g.

through a waste water management strategy which try to avoid the direct use in food production system by first using the waste water for non-food production.

- Focused use of green manure through biogas as well as other methods.
- Identification, testing and validation of waste streams which may, perhaps mixed, contribute to increased fertility in farming systems that do not receive sufficient amounts of nutrients from animal waste/manure.
- Optimization of the chain between primary producer and marketing, and the possibility of developing and marketing “resource optimized” food products.
- Utilization of perennial crops, also from areas not included in the rotation, for production of high quality fodder through biorefining and potentially for production of food in combination with biogas production and recirculation of nutrients to the soil.

Interdisciplinarity

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

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. It appears from the Guideline to Organic RDD 5, how the quantification of the individual parameters must be indicated. The application must therefore show that the grants result in a direct benefit or a derived measurable effect.

Commercialization and business plan

Funding from GUDP is granted with the expectation that the project results will be commercialized, and as an important part of the project application, business plan(s) must therefore be prepared for the project. However, projects focusing on the contribution of organic farming to public goods (Type 2) 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 the different parts of the value chain (e.g. production, processing, marketing and transportation) that are relevant for the project. However, this does not apply to projects focusing on the contribution of organic agriculture to public goods (Type 2), but other actors than researchers can with advantage be included in the project.

Bridging the food sector

GUDP wishes 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 when it constitutes 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.

With the funded projects, GUDP wishes to create the framework for cooperation across industries, knowledge institutions and companies in such a way that experiences and results can be documented and used in the future.

The GUDP board requires that research and knowledge institutions contribute 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. However, they cannot be included as project participant. 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 [website](#) under "Ansøgningsmateriale" (Application material). Enclosures sent with the application, besides the ones mentioned below, will not be taken into consideration. Please be aware that applications that have not used the application forms mentioned will be considered insufficient and will receive an administrative rejection immediately after the deadline.

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 – [CVR.dk](#)").

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. However, projects focusing on the contribution of organic agriculture to public goods (type 2) only have to result in green 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

Organic conditions

Grants are only given to projects if the applied methods are compatible with the organic principles². Project activities are expected to be accomplished according to the existing regulations³ 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 focusing on the challenges of organic agriculture in relation to climate and environment as well as recirculation and nutrient supply.
2. Projects with research content focusing on the contribution of organic agriculture to public goods in relation to climate and environment as well as recirculation and nutrient supply.

Projects with research content focusing on the challenges of organic agriculture in relation to climate and environment as well as recirculation and nutrient supply (type 1)

Projects with research content are projects in which one or more participants accomplish a number of interdependent and supporting activities, please see below.

Projects with research content focusing on the contribution of organic agriculture to public goods in relation to climate and environment as well as recirculation and nutrient supply (type 2)

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:

- Applied research activities that are related to planned research and critical studies to acquire new knowledge and skills that can be used to develop new products, processes or technologies. The results of the activities carried out are not expected to be commercialized in the short term. Research activities alone cannot constitute a GUDP project but can be included as a starting point for development activities (type 1) or
- Applied research activities 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. Research activities alone cannot constitute a GUDP project but can be included as a starting point for development activities (type 2).

² <http://icrofs.dk/en/about-icrofs/organic-farming/>

³ <http://lbst.dk/tvaergaende/oekologi/lovstof/>

- Development activities that develop new or improved products, processes or technologies based on the acquisition and use of existing scientific and other relevant knowledge and skills. Development activities may include commercially applicable prototypes. The result of the completed development activities is expected to be applicable, including commercialized, in the short term.
- Demonstration activities with the purpose of disseminating and spreading knowledge on the application of research and/or development activities to a wide range of actors. This must not be confused with marketing activities. Demonstration includes scientific or technical knowledge etc. that is not distortive. Meaning:
 - 1) All stakeholders can get access to the demonstrated knowledge, and
 - 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 participation from trade and industry.

GUDP requires that research and knowledge institutions contribute with a co-financing of at least 10 per cent.

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

Gardeners and horticultural companies, who are members of producer organizations (PO) receiving funds for research and development activities, have not previously been eligible for GUDP funding for the same action types for which funding could also potentially be sought from the producer organization. These rules have now been changed, and as of 1 January 2019 a new regulation came into force for the producer organizations which states that the requirement for demarcation on scheme level no longer applies. This means that it is now only the generally applicable principle that no double financing is allowed which applies to members of a PO as to all other applicants for GUDP.

Table 1. Maximum subsidy rates for GUDP projects

Company size	Research and knowledge dissemination organizations*	Small companies		Medium-sized companies		Large companies**	
		Individual	Cooperation***	Individual	Cooperation***	Individual	Cooperation***
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 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.

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 facts and refer to relevant sources. It is important to substantiate the plan by means of data describing e.g. market size and growth rates.

Projects focusing on the contribution of organic agriculture to public goods (type 2) do not need to prepare business plans.

More information about business plans can be found at this [link](#) as well as in the guidelines for filling in the application forms (A28-A32) on the [website](#) under "Ansøgningsmateriale" (Application material).

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. Dissemination and stakeholder involvement.

Project descriptions on ICROFS' website

ICROFS is going to make project descriptions of the projects that have been approved for grants. The individual project descriptions contains descriptions of the projects, if possible quotes for press releases and photos from the project. The project description will be published on ICROFS' and GUDP' websites, in

project leaflets, and will be used in connection with media coverage of the project in the daily press. No confidential information from the projects will be published⁴.

Previous Organic RDD project descriptions can be seen at ICROFS' website: <http://icrofs.dk/en/research/danish-research/>. Moreover, please see below under publication.

Start-up meeting for project managers

The ICROFS Secretariat is organizing an annual meeting for projects which have received grants, where new projects are introduced to the Organic RDD-programmes, ICROFS, etc. The project managers will receive an invitation directly.

Progress and final reports on GUDP projects

ICROFS monitors all launched projects to support the realization of the results. All GUDP projects must make an annual project report on progress and results by 1st May, as well as a final report, which must be completed no later than 3 months after the project ends. The first project report on progress and results is not to be delivered until approximately 1 year after the project has started. ICROFS will provide instructions directly to the project leaders.

The GUDP-secretariat can furthermore ask to be an observer in the project steering group or in an advisory group for a group of related projects.

Prioritization of applications

GUDP will prioritize projects focusing on the interaction between green and economical sustainability and this also applies to applications for this call regarding Organic RDD. GUDP's requirement for business plans to be part of the application also applies - though not for projects that focus on the contribution of organics to public goods (type 2 projects).

The prioritization criteria appear from the ICROFS spider web (see next page) and it is important to note that a project does not need to have an effect on all the parameters in the spider web, but there must be one green and one economic effect as well as effect on dissemination and stakeholder involvement. For projects focusing on the contribution of organic agriculture to public goods (type 2), only effects on the green parameters must be quantified, cf. there is no requirement for business plans for type 2 projects, as well as effect on dissemination and stakeholder involvement. For the green parameters, regardless of whether the project has an effect on several parameters, as a rule only the most important effect is to be quantified, while any other green effects can be described in prose. However, if it is a holistic project that has several effects, the main effects should all be quantified. Applicants must aim to ensure that focus and improvement in one area do not have negative consequences for other areas.

In addition to the criteria which appears from the spider web, GUDP and ICROFS place particular emphasis on the novelty value and relevance of the projects, as well as the professional quality and the anchoring of the project in the industry. The ICROFS's board prioritizes between the best project applications in relation to what the board estimates will have the greatest effect on organic production and development.

⁴ The assessment of whether the information is confidential or not is carried out in accordance with the applicable rules of the Danish administrative law.

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 green sustainability, two criteria are concerned with economic sustainability and the last criterion is about dissemination and stakeholder 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.

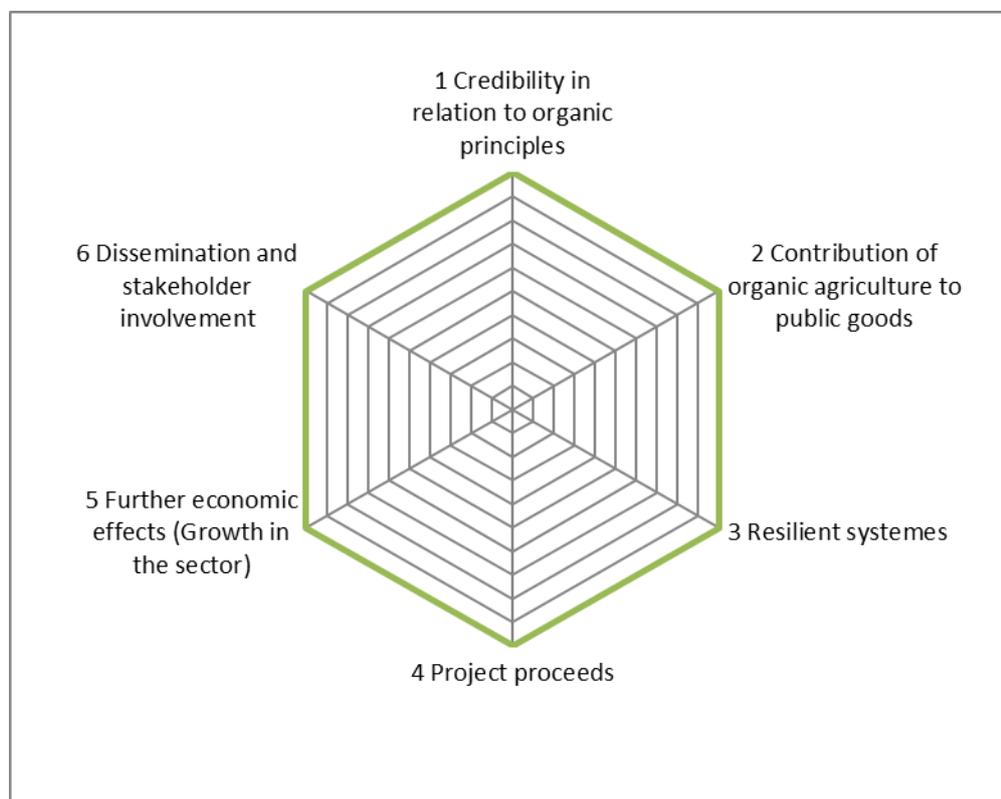
All type 1 project applications should excel within green sustainability as well as economic sustainability and within dissemination and stakeholder involvement; but not necessarily within all prioritization criteria.

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 1) Credibility in relation to organic principles, criterion 2) the contribution of organic agriculture to public goods, and criterion 6) Dissemination and stakeholder involvement. 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 their contribution to these criteria (3, 4 and 5).



ICROFS' six criteria

The three green sustainability criteria – the project must have at least one green effect. For type 2 it must be on credibility or public goods. There is overlap between the three criteria, and it can be difficult to say unequivocally that an effect belongs to one or the other criterion – an effect must, however, only be described under the criterion where you think it fits best.

Research and development must support the credibility of the organic sector by ensuring

- that the organic sector continuously has the opportunity to improve practice in relation to
 - its principles and
 - important societal goals as well as
 - consumer expectations,
- that there is an open dialogue, and
- that the importance of organic farming for society is documented.

1 Credibility in relation to organic principles⁵

The credibility of organic farming is a prerequisite for consumer confidence and thus continued growth of the organic sector. It is still important to develop organic farming based on the organic values and principles so that consumers can maintain their confidence in organic products.

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.
- Circular economy/recirculation – the project's contribution to increased recirculation both within the individual farm and in interaction with society.
- Optimization of the food system – the project's contribution to optimizing resource utilization and reducing the environmental and climate impact of the food system as a whole.
- 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 input⁶.
- 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)
- Careful processing – the project's contribution to the development of careful processing of raw materials, use of natural conservation methods and additives, etc.

2 The contribution of organic farming to public goods

The contribution of organic farming to public goods is also a prerequisite for consumer confidence, but many of the contributions to public goods may be more distant to the individual consumer. The EU Council Regulation's principles for organic farming⁷ include the importance of working on soil fertility, biodiversity, environment, animal welfare and gentle processing. At the same time, this focus contributes to making organic agriculture an important societal contributor.

⁵ <http://icrofs.dk/om-icrofs/hvad-er-oekologisk-jordbrug/de-oekologiske-principper/>

⁶ 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..

It is assumed that the identification and development of organic agriculture's contributions to public goods will strengthen the entire sector.

Focusing on how organic farming increasingly meets these principles will ensure that organic farming and aquaculture will be among the most powerful opportunities for a future with more environmentally friendly primary production that can 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.

Contributions to the identification or development of the contributions of organic agriculture to societal benefits must be described, and applicants should seek to quantify the contributions they expect from project. Some examples are given below, and the applicants may include more, but it is recommended to study the knowledge synthesis *The Contribution of Organic Farming to Public Goods*^{9, 10}.

- Nature and biodiversity – e.g. 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.
- Environment – the project's contribution to an improved environment including water environment and ground water.
- Energy and climate – 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)
- Human health and welfare – 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.
- Animal health and welfare – 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)
- Reduced use of pesticides – the project's contribution to increased conversion to organic production which will result in reduced use of pesticides.
- Industry and rural districts.

3 Resilient systems

To ensure a balanced growth of supplies, it is important to ensure efficient and resilient farming systems in a biological as well as economic sense. In the context of organic farming, higher productivity is based in particular on optimizing the way in which the individual biological components mutually contribute and support each other, the manager's abilities within resource management, cost optimization, observation and understanding of the biological factors included in the farm operations; whether it is knowledge of the ecosystem services linked to the soil's fertility and yield, functional biodiversity or regulation of animal diseases.

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

⁹ http://icrofs.dk/fileadmin/icrofs/Diverse_materiale_til_download/Vidensynte_WEB_2015_Fuld_laengde_400_sider.pdf

¹⁰ http://icrofs.dk/fileadmin/icrofs/Diverse_materiale_til_download/web_OKvidensyntesen_okt_2015.pdf

It is worth noticing that optimization and efficiency at this level requires both very specific knowledge of the individual components as well as knowledge on system level. At the same time, it is important to clarify the impact of processing on the quality of the products.

Resilient systems enable the farmer to produce under different conditions with less fluctuations in yield.

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, structure and water holding capacity, 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 multi-functionality, 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.

The two criteria concerned with economic sustainability – type 1 projects must have at least one economic effect.

4. Project proceeds

The financial revenue generated by the project results for the grant receivers year 1, 2, and 3 after the finalization of the project.

5. Further economic effect

Project potential in relation to dissemination within the sector as well as the socio-economic impact after potential upscaling of the outputs.

Applicants must aim to ensure that focus and improvement in one area do not have negative consequences for other areas.

Criteria concerned with dissemination and stakeholder involvement

6. Dissemination and stakeholder involvement – the project must have effect within this criterion.

Anchoring of the project effect in relation to the target group/stakeholder, e.g. the organic farmer, is important. 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 stakeholders 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. Stakeholder 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' communication channels. 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.

Specification of project impact

When describing project contributions according to the different parameters (cf. the spider web) 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. The applicant's description of the expected project impact is included in the concrete assessment of the applications. It is therefore important that the stated contributions are assessed realistically and that the calculations are substantiated.

Procedure for the processing of applications

The processing of applications received will be based on the submitted material. From this material and in consideration of the economical frame of the call, the GUDP board decides which applications should receive grant approval.

During the processing of applications, ICROFS or the GUDP secretariat may contact the project manager with clarifying questions. However, it will not be possible to provide new information that improves the application.

The role of the ICROFS board

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 – the ICROFS board 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 they are not bound by the expert panel's assessment of e.g. relevance.

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

Information for the scientific evaluation must be prepared as an independent account of the research part and the entire application including Form E must 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 and the ICROFS board recommendation

In connection with the application process, the applicant will be given the opportunity to comment on the expert panel's assessment of the project's research part and the ICROFS board's recommendation of your application via consultative procedures. The applicant will be consulted irrespective of the recommendation and whether the research part is considered eligible for support or not. This is done in order to clarify whether the 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.

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 publishes 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, we are going to publish the following information: projects that have received grants or rejections, project titles, names and CVR numbers of the project participants as well as the project time schedules. The grant sums may appear in total and/or distributed on the individual participants.

We cooperate with the InnovationDanmark database, which is a data 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]¹¹.

Processing of personal data

GUDP applications are treated confidentially within the GUDP secretariat and are, as a rule, not handed out to outside parties. However, it is possible to apply for access to documents in accordance with the applicable public law rules. But confidential information cannot be disclosed beyond the stipulated cases pursuant to the applicable rules.

Based on the new rules laid down in the General data protection regulation, which came into force in May 2018, we must, however, make you aware of the following:

Applicants for GUDP grants submit personal data in connection with the application and possibly in connection with the subsequent processing of applications. Failure to submit information means that the GUDP application cannot be processed, cf. Chapter 3 in the Consolidation Act No. 23 of 4 January 2017 of the Green Development and Demonstration Programme (the GUDP Act). The GUDP Secretariat and the GUDP Board deal with information in connection with the processing of applications and the project selection. Submitted material can be passed on to external experts outside the secretariat and to Innovation Fund Denmark (InnovationsFonden) in order to obtain scientific advice and assessment. In addition, personal data can be exchanged with experts in and outside the GUDP secretariat in connection with follow-ups on the processing of GUDP projects.

When checking GUDP projects, personal data can be exchanged with other authorities in accordance with § 18 of the GUDP Act.

In addition to the submitted material, the GUDP Secretariat collects and stores personal data from publicly available sources in connection with information activities. The information is stored in the secretariat's archiving systems until the information is passed on to the Danish National Archives in accordance with Consolidation Act No. 201 of 28 September 2016 of the Archives Act. The information cannot be deleted.

As stated above, parts of the project applications are published and we pass on the above-mentioned personal information to the InnovationDanmark database and the EU Commission's State Aid Register.

The GUDP Secretariat will keep the information for one year after submission in closed file systems, after which they will be deleted. The information is also stored in the Danish Agricultural Agency's case processing system until the information is passed on to the Danish National Archives in accordance with the Archives Act. The information cannot be deleted.

Requests for access to or rectification of personal data can be directed to the data controller.

The GUDP Secretariat's data controller is the team leader of the GUDP Secretariat. The GUDP secretariat's lawyer is the associate data processor for the above-mentioned personal data stored by the Danish Environmental Protection Agency. The data controllers and data processors can be contacted via the GUDP secretariat's e-mail GUDP@lbst.dk.

¹¹ Further information on the Danish Business Authority (Erhvervsstyrelsens) website under 'EU statsstøtterejestrets indberetnings-system'.