

The Swedish Farmers' Foundation for Agricultural Research launches a call for project proposals on the theme of *"Sustainable diets from sustainable food chains"*

Background

The concept of sustainable diets encompasses the existing links between sustainability of food value chains with food consumption patterns for health and wellbeing in its broadest sense. Although complex and multidimensional, it is anticipated that sustainable diets directly address all 17 Sustainable Development Goals (SDG's) set by the United Nations General Assembly in September 2015. The achievement of these goals will make a significant step towards having sustainable dietary intakes and sustainable systems for agricultural production.

In 2012, the Food and Agricultural Organization (FAO) defined Sustainable Diets' main characteristics as: *Diets with low environmental impacts which contribute to food and nutrition security and healthy life for present and future generations. Sustainable diets are protective and respectful of biodiversity and ecosystems, culturally acceptable, accessible, economically fair and affordable, nutritionally adequate, safe and healthy; while optimizing natural and human resources'*. In order to find desirable ways forward in achieving more sustainable diets worldwide, it will be necessary to develop scientifically robust, as well as multidisciplinary, approaches that merge the assessment of the environmental impact of food production with the socioeconomic impact of food consumption - in terms of nutrition and health, but also affordability, convenience, taste and all other parameters that influence the decision on what people choose to eat.

In the agricultural, sector there is an increasing awareness of the challenges linked to the sustainability goals which calls for increased research efforts. The Swedish Farmers' Foundation for Agricultural Research (The Foundation), with support from one of our key sponsors, Arla Foods, sees dairy products and associated production as a suitable area in which research may deepen the understanding of the concept of sustainable diets. Therefore, the foundation has decided to launch a call on sustainable diets with focus on dairy products and production systems.

Dairy products are naturally nutrient dense and constitute a key component in the diet for an increasing world population. In Sweden, the dairy industry represents the core of Swedish agricultural activity and has a long tradition of working to reduce environmental impact, improving resource efficiency and sustainability along the value chain. Furthermore, dairy cows have the natural capacity to convert low value roughage, indigestible to humans, into high value dairy products. The future of the dairy industry relies on increasing the awareness of the challenges linked to the SDGs, which calls for increased cross-disciplinary research efforts to make a significant step towards having sustainable dietary intakes and sustainable systems for agricultural production.

The call

The Foundation now launches a call entitled: *“Sustainable diets from sustainable food chains”* with a broad focus on the concept of sustainability with special reference to dairy production and products. The call comprises a total of 16 million SEK and grants will be awarded for research with the highest scientific quality and relevance for Swedish dairy production. Funding may be applied for a maximum project length of four years and projects are expected to start during 2019.

The overarching aim of the programme *“Sustainable diets from sustainable food chains”* is to support projects that contribute to the development of a sustainable Swedish dairy production as well as increasing the knowledge of how dairy products contribute to a sustainable diet. The programme is intended to capture sustainability in various parts of the dairy food chain and broadening the analysis from using single climate impact factors as a proxy for assessing sustainability of production and consumption. Projects with focus on one or several of the following priorities are invited:

- Development of new sustainability metrics that balance the environmental impact of dairy products against their nutritional composition not only to their physical weight.
- Development of an extended concept of sustainable diets including additional sustainability criteria listed in the FAO definition above. This includes finding more comprehensive units for quantifying the environmental impact of foods – including socioeconomic dimensions at consumer level (e.g., affordability, culturally acceptable, nutritionally adequate, etc.)
- Methodological developments to include more environmental impacts at production level (e.g., impact on ecosystem services), that allow comparisons on how different foods contribute to sustainable diets. For instance, climate friendly production of forage crops with a botanical composition that favour carbon sequestering, feed efficiency in combination with low emissions of green-house gases during the digestion process.
- Domestic protein crops with multiple uses and benefits and/or industrial side streams from Swedish industrial processes.
- Studies of the interactions between forage/host/microbiota for decreased environmental impact.
- Demonstration of animal traits and production systems that increases cow longevity and the part of the metabolizable energy that are being used for production and in contrast to maintenance.

Call and review procedures

The call and review process follow a two-stage model. In the first stage the Foundation welcomes full scale proposals for smaller and bigger projects (maximum 1 million SEK/year), which will be evaluated against six criteria linked with the benefits for the agricultural sector (1-3) and scientific quality (4-6):

1. Potential
2. Relevance and direct benefit

3. Communication and dissemination of results
4. Hypothesis and questions addressed
5. Methods and performance including budget
6. Competence of the main applicant and project group

It should be noted that this procedure is different from our standard procedures in the open call in which only a concept note is required in the first stage. For this reason, the applicant is advised to read the instruction in the Handbook 2018 under the section describing the outline of full scale applications.

In the evaluation process a certain number of proposals will be selected and invited to proceed into the second stage. This decision is taken by the board of the Foundation based on recommendations from a review panel consisting of stakeholders from the dairy sector and academic expertise. The decision will be taken in September 2018. Concomitantly, the board of the Foundation will appoint a coordinator who's task will be to form a consortium and link the selected proposals together into a coherent programme and to present this in larger common application. Each applicant can disclose a willingness to undertake such an obligation when submitting the application in stage 1. This should be done in a separate letter submitted by e-mail to research officer Jessica Ekström (jessica.ekstrom@lantbruksforskning.se). In this letter the coordinating organization should declare a willingness to support the programme with liquid or in-kind resources amounting to 2 million SEK annually.

The common larger application submitted by the coordinator will be reviewed in stage 2 and the review committee will compile a final opinion including recommendations for potential revision points and for decision. The final decision will be taken by the board of the Foundation in middle of December 2018.

Applicants and cooperation

The main applicant should have PhD-degree or corresponding well documented research competence. Cooperation between academia, extension services, industry and practitioners is encouraged whenever motivated for implementation and dissemination of results. Supplementary funding from other sources is appreciated and should be specified.

Summary of important dates

The call opens on 2018 05 03 and closes on 2018 06 28. Applications should be submitted in electronic application system of the foundation according to instructions on the Foundation's homepage www.lantbruksforskning.se and instructions in Handbook 2018. The evaluation of applications in stage 1 will take place during summer 2018 and a decision on approved applications will be taken and published on the Foundation's homepage in the beginning of September. Stage 2 opens 2018 09 10 and closes 2018 10 12. The final decision is taken and communicated in middle of December.