

FABRE-TP's Vision for FP9

Introduction

FABRE-TP strongly underlines the importance of Research and Innovation for meeting the grand global societal challenges as referred to in the UN Sustainable Development Goals, in the COP 21 Agreement and in several other declarations. Agriculture (crop farming, horticulture, livestock production) and Aquaculture play essential roles in feeding the growing world population. However, FABRE-TP acknowledges that the production of more food should be done in a sustainable way for which Research and Innovation should take the lead in showing the tools to do so. Therefore **FABRE-TP emphasizes the need for a substantial budget allocation to agriculture and aquaculture sectors in FP 9.**

In this respect FABRE-TP acknowledges the importance of the whole food production chain, including the production itself (farmers), the supplying sector (breeding, feeding, farm technologies, animal health, farm management, IT), the processing sector and the retail sector. with a special attention to the fact that the food chain starts at the farm level.

Background

Over the past few decades, animal production achieved a high level, in quantity and quality, through Research and Innovation (R&I). The EU Framework Programmes (FPs) have contributed substantially to this development. European animal products are valued for its intrinsic quality in Europe and globally. Over the past years, the extrinsic quality of animal products has become more important and is expected to become even more important in the coming years. This is expressed in the Societal Challenges calls in the FP 8 (Horizon 2020). Several projects, based on FP 8 calls, are currently carried out. In addition, the most recent Working Programme 2018-2020 offers possibilities for further R&I with a focus on extrinsic quality of animal products.

Notwithstanding the current initiatives, several societal challenges could not yet be met. More research is needed to make the sector more sustainable. Examples are:

Product quality: better understanding the relation between animal products and health

Disease resistance: combatting upcoming diseases and antimicrobial resistance

Animal welfare: getting rid of boar taint to avoid piglet castration, identification of sex in embryos of layers (or even avoiding the birth of males) to avoid the killing of one-day old male chickens, breeding polled cattle to avoid dehorning of calves, fish welfare etc.

Environmental footprint: decreasing emissions of methane, phosphate, nitrate, CO₂ and ammonia

Meanwhile, engagement with society is getting more important than ever in means of sharing developments in the sector.

To maintain the strong position of animal production and to be able to meet the societal challenges, there is still an unquestionable need for funded R&I with more emphasis on engagement with society.

FABRE-TP's message for R&I within FP9

Our main message is that **investing in research and innovation** is crucial for strengthening a **sustainable and competitive European farm animal production sector** in a globalising world. Here, creating and transferring knowledge is the ultimate investment for future generations. Animal breeding cannot meet all societal challenges on its own, but animal breeding can always be a part of the solution. In this context, FABRE-TP believes that the following key points are

essential for the continuation and strengthening of the impact of European R&I programmes under the scope of FP9:

1. *Starting points*

FABRE-TP endorses the recommendations in the Lamy Report, the UN Sustainable Development Goals, the Strategic Approach of DG Agri and the outcome of the ongoing Food 2030 debate, as starting points for the establishment of the FP9.

2. *Balance in funding R&I in downstream and upstream part of the food chain.*

A well-functioning food chain is extremely important, considering the needs of the growing world population. Already today, however, we are faced with a growing number of obese people, whilst at the same time the number of malnourished people is growing. We need to reduce food waste, improve food safety and nutrient security.

In tackling all these challenges R&I is needed. However, it should not be forgotten that food consumption, and therefore the entire food chain, is heavily depending on the basic crop, livestock and aquaculture production. Therefore, the FP 9 should contain a good balance in funding R&I in the downstream and in the upstream part of the food chain.

3. *Holistic approach, but room for smaller projects*

The FP 9 calls should be holistic (multi-stakeholder approach) when appropriate, but not all research questions need a multi-stakeholder approach. Besides, it could be worthwhile to grant several smaller (practice oriented) projects in parallel without compromising stakeholder engagement. Smaller projects make it easier for smaller companies and institutes to participate in projects.

4. *Clear description of desired impact and instrument*

The FP 9 calls should be clear about the desired impact such as basic versus applied research, long term versus short term impact, innovation driven versus policy driven impact etc. It should also be clear why a specific instrument (e.g. RIA or IA) is chosen.

5. *Sustainable intensification for global food security*

Livestock and aquaculture production are criticised for several aspects such as resource in-efficiency, antimicrobial resistance, environmental impact and animal welfare. It is believed that extensive production should be preferred over intensive production. However - in our opinion - sustainable intensification of livestock and aqua production is still the key to meet the global food security challenge.

6. *Areas with less favourable circumstances*

Although FABRE-TP believes that sustainable intensification is needed for global food security, we do realise that a lot of areas in Europe have less favourable circumstances for animal production. Due to climate change the circumstances in some areas are getting even worse. For these areas, R&I for adaptation to climate change is urgent. In other areas (i.e. mountainous areas) R&I is needed to make farming more beneficial. The diversity in production circumstances needs to be taken into consideration: it is unlikely that one solution will fit all.

7. *New technologies*

New Breeding Techniques (NBTs) provide major opportunities for making agricultural production more sustainable. NBTs are getting increasingly important in common animal breeding practices. NBTs could be used to tackle both societal challenges, as well as production challenges. For example:

- i) reducing anti-microbial use by creating disease resistance (e.g. African Swine Fever),
- ii) reducing environmental impact by increasing efficiency and/or by diminishing emissions,
- iii) improving animal welfare by breeding pigs without boar taint to avoid castration and cattle without horns to avoid dehorning of calves.

8. *End-users*

We believe that innovation in the animal sector is mainly created by the supplying industry: breeding, feeding, health, IT, machinery, buildings, fertilizers etc. In our opinion end-users such as practitioners and farmers are not always involved sufficiently. Thus, the European Innovation Partnership (EIP) could/should play a bigger role in assisting end-users to ensure the uptake of results of EU research projects (extension).

9. *Designing EU R&I programme for greater impact*

Beneficial innovations created by the supplying industry will be brought to the market without any doubt. Yet, the private sector mainly focusses on innovations with short term return. However, innovation is also needed for medium and long-term sustainability goals (market driven, or policy driven) which needs cooperation between private companies, knowledge institutes and funders. Therefore, R&I on specific quality food (for specific consumers), animal welfare, disease resistance, climate mitigation and climate adaptation need more focus.

10. *Aqua sector*

In 2016/ 2017 DG Agri developed a Strategic Approach to EU Agricultural Research and Innovation in close cooperation with stakeholders. It would be good if such a document also could be developed for the aqua sector.

11. *Success rate of project proposals*

The success rates of project proposals in H2020 was and is rather small. On the one hand this is a positive signal, showing that many stakeholders (research institutes and private sector partners) are eager to participate in EU research and innovation projects, on the other hand it is rather frustrating for candidate project coordinators and t partners if their projects are rejected, especially when all conditions are met, and all thresholds are passed. To maintain this interest and even further stimulate stakeholder involvement, FABRE-TP strongly recommends a financial compensation for all proposals passing the 1st stage of a 2-stage proposal to be paid by the EC.

12. *Engagement with society*

Engagement with society is identified as a priority area by FABRE-TP. The objective of this area is defined as: improve perception and increase the level of knowledge of citizens, consumers, politicians and NGO's about the benefits and weaknesses of (novel) breeding and reproduction methods related to the societal challenges. This priority area should be integrated in almost all R&I programmes. Thus, giving more emphasis and focus on engaging the society in research projects, the funding allocated for this specific purpose should be visible.

Conclusion

Innovations in the whole animal production chain are required, not only for a more sustainable and competitive European animal production sector but also for an improved well-being of the society. To foster these innovations, the FP9 should focus on the whole animal production chain upstream **and downstream**. The impact of R&I should be better defined (in the calls), strengthened and better communicated with society by more funding for this specific goal.

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About FABRE-TP

FABRE-TP promotes research and innovation for sustainable farm animal breeding and reproduction (livestock and aqua) in Europe. FABRE-TP is the main contact point for farm animal breeding and reproduction organisations in Europe, aiming to mobilise research efforts, technological development and innovation in Europe.

FABRE-TP brings together key stakeholders around a common vision for the development of technologies and practises in farm animal breeding and reproduction. It is the meeting point for professionals from the **industry, knowledge institutes and funding organisations** in the field of **farm animal breeding and reproduction**.