CALL TEXT AND SUPPORTING INFORMATION

Call: Section 1 – Farming Systems 2020

Topic 1.2.1: Genetic conservation and animal feeds

Sub-topic A) Conservation and valorization of local Animal Genetic Resources (RIA)

Version 1.0
10 February 2020
The proposals submitted to this call, should address only the sub topic A (sub topic B is described in a separate document)

Challenge

The Mediterranean’s population will reach 560 million people in 2030; the demand for meat as animal products is set to climb steeply as the population increases. It is urgently needed to transform the livestock production systems into more sustainable ones respecting the environment and meeting the expectations of consumers and citizens, while providing a fair income and good working conditions to producers.

With increasing demands for animal products by an ever-growing Mediterranean population and changing societal needs, animal breeding needs to evolve to incorporate genomic information in order to speed up response and increase productivity and quality in a context of climate change. Deeper investigation on the local breeds through genetic analyses and conservation programmes to valorize them are needed, making livestock production systems more resilient.

At the same time, sustainable livestock production in the Mediterranean is affected by the decrease of availability and quality of plant forage causing import of high prices feedstuffs such as cereals, which are the base of most of the concentrates. The lack of local alternative feeds combined with the rearing of non-adapted breeds and/or the inadequate management of herds can have a strong negative impact on soil while threatening the competitiveness and the sustainability of the livestock systems, especially in the South and East of the Mediterranean Area.

Scope

Knowledge of animal genetic resources for food and agriculture is fundamental to the sustainable use, development and conservation of these resources.
Proposals shall consider mapping, genetic characterization and monitoring of local breeds\(^1\), well adapted to the Mediterranean environment, tolerant to heat stress and diseases resistant.
Proposals shall decipher the links between epigenetic, genomic and the phenotypic adaptive traits to increase the reliability of genomic breeding with the goal of increasing their resilience under a climate change context. In doing so, proposals shall take advantage of existing databases, past EC projects outputs, and existing national breeding programs to avoid duplications. Proposals should also characterize and valorize the final products of local breeds promoting the use of these breeds which can generate high quality products for the consumers (meat, milk....) and with high added value for the

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\(^1\) Only local Mediterranean breeds shall be considered.
farmers (labels, genetic certification, new products...). Networks or platforms shall be established around the Mediterranean basin for genetic conservation and the promotion of adapted breeds bringing economic benefits to the farmers through capacity building and dissemination of good practices. Decision-making tools for the end users are encouraged, to select the most appropriate breeds according to the specificities of the production environment (agro-pastoralism, extensive or intensive production systems, mix crop livestock systems, ...).

Proposals under the concept of the **multi-actor approach**
2 ensuring that all the stakeholders, from farmers to consumers and regulators, will contribute to the building of sustainable livestock production systems to further add value to EU Mediterranean foods of animal origin.

**Expected impact**

The project results are expected to contribute to:

- Better knowledge of epigenetic and genetic processes leading to the adaptation of breeds to the changing Mediterranean environmental conditions
- Ensure the genetic conservation of local best adapted breeds and valorise them
- Propose to the farmers new options of breeds adapted to the local conditions (matching genetic and epigenetic with environment)
- Increase small farmers’ incomes via the rearing of local breeds and the sale of products (raw or transformed) with high added value

**KEY PERFORMANCE INDICATORS**

- Number of innovations in farming systems developed enabling sustainable and efficient agriculture and food systems
- SDG#2- Indicator 2.5.1: Number of plant and animal genetic resources for food and agriculture secured in either medium or long-term conservation facilities
- SDG#2- Indicator 2.5.2 Proportion of local breeds classified as being at risk, not-at-risk or at unknown level of risk of extinction

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2The multi-actor approach aims to make innovation more demand-driven, and therefore should ensure genuine and sufficient involvement of various actors (end-users such as farmers/farmers’ groups, advisors, businesses, etc.) all along the project: from the participation in the planning of work and experiments, to implementation, the dissemination of results and a possible demonstration phase.
### Supporting information for the Section 1 Call for Proposals, Topic 1.2.1

<table>
<thead>
<tr>
<th>Type of action</th>
<th>Research and Innovation Action (RIA) sub-topic A and Innovation Action (IA) sub-topic B</th>
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<tbody>
<tr>
<td>Total indicative amount allocated to this call</td>
<td>€ 10.7 million</td>
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<td><strong>Funding level</strong></td>
<td>According to Horizon 2020 Rules  &lt;br&gt; For the sub-topic A) RIA: 100%; For the sub-topic b) IA: 70%  &lt;br&gt; (except for non-profit legal entities, where a rate of 100% applies)</td>
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<td><strong>Technology Readiness levels (TRL)</strong></td>
<td>RIA TRL 3-5  &lt;br&gt; IA TRL 6-7  &lt;br&gt; Proposals should clearly state the starting and end TRLs of the key technology or technologies targeted in the project.</td>
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<td><strong>Budget and duration of the grants</strong></td>
<td>PRIMA considers that proposals requesting a contribution up to <strong>EUR 1,75 million</strong> for subtopic A and up to <strong>EUR 2.30 million</strong> for subtopic B would allow this specific challenge to be addressed appropriately.  &lt;br&gt; Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.  &lt;br&gt; Duration of the grants will be from 36 months to 48 months</td>
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<td><strong>Submission and evaluation procedure</strong></td>
<td>Two-stage application procedure. For the first stage, a short proposal (maximum 10 pages) must be submitted by the first deadline.  &lt;br&gt; Successful applicants in the first stage will be invited to the second stage to submit a full proposal (maximum 50 pages).  &lt;br&gt; A timeline for the submission and evaluation of applications can be found in the guidelines for applicants section 1 2020</td>
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<td><strong>Evaluation rules</strong></td>
<td>The award criteria, scoring, thresholds and weightings for RIAs and IAs respectively, listed in in the AWP2020 will be used.</td>
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<td><strong>Grant agreement</strong></td>
<td>PRIMA MGA (multi-beneficiary), based on Horizon 2020.</td>
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<td><strong>Consortium agreement</strong></td>
<td>Participants in projects resulting from this Call for Proposals will be required to conclude a consortium agreement prior to the conclusion of the PRIMA grant agreement.</td>
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