QUESTIONNAIRE FOR THE CONSULTATION OF STAKEHOLDERS ON THE COMMUNITY PROGRAMME ON GENETIC RESOURCES IN AGRICULTURE – Council Regulation (EC) No 870/2004

It would be very much appreciated if the questionnaire could be completed in English.

PLEASE DO NOT FORGET TO SEND THE COMPLETED QUESTIONNAIRE BY 20 JANUARY 2012 AT THE LATEST

Please do not use for any of the questions more than 250 words (except where indicated otherwise)!

Name of organisation:	**European Regional Focal Point for Animal Genetic Resources (ERFP)**
Main field of interest:	ERFP is the regional platform to support the in situ and ex situ conservation and sustainable use of animal genetic resources and to facilitate the implementation of FAO's Global Plan of Action for Animal Genetic Resources in Europe.

Section 1 – Conserving genetic resources in agriculture

1. In your view, which are the main benefits of conserving agricultural genetic resources (max 5 choices)?

a. Agronomic and/or economic advantages/benefits (X)
b. Consumer attraction /interest
c. Environmental benefits (biodiversity) (X)
d. Food quality (X)
e. Food security (X)
f. Human health
g. Larger products range (diversification, products offer)
h. Non-tangible benefits (cultural, ethical) (X)

i. No regret strategy in case of future needs
j. Scientific interest
k. Other (please specify) …….

Please explain your choice (max 500 words):……..

2. If your organisation is involved in conserving genetic resources diversity in agriculture (including actions under the Community programme established by Council Regulation No 870/2004) please provide brief details of its activities.

The activities of ERFP are carried out based upon a Multi Year Programme of Work (MYPOW). The prioritized areas in the MYPOW for the period 2010 – 2014 are:
- Ex situ conservation (cryo-conservation) of animal genetic resources
- Documentation and information of animal genetic resources
- Access and benefit sharing (ABS) of animal genetic resources
- Risk status and indicators of animal genetic resources
- Agri-environmental measures (support schemes for animal genetic resources)

3. Are you familiar with the Community programme established by Council Regulation No870/2004? **If you are not familiar with the Community programme, please go to Section 3**

Yes

Section 2 - Community programme established by Council Regulation No 870/2004

4. The Community programme had the objective "to help ensure and improve conservation, characterisation, collection and use of plant, animal & microbial genetic resources". To what extent has the objective been realised?

- **The main advantage of this programme was, that it provided a unique opportunity to serve the niche between pure conservation activities on farm, funded *inter alia* by the European Agricultural Fund for Rural Development (EAFRD) and by the Rural Development Programmes of the MS, and research activities funded by MS and Seventh Framework Programme (FP7). In five actions "applied research" in the field of animal genetic resources was funded, which contributed enormously to the conservation, characterisation, collection and utilisation of breeds. However, the "weak point" of the programme was its poor amount of EU co-funding of EUR 8.9 million and the fact, that conservation and use of genetic resources is a continuous process that needs continuous (financial) support, which is difficult to be provided by projects with limited time and finances.**

5. A second objective was "to co-ordinate and harmonise actions in Member States with a view to reinforcing the Community's efforts and eliminating duplication of effort". To what extent has the objective been realised?

- **The Community Programme made an important contribution to the conservation, characterisation, collection and utilisation of animal genetic resources in agriculture. The five actions for animal genetic resources funded under the programme involved 37 partners in 22 European countries and improved the international collaboration in this field.**

- **The objective to co-ordinate and harmonise actions was highly realised in some of these areas. A good example is FABIS-net where a common database have been developed instead of individual solutions in each country.**

6. A third objective was "to promote an effective information exchange between the Community main actors and the relevant organisation concerned by genetic resources in agriculture". To what extent has the objective been realised?

- **The objective has been reached quite well. The funded projects provided a platform for information exchange. However, depending on how the Commission defines "information exchange" two different answers are possible. Firstly, the funded projects provided an excellent platform for information exchange between project partners. In this respect, the objective has been reached quite well. Secondly, within several of the five actions databases and information systems for genetic resources have been developed which contribute to the diversity of genetic resources information systems within the EU. Databases and information systems form an important and indispensible infrastructural element of an EU genetic resources programme. The establishment of data repositories for data created by the various projects is to be considered a great success of the Council Regulation. However, databases and information systems should be more integrated to allow for an easy exchange of data and should be developed according to certain IT standard procedures to guarantee a long life-span of the information systems and their continued adaptation to the technical progress in the field of information sciences. In this regards EFABIS may play an increasing role.**

7. A fourth objective was "to be multidisciplinary and to built constructive collaboration between partners (e.g. the various stakeholders including gene banks, non-governmental organisations, technical institutes, breeders, farmers, gardeners and the forest sector)". To what extent has the objective been realised?

- **This objective has been realised sufficiently through a broad involvement of various stakeholders (public - private, governmental - non-governmental, research etc.). However, the participation of non-governmental organisation in the projects could be improved.**

8. In your view, what are the specific positive (or negative) effects that can be expected from the Community programme?

- **The specific positive element of this Community Programme is, that it provided a link between pure research and rural development / on farm management activities (see also question 4).**

9. Do you have any views on the organisational and administrative handling of the Community programme? If the programme were to be renewed, what in your opinion should be maintained and what should be modified or abandoned?

- **The EC should make use of existing infra-structure and even collaborative programmes in the field of GRFA such as ERFP, whose host organisations could be charged by the EC to become executing agencies and administrate the Community Programme.**

- **There are always fixed costs related to such a Community Programme. In the last Community Programme less than 90 % of the 10 million € were actually used for project funding. This proportion could be "improved" by a considerable increase of the total budget and by simplifying and outsourcing the project administration (see above), to decrease the administration costs considerably (5-7 %).**

Section 3 - Community programme, Rural Development Policy & Research Framework Programme

10. According to your knowledge, which measures on the conservation of endangered genetic resources in agriculture or the use of traditional and local agricultural genetic resources (plant varieties/landraces and animal breeds) have been promoted under Rural Development Programmes in your region(s) and/or country (max 500 words)?

- **For the current funding period (2007-2013) the Council Regulation No. 1698/2005 on the "support for rural development by the European Agricultural Fund for Rural Development (EAFRD)" sets the general framework for the rural development policy. In the MS, the implementation of the EAFRD at national level supports a sustainable rural development through a variety of agri-environmental-friendly measures, including the conservation and utilisation of genetic resources.**

11. In your opinion, what are the advantages and disadvantages of the three different types of measures, used for the conservation of genetic resources in agriculture: Rural Development Policy; Community Programme on Genetic Resources; EU Research Framework Programme? How could these measures complement each other in a meaningful manner?

Each of the three types serves a specific purpose:

- **The EU Research Framework Programme provides for research to make the best use of the genetic resources in breeding and science in order to provide for European Farmers improved breeds and to improve competitiveness and sustainability of European agriculture.**

- **Rural Development Policy provides for measures to maintain genetic resources for food and agriculture on farm. This will only work, if there is still enough knowledge and "material" (breeding animals) available that could be provided to the farmers.**

- **The Community Programme on Genetic Resources fills a specific niche between the two other elements since it is neither research nor on farm management but addresses an important and essential range of activities to bridge these two: it relates (1) to the collection and conservation of genetic resources in agriculture as well as (2) to the characterisation and evaluation of existing collections and therefore seeks (3) to promote genetic diversity by improved use of these genetic resources. (4) The Community Programme also supported efficient utilisation of resources through concerted action e.g. the development of the common database EFABIS and (5) the development of knowledge and understanding for the factors, needs and conditions that support on farm conservation and sustainable use of AnGR.**

Section 4 – Identifying needs and objectives

12. In your views, which sector could benefit in particular from efforts to conserve genetic resources in agriculture (max -5 choices)?

a. Agri-food industry
b. Biotechnology industry
c. Other industry (please specify) …….
d. Botanical and zoological gardens
e. Breeders (X)
f. Consumers (X)
g. Farmers (X)
h. Scientific bodies (X)
i. Tourism (X)
j. Other (please specify) …….

Please explain your choice (max 500 words):

13. Which of the existing initiatives and activities of EU and other organisations do you consider to be most relevant for the conservation of genetic resources in agriculture? (max 5 choices):

a. EU Community programme (Council Regulation No 870/2004) (X)
b. EU Rural Development Policy (X)
c. Other relevant measures applied under EU Common Agriculture Policy
d. EU Research Framework Programmes
e. EU Biodiversity Strategy (X)
f. EU legislation on the protection of intellectual property rights
g. Other EU policies (e.g. propagating material and zoo-technical legislation)
h. Activities of the UN-Food and Agriculture Organisation (FAO) (X)
i. Convention on Biological Diversity (CBD), incl. the Nagoya protocol
j. European cooperative Programme for Plant Genetic Resources (ECPGR)
k. European Forest Genetic Resources Programme (EUFORGEN)
l. European Regional Focal Point for Animal Genetic Resources (ERFP) (X)
m. International Treaty on Plant Genetic resources for Food and Agriculture
n. International Plant Protection Convention (IPPC)
o. World Organisation for Animal Health (OIE)
p. Other (please specify)……..

What should be modified or strengthened in order to enhance the effectiveness of the selected initiatives and actions (max 500 words)?

- **The EU Rural Development Policy should provide measures (funding) for the conservation of genetic resources for food and agriculture (GRFA) on farm / in production on the MS level, while community programmes such as the Council Regulation No 870/2004 should provide support for regional and trans-national measures.**

- **While the main beneficiaries for Rural Development programmes will be farmers, a specific EU Community programme on GRFA would also allow to support other stakeholders such as genebanks, researcher, breeders and NROs.**

- **In order to improve efficiency and cost effectiveness, such a Community Programme should be better linked to the respective European cooperative programmes on AnGR. The EC should make use of existing infra-structure and even collaborative programmes in the field of GRFA such as ERFP, whose host organisations could be charged by the EC to become executing agencies and administrate the Community Programme.**

- **In order to strengthen the existing European regional information infrastructures such as EFABIS all data arising from the projects within the community programme should be added to these regional information systems / databases. In order to prepare these European regional information infrastructures for obtaining characterization and evaluation data the community programme should seek to support the further development of EFABIS in these domains.**

- **European decentralized networks of genebanks for animal genetic resources could be developed and supported. The slogan could be "regional funding for regional resources".**

- **In order to further strengthen the existing AnGR collaborative programme ERFP the Community Programme should be used as a means to allow the European Commission to become member to these networks and through this membership contribute to these programmes financially.**

14. In your opinion, which is the impact of the EU seed and propagating material and zootechnical legislation on actions, including farming practises, relevant for the conservation of genetic resources diversity?

- **There are still some existing restriction caused by EU legislation. One possible suggestion would be to cover the whole "production chain" from conservation of genetic resources through research and breeding up to commercialization of breed in one coherent legal framework.**

15. In your opinion what would be the most effective and efficient approaches to encouraging actors (including farmers, breeders, up-stream and down-stream industry, scientists, and others) at local, regional, national, and European levels to engage in the conservation of agricultural genetic resources in their habitat (*in situ)* and outside their habitat (*ex situ*)?

- **The existing requirement of self-funding (30-50%) under Council Regulation No 870/2004 leads to a situation where the strong stakeholders contribute more than weaker stakeholders who cannot afford this level. Hence, a two – tier- or more flexible approach with much less or no self-funding requirements for the latter might be considered.**

16. With respect to decisions on different types of measures and their implementation, which role should be attributed to the local, regional, and national level? Which decisions and which types of action should be undertaken specifically at the EU level?

- **There is no clear answer for this question. While preservation of GRFA on farm / in production is clearly a matter of local, regional and national decisions, the overall framework (EU Rural Development Programme) has to be provided through decisions on the EU level.**

- **With regards to ex situ conservation regional (European) collaboration is key, in order to establish a cost efficient European system. Existing European collaboration in this field (e.g. ERFP) could be used to facilitate decision processes, which then would be a mixture of local, national and regional decisions. A model initiative is the European information system EFABIS. Additional activities under the Community Programme should seek to further strengthen these infrastructures.**

17. The main objectives of the Community Programme on Genetic Resources are "to help ensure and improve conservation, characterisation, evaluation, collection, documentation, development and use of […] genetic resources". How far do these objectives correspond to relevant needs? Which other objectives should be pursued?

- **Regarding characterisation, evaluation, collection, documentation, conservation, development and use there is still a strong need.**

- **While in situ conservation of AnGR should be supported by EAFRD, ex situ conservation should be pursued by the Community Programme (see also questions 10. and 11.)**

18. In view of ensuring the most effective use of resources devoted to the conservation of genetic resources, which priority should be given to the items listed below. Please provide a ranking from top (1) to bottom (7).

a. characterisation **(1)**
b. collection **(7)**
c. collection maintenance & updating **(6)**
d. conservation **(4)**
e. development of genetic diversity (level of populations) **(8)**
f. documentation (such as Web-based inventories) **(2)**
g. evaluation **(3)**
h. use **(5)**

19. In view of ensuring the most effective use of resources devoted to the conservation of genetic resources, which relative importance should be given to the different types of conservation actions?

a. only in situ conservation of genetic resources
b. in situ > ex situ (X)
c. in situ = ex situ
d. in situ < ex situ
e. only ex situ

Please explain your choice:

- **Conservation of AnGR ex situ and in situ are complementary to each other. Because in situ conservation is even effective for the conservation of traditional farming and preservation of landscape it should be supported by EAFRD. As a complement to this ex situ conservation should be supported by the Community Programme.**

20. In your view, how far could an EU-wide lists of endangered breeds and plant varieties (e.g. the *" list of endangered local breeds in danger of being lost"* and "*plants under threat of genetic erosion*" used for Rural Development Programmes - Regulations 1698/2005 and 1974/2006 - Annex IV) be useful for the implementation of a possible future EU-Community programme?

- **Such an EU-wide lists of endangered breeds would be extremely useful if they are based on National lists of endangered breeds. These lists could be used at national level as to define the scope for financial support under the national programmes in the framework of the EAFRD schemes. They could also provide an approach to define public interest in terms of conservation of biological diversity. Unfortunately there are yet no common criteria regarding definitions for local respectively endangered breeds.**

21. Which priority should be given to the different types of actions, listed below, supporting *in situ* conservation at farm level? Please provide a ranking from top (1) to bottom (7).

a. Communication **(5)**
b. Innovation **(4)**
c. Knowledge transfer **(1)**
d. Networking **(2)**
e. Training **(3)**
f. Other (please specify):……

Please explain your choice for the 3 top ranking actions:

- **In animal genetic resources, networking will be essential to avoid unnecessary inbreeding. Nation-wide or for transboundary breeds even European wide conservation networks should be established. Generally networking is essential for sharing experience, training and establishing common activities.**

22. Which priority should be given to the different types of actions, listed below, supporting *ex situ* conservation? Please provide a ranking from top (1) to bottom (10).

a. Centralisation of database & collections **(9)**
b. Development of database & collections **(6)**
c. Maintaining & updating databases & collections **(4)**
d. Centralised collection of cryopreserved samples **(5)**
e. Funding **(7)**
f. Innovation **(1)**
g. Knowledge transfer **(3)**
h. Networking **(2)**
i. Training **(8)**
j. Other (please specify):……

Please explain your choice for the 4 top ranking actions:

- **Innovative, knowledge based approaches are needed for both the conservation management of genetic resources and their utilisation. Esp. innovation is urgently needed to develop efficient cryoconservation methods for some species. This, of course, requires funding.**

- **European collaboration will be key for an efficient and effective ex situ conservation of GRFA. Therefore further strengthening of European Networks such as ERFP will be essential.**

- **Mutual support by knowledge transfer / training should be used to improve existing infrastructure and support maintaining & updating databases & collections where necessary.**

23. In your view, which are the most relevant obstacles to valorise under-utilised crops and animal species and traditional varieties and breeds? How could these obstacles be overcome?

- **European food industry requires large quantities of highly standardized commodities, which cannot be easily produced from rare breeds.**

- **Low productivity of rare breeds lead to less interest by farmers to keep or breed them. Hence, ways and means need to be explored to improve the productivity and/or special properties like product quality and the environmental and social contribution of such rare breeds.**

- **Enough funding (by time and amount) will be needed to develop and establish the whole value chain for products from rare breeds, otherwise they will remain niche products.**

24. In your view, what are the priority areas regarding conservation and sustainable use of genetic resources of agriculturally relevant microorganisms and invertebrates? Please provide a ranking from top (1) to bottom (6).

a. Agro-industry microorganism **(2)**
b. Bio-control microorganisms **(4)**
c. Pest and disease (used in breeding programs) **(3)**
d. Plant & animal health microorganism **(There is no essential distinction between b and d, so we suggest to include this area in b)**
e. Soil biodiversity **(1)**
f. Other (please specify): **pollinators (5)**: **Without pollination, many plant species would have a defective fruit setting. Consequently, a great number of invertebrate species play a vital part for crop yields.**

g. Other (please specify): **Ruminant digestion (6): The interdisciplinary cooperation of microbiology, animal nutrition and animal breeders could improve the efficiency of animal husbandry (quality of milk) and promote climate protection.**

Please explain your choice for the 4 top ranking actions:

(1) Soil biodiversity: **The soil organisms are the basis for the health status of plants and thus on the yield and quality of the harvest. Research is needed for the**

understanding of the occurrence and distribution of species in soils and their ecosystem functions. The relationship of genetic resources and associated biodiversity of microorganisms and invertebrates in relation to yields (quantity and quality) should be investigated.

(2) Agro-industry microorganisms: **Microorganisms are cultivated and used for the treatment and processing of food and feedstuff as well as in the production of beverages, e.g. starter cultures (including probiotics), protective cultures, feed additives. By lactic acid fermentation crops for feed (grass silage) and vegetables (sauerkraut) are conserved. Another agro-industrial process is the conversion of biomass into biogas or renewable raw materials (industrial biotechnology).**

(3) Pest and disease (used in breeding programs): **The partly negative contributions of microorganisms and invertebrates to global food security, agricultural yields (crops, livestock production), ecosystem services, natural environment and human, animal and plant health can be serious and have significant economic, commercial, legal, socio-economic, environmental and political implications. The characterization and the study of the epidemiology of diseases and pests is essential for the breeding and propagation of healthy animals and plants as well as for the development of national hygiene standards, monitoring the spread, the development of vaccines, the development of resistance strategies (e. g. integrated plant protection), the implementation of control on harmful organisms, the identification of diseases with reporting obligations.**

(4) Bio-control microorganisms: **Bio-control organisms chiefly describe such organisms that decimate pests ("vertebrate control agents" and "micro-biological control agents"), but also perform other useful functions in increasing or stabilizing yields. In the narrow sense this is linked to biological plant protection and comprises predatory and parasitoid invertebrates as well as pathogenic and antagonistic microorganisms that diminish plant-damaging organisms. In animal nutrition, microorganisms are used to control the harmful organisms (e.g. probiotics).**

25. In your opinion, what would be the link between securing product quality (and quantity) and the conservation and sustainable use of genetic resources in agriculture and what should be done in this respect?

- **AnGR are the raw material for new breeds. Only by the help of improved breeds European farmers will be able to cope with global challenges such as climate change and global food securities.**

- **To improve efficiency of breeding the linkage between conservation and breeding has to be tightened. Genebanks should strengthen their evaluation activities, these activities should be done in close collaboration with the users (breeders, stakeholders) and these data should be as easily available as material itself. The same should apply to traditional production methods and products to avoid loss of valuable knowledge and further unnecessary standardization of products.**

26. How far could short food supply chains help promoting the use of traditional and local agricultural or underutilised genetic resources?

- **There seems to be some potential at local and regional level, which could be even reinforced by specific labelling such as the EU-label "Protected Designation of Origin" (PDO) and "Protected Geographical Indication" (PGI).**

27. Other comments & suggestions

- **Aquaculture is the world's fastest-growing source of animal protein and currently provides nearly half of all fish consumed globally. Therefore the priority of the community programme should be urgently extended on aquatic genetic resources particularly aquaculture species.**