

# Report : ERFP – Ad hoc Action Thessaloniki 25.02.2016 9:00 -18:00

# Attending:

Members of the Ad Hoc Group: Christina Ligda (Chair), Zhivko Duchev, Eleonore Charvolin, Etienne Verrier, Gustavo Gandini, Enrico Sturaro, Montse Castellanos Excused: Sebastian Winkel Dimitrios Tsiokos (observer)

# Background , Objectives and Expected outcome (C. Ligda)

This proposal is considered as a continuation of previous works of ERFP (TF risk status and indicators, and the project "Development of models assessing the breeds risk status by utilization of population and relevant georeferenced data"). These actions concluded that additional parameters may be used to further refine the assessment of the breed's development potential or the risk status. Such parameters are categorized as environmental and socio-economic factors and can be provided from different information sources. Addressing socio-economic and environmental parameters requires a multidisciplinary approach.

The work of the ad hoc group, apart from the above mentioned projects, will be based on the work published by FAO on the thresholds to assign breeds to risk categories ("In vivo conservation of AnGR (FAO, 2013), the PEDs Report (FAO, 2008), the study by the Ramage Consortium (Races animals francaises menaces d'abandon pour l'agriculture - Rapport methodologique; INRA, 2014) (a multi criteria assessment of the degree of endangerment) and the document on the work on the definition of national criteria to categorize native breeds developed by the Spanish Ministry of Agriculture. Other relevant studies in European countries will be also considered (a feedback from NCs will be asked).

This meeting aims to discuss on possible approaches and criteria, based on their impact to the trends of a breed and easiness to measure, their relative weight and decide on breed cases to test different approaches depending on availability of data.

# ERFP project results (E. Sturaro)

The methodology that was used in the previous ERFP project to test the geographic concentration of the breeds the conclusions of this work, and the proposal of the Risk Status Index using demographic and geographic concentration criteria were presented. The inclusion of geographic distribution represents a useful tool for the integrated evaluation of the breed risk status, as it can be combined also with additional information that are available at spatial level.

# FAO - EAAP criteria (G. Gandini)

The presentation aimed to give an overview on the criteria by FAO (FAO, 2013) and explain the process that these were developed combining, in terms of criteria and thresholds, the previous system of the FAO (FAO Secondary Guidelines: Management of Small Populations at Risk, 1998) with several proposals from the literature (Gandini et al., 2004; Alderson 2009 and 2010). FAO categorization is based on primary criteria (numerical scarcity, inbreeding rate and conservation programme existence) while additional parameters may be used when data are available to refine the classification. A list of possible socio-economic parameters was proposed for the discussion.

# Multi-criteria approach (RAMAGE Consortium) (E. Verrier / E. Charvolin)

The principles and indicators of the multi - criteria approach developed by RAMAGE Consortium to assess the risk status of livestock populations were presented. Six indicators were used: (i) number of breeding females; (ii) change in the number of breeding females over the last 5 years or generations; (iii) percentage of cross-breeding; (iv) effective population size; (v) breeders organization and technical support; and (vi) socio-economic context.

The observed values were converted into scores on a six-point scale (from 0 = no threat to 5 = maximum threat) and for each breed, the different scores were presented graphically and an overall score was calculated. This approach was applied to 178 French local breeds (ten different species).



# National criteria (Spain) (M. Castellanos)

The presentation described (1) the general framework (EU legal framework regulation: Article 28 of Regulation (EU) No 1305/2013 + Regulation (EU) 807/2014, the Zootechnics regulation proposal) and the multiple actors that are involved with different interests, (2) The work that has been developed in national level (National Coordinating Committee for the conservation, improvement and promotion of livestock breed, National System of livestock breeds), (3) analysis of results in a case study and SWOT analysis and (4) the future challenges and prospects.

## Geographical approach (E. Sturaro)

The presentation offered an example of possible incorporating geographic information systems (GIS) approach for the evaluation of socio-economic and environmental parameters. Rendena cattle breed (a local dual purpose Italian breed adapted to mountain pastures) was used as case study. The analysis of relationships between Rendena cattle farms and land use was performed at two levels: a) landscape level: using Corine land use and Natura 2000 maps b) farm level: using data on agricultural patches from on farm survey based on 25 Rendena breeds farms. The results shows that GIS can be used to characterize the production environment (and ecosystem services) of local breeds. A key point is the availability and the possibility to merge datasets of different origin. The proposal is to test this approach on different case studies considering different species, population size and geographic concentration.

### Using data on regional level (Z. Duchev)

The key elements that need to be clarified in this process were defined in a set of questions. In this context, a brief review on the data available on regional level was made, with specific reference to the transboundary breeds and how they defined, some obstacles that hinder the development of common tool, based on the current status of data availability, and possible integration on a regional system, in case of developing a common tool.

### Discussion (Data characteristics, Rating, weighting of the criteria, interpretation of the parameters),

The main objective of this action is to elucidate the additional factors that shape the general environment (physical and socio-economic environment), where a breed is raised and affects the dynamics of the breed.

Considering this a list of proposed indicators was discussed, based on the source of data, relevance level, range of values and possible impact to the breed (in certain cases, is not clear whether the parameter is beneficial or unfavorable).

The list of criteria is under revision by the group and will be finalized (20/3).

# Tasks and timetable

# The timetable agreed:

- Collect information from other countries (by e-mail to the WG docu&info). Circulate the table and finalize (define the parameters and the scale) (by April (15/4)
- Decide on the breed cases to apply the methodology (beginning of April)
  - The cases should cover:
    - Variety of species (cattle/ sheep/ goats/ horses/ poultry)
    - Different population size cases
  - o Prepare a form for collecting data (beginning of April)
- Decide on the content of the report (beginning of April)
- Collect the data and apply these criteria to the selected cases (May)
- include geographic approach, building thematic maps for specific breed cases

#### Final Report

The expected outcome of the action is a report that will summarize the scope of the action, the existing approaches in different countries, the applied criteria and approach, the results on the tested breed case studies, analyzed in terms of contribution to the understanding of the impact of the different factors to the trends of the breeds, the relevance and connection to ERFP activities and possible implementation.

#### Next meeting



The date of the next meeting will be decided by e-mail considering the availabilities. The meeting will be end of June - first week of July.

Close of the meeting.

The presentations, the report and the list of participants will be available in the ERFP website.