### **Iceland**

Reported by

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# STRATEGIC PRIORITY AREA 1: CHARACTERIZATION, INVENTORY AND MONITORING OF TRENDS AND ASSOCIATED RISKS

## Actions undertaken during the past year

- 1) \* Continued analysis of the conservation value of the Icelandic dairy cattle breed in relation to possible importation of another dairy breed/breeds.
  - \* Continued study of genetic diversity within the Iceland goat breed now numbering 646 head (endangered). An MS student project was completed in March 2010 highlighting the inbreeding problem facing this small population.
  - \* Continued work on the characterization of the leading trait of the Icelandic leadersheep, improving recording and building up pedigree files for this unique strain within the Icelandic sheep breed.
  - \* Continued genetic studies on the possible origin of the Icelandic horse breed and its diversity.
  - \* Participation in the EFABIS-Net, installed in February 2008, and building up databases for all the Icelandic breeds.

## Actions planned for the next year

- 2) \* Conclude the current genetic projects on Icelandic dairy cattle, goats, the old Icelandic poultry breed, horses and the dairy cattle conservation project.
  - \* Further studies on molecular diversity of dairy cattle, the old Icelandic poultry breed and goats.
  - \* Continued work within the EFABIS-Net.
  - \* Continue building up registration systems for all goats and leadersheep in order to complete pedigree files for both populations.
  - \* Continued work within the CryoWeb installed in April 2009.

#### STRATEGIC PRIORITY AREA 2: SUSTAINABLE USE AND DEVELOPMENT

# Actions undertaken during the past year

- 3) \* The local Icelandic livestock breeds are currently in full use for the production of food and fibre or as leisure animals, with the exception of the endangered goat breed.
  - \* Continued work to support goats as production animals.
  - \* Continued work to maintain the old Icelandic poultry breed (small population), mainly by marketing their eggs in labelled packages.

# Actions planned for the next year

4) \* Continued work to support populations of Icelandic goats and poultry. This includes small scale egg marketing and the establishment of a few goat herds able to sustain a regular supply of milk (cheese) and meat for niche markets.

#### STRATEGIC PRIORITY AREA 3: CONSERVATION

## Actions undertaken during the past year

- 5) \* Continued regular, annual, payments of goat conservation grants (6500 ISK/recorded goat) and the monitoring of goat numbers according to the Agricultural Law nr. 70/1998.
  - \* Continued regular collection of bull and ram semen from all AI sires for permanent storage in cryo-banks.

## Actions planned for the next year

- 6) \* Continue all regular activities already in progress.
  - \* Continue developing a breeding and conservation programme for the Icelandic goat population based on the results of genetic diversity studies within the framework of veterinary/animal health restrictions applying nationwide to the movement of livestock. Utilize methods of optimal genetic contributions of individual breeding animals for the programme.
  - \* Embark on the development of a similar programme for the Icelandic leadersheep population now being monitored and recorded.
  - \* Collection of buck semen as a means of disseminating genetic material in view of the severe limitations on the movement of breeding bucks between farms and regions.

## STRATEGIC PRIORITY AREA 4: POLICIES, INSTITUTIONS AND CAPACITY BUILDING

# Actions undertaken during the past year

- 7) \* The Icelandic Commission on Genetic Resources in Agriculture continued work on a strategic plan including an analysis of the current status and proposals of necessary actions regarding the conservation of all GR in Iceland from 2009-2013.
  - \* Promotion of further incentive payments for the establishment of goat farms that could embark on sustainable production of niche commodities such as goat cheese, in cooperation with a dairy company in W-Iceland.
  - \* A documentary film on leadersheep was released in May 2009 where the unique characteristics of the animals are highlighted. It includes material from the first behavioural study on the leading instincts of these sheep, taking place in October/November 2007. The producers issued a version with a text in English in 2010.

- \* Icelanders have taken part in several NordGen, ERFP, EAAP and ELBARN activities during 2009 and 2010.
- \* The Icelandic Commission on Genetic Resources in Agriculture is planning a symposium in the autumn of 2010 dedicated to the International year of Biodiversity. During the year the NC for Iceland (ORD) has already presented three public talks on this issue and appeared on a ra dio programme addressing farm animal genetic diversity.

## Actions planned for the next year

- 8) \* Continue involvement in international activities, however, within strict limits of budgets which have been severely cut as a result of the present economic crisis.
  - \* To start working according to the strategic plan 2009-2013 and promote financing of the necessary actions defined in the plan.
  - \* To publish posters with colour photographs and texts in Icelandic and English, emphasizing the genetic diversity of the Icelandic goat and the old Icelandic poultry population.
  - \* The Icelandic Commission on Genetic Resources in Agriculture will seek co-operation with Hvanneyri Agricultural Museum.