

Progress report on the implementation of the *Global Plan of Action for Animal Genetic Resources* - 2007 to 2011

ANIMAL GENETIC RESOURCES IN SLOVENIA

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

- Characterization, inventory and monitoring of trends in Slovenia are comprehend with running the “Register of breeds with zootechnical assessment”. Register included the following information about each breed by species:
 - basic data (population size, location, risk status, phenotypic characteristics, geographical distribution within the country);
 - in situ and ex situ conservation (number of pure breed animals);
 - whereas data about breed is included in international database;
 - breeding program (breeding goal, herd book, production characteristics, biological characteristics, breeding value),
 - assessing genetic value of the breed;
 - zootechnical assessment and actions (short-term and long-term actions).

The data from the register were used to monitor trends in population numbers and therefore to took all necessary steps for determine conservation activities. Once per year risk status of the breed was assessed. For each breed report was completed regarding breeding environment and assessment, number of animals, short introduction about breed status, breeding and selection methods and their application.

Number of registered breeds up to now: 11 breeds of cattle, 11 breeds of horses, 7 breeds of pigs, 6 breeds of sheep, 4 breeds of goat, 7 breeds of chicken, one honex bee and two breed of rabbit.

- Breed standard that comprises the description of appearance/exterior of a breed, body measurements, morphological and biological characteristics for autochthonous breeds with collaboration of breeding organisations are made.
- Livestock geography in Slovenia

Study of the spatial distribution for cattle and horses breeds is made.

- Bibliography of historical sources about slovenian local breeds up to 1945 was written and publish on the Digital library of Slovenia.

STRATEGIC PRIORITY AREA 2: SUSTAINABLE USE AND DEVELOPMENT

- Traditional breeding technologies and knowledge

Production system for the Cika cattle was assessed concerning value, knowledge and importance. Research was done with questionnaire taken directly from the farmers. The result shown the social, economic and cultural characteristic of keeping animals and traditional knowledge.

Study was done on how are sheep of the Jezersko-solčava breed and Improved Jezersko-Solčava breed resistant to moisture, cold, heat, and their adaptation to altitude. The result of the analysis shown that breeders of both breed think that both breed are resistant and adapted to all mentioned environmental impacts.

- Conservation of Slovenian autochthonous breeds with “ARK-FARM” and “ARK-RESCUE NET”

In 2011 the proposals and rules were made for the establishment of ARK-FARMS in Slovenia.

- Measures for endangered locally adapted breeds are made each year for different breeds.
- Search for Slovenian locally adopted breeds residues – in the case of brown cattle breed

The aim of the study is to find out genetic material in the form of live animals or frozen semen with the minimal genes proportion of american brown breed cattle.

STRATEGIC PRIORITY AREA 3: CONSERVATION

- A genetic reserve for the bulls has to be stored. Total zootechnical assessment was done for all breeds of cattle and selection of bulls for which semen was stored. For every breed of cattle number of preserved semen was defined. Semen is by the contract stored in the IA centre in is under the control of Public service for Animal Genetic resources. A genetic reserve was also done for the autochthonous breeds of rams and a semen was collected and stored on Veterinary Faculty.
- From 2008 (2009) up to 2011 breeders who bred Bela Krajina Pramenka, Istrian pramenka, Drežnica goat, Cika cattle and Krškopolje pig received de minimis aid. Breeders sign the contract with clear obligations under which they were entitled to the support for autochthonous breed. The support was given to the breed according to the level of threat which taken from the Register. Aids were given to the breeders which bred pure male and also to the breeders which bred mother of pure male (according to the breed).
- The most important zootechnical assessments by breeds (and by breeds`s groups) are given once per year.
- The genetic diversity by some Slovenian locally adopted breeds is estimated based on the origin.
- In order to characterize and analyse genetic variability and to found out the purity of the Carniola honey bee about 1.000 samples of Carniolan bee was collected.
- In the Depository tissues are collected isolated nucleic acids (DNA, RNA), samples of different tissues (blood, semen ...). Before taking the samples the relationship between animals was checked.

STRATEGIC PRIORITY AREA 4: POLICIES, INSTITUTIONS AND CAPACITY BUILDING

- Slovenia took an active part in cooperation with the following international organizations: FAO, ERFP, EAAP, DAGENE, SAVE regarding exchange of information's, seminars, and technical conferences and other.
- Various projects including autochthonous breeds were done (The Heritage sheep project, 'Study of origin and conservation strategy of the Pramenka sheep breeds as regional transboundary breed, Management of traditionally transboundary breeds on example of a nearly forgotten breed, the Murinsulaner)
- EU project named EFABIS net and HERITAGESHEEP
- Establishment of an ERFP Working Group to support AnGR Cryopreservation Initiatives - adding new data in Cryoconservation.
- Establish the Public service for Animal Genetic Resources and approve multiyear Program of Work 2010-2016
- Establish a national body (Board of Animal Genetic Resources), where representative NGO – breeders organizations - are included
- Local web site named “Gene bank” is regularly updated
- Education and training in the field of conservation of farm animal genetic resources is performed at the agricultural secondary schools, institutions of higher education, colleges, undergraduate or postgraduate studies at the departments of the Biotechnical Faculty - either as a special course or directly as a part of other subjects within the zootechnical curriculum.
- Once per year a seminar on Biodiversity in Slovenian agriculture is organised

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