

ERFP Country report 2010 – 2011

COUNTRY: HUNGARY

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Strategic Priority Area 1:

Characterization, Inventory and Monitoring of Trends and Associated Risks

- Many breeding databases work in Hungary. There is a continuous data collection, including the animal identification and registration systems. The control bases on them. The relation between the breeding authority and the breeding organizations is continuous, so there is a way to follow the trends, to recognize the dangers, and to intervene in time.
- The animal breeding authority continuously maintains and runs the animal breeding database, and keeps on the availability of the breeders to the above database.
- The breeding associations in cooperation with the breeding authority reconstructed their breeding programs based on the results of the previous surveys.
- The recognition procedure of the breeding association of the Hungarian giant rabbit is in progress.
- The breeding authority is responsible for maintaining the list of the breeds (including the recognized breeding organizations), in Hungary.
- The minister of agriculture and rural development maintains a so-called Indigenous Farm Animal Genetic Resource Committee. It is an advisory committee of the minister in the field of indigenous breeds. This Committee was renewed last year.
- Ministerial decree deals with the rules of the genetic maintenance of the protected indigenous animal breeds.
- The Ministry of Rural Development started to elaborate the national programme on the protection of animal genetic resources for food and agriculture.

Actions planned for the next year

- We are planning to survey the data of the Hungarian breeds in the FAO's DAD-IS system, and to update these data.
- The above mentioned bodies will continue their work.
- We will make the necessary developments of the animal identification and registration systems.
- We will keep the breeding data base up-to-date.

Strategic Priority Area 2:

Sustainable Use and Development

Actions undertaken during the past year

- In the case of conservation of indigenous breeds, one of the most important things is the product made from these breeds. The Hungarian grey cattle and mangalica pig products are more and more popular in Hungary and abroad too. It helps to keep these breeds. But for example the indigenous poultry, and some horse breeds have no marketable products. It means a specific problem in the maintenance of these breeds, so special help is needed. A trademark was introduced in Hungary, the so-called HU-BA (Hungaricum poultry product). These products are all made from indigenous poultry breeds. It can help to solve the problem of the marketing of the indigenous poultry breeds.
- The Association of Hungarian Small Animal Breeders for Gene Conservation (MGE) organized and made a further development of HU-BA (Hungaricum poultry product) programme which was started for establishing the breeding background of poultry meat and egg production, preferably in some underprivileged regions of Hungary. Another programme aims the sustainable usage of local poultry breeds. It is the Model Village Programme (MVP) which was launched by MGE. It includes an

educational programme and the reintroduction of local breeds to small villages to develop family poultry production.

- In the last one-year period many events were organized for making the indigenous animal products popular. It can help to promote the consumption of these products too.
- The National Council Against Forgery works against the product forgery. It deals with the forgery in the food industry in Hungary, as well.
- Experimental genetic examinations started for finding the rate of the breeds in product. It can help fight against food forgery. In 2009, the so called “Mangfood project” was launched. This project will help to investigate the mangalica pig DNA for impeding food forgery. It will end in 2012 with a budget of 607 million HUF (app. 2,17 million EUR). This project also provides scientific data for mangalica research and establishing an in vitro mangalica gene bank.
- The Association of Hungarian Grey Cattle Breeders operates a mobile phone system for checking the origin of meat comes from grey cattle. (An SMS message with an identification number has to be sent to a phone number, and within a couple of seconds, the system sends an answer with a certificate of origin of that product.)
- A new financial support (subsidy) was introduced for the in-situ genetic resources conservation in 2010. It is co-financed by the EU (European Agricultural Fund for Rural Development).
- The Ministry of Rural Development started to elaborate a financial support (subsidy) for the ex-situ, in-vitro genetic resources conservation and dissemination of information, guidance in 2011. It will be co-financed by the EU (European Agricultural Fund for Rural Development).
- The Ministry of Rural Development started to renew the law on animal breeding. The future law will deal with the protection of the animal genetic resources on a much more detailed way.
- The new constitution of Hungary will enter into force 1st January, 2012, which especially protects the biological diversity.

Actions planned for the next year

- Marketing events will continue to promote the consumption of indigenous animal products.
- A new financial support (subsidy) will be introduced for the ex situ, in vitro genetic resources conservation and dissemination of information, guidance, next year. It will be co-financed by the EU (European Agricultural Fund for Rural Development). The preparation of its legal background will be in progress
- Indigenous Farm Animal Genetic Resource Committee will continue its work too.
- MGE plans a further development for both HU-BA and MVP, towards the production for the market. For this purpose, invitation of feed mills and processing plants to take part in the programme is needed.

Strategic Priority Area 3:

Conservation

(please give details for the most relevant institutions for national genebanks / cryopreservation in the table in Annex 1)

Actions undertaken during the past year

- The Indigenous Farm Animal Genetic Resource Committee was established in 2007. It helped to prepare the amendment of the ministerial decree on the declaration of the protected indigenous and endangered animals kept for farming purposes, and to create a new ministerial decree on the rules of the genetic maintenance of the protected indigenous animal breeds. It also keeps the situation of indigenous breeds under control, and it can initiate specific measures at the minister of agriculture. The membership of the Committee was renewed.
- Microsatellite markers and results of parentage control of the Hungarian grey cattle stocks in breeding were mapped and recorded in the animal breeding database by the Genetic Laboratory of Parentage Control of the breeding authority. The main goals of the investigation are to find the rare alleles and preserve the genome of the animals. Mapping of the DNA markers of native buffalo has started on 1000 samples.

- The Research Institute for Animal Breeding and Nutrition (Herceghalom) examines the genetic variability of mangalica pig breeds within the framework of a research institute consortium project (MANGFOOD).
- Research group for reproductive biology (Research Institute for Animal Breeding and Nutrition, Herceghalom) took part in reproductive characterisation of Black Racka rams. It was determined scrotal circumference, quantitative and qualitative semen parameters of ejaculate and preliminary research was done on liquid and cryo-preservation of semen from Hungarian Black Racka rams.
- The inspection of the sperm bank of the Hungarian grey cattle native breed belongs to the duties of the Department of the Animal Genetic Resources of the breeding authority.
- The breeding authority and the breeding organizations worked in the field of genetic conservation.
- Hungary takes part in an ERFP project (“Proper way of supports for endangered livestock breeds”). This project gained 20.000 EUR from the ERFP Call for Action.
- The “Characterisation of the indigenous and improved podolic cattle breeds and identification of threats for extinction in global challenges” project gained 20.000 EUR from the ERFP call for Action. There were four meetings (Italy, Serbia, Austria, Hungary) related to this project. This project will be finished in September 2011.
- A significant increase can be observed in both the number of primary breeders and registered pedigree stocks in all local Hungarian poultry breeds (app. 30% in chicken and guinea fowl, 400% in duck, 50% in turkey and 20% in goose breeds).
- The Hungarian plain goat became so called indigenous breed.
- We take part in the ELBARN project.
- A new financial support (subsidy) was introduced for the in-situ genetic resources conservation in 2010. It is co-financed by the EU (European Agricultural Fund for Rural Development).

Actions planned for the next year

- The “Characterisation of the indigenous and improved podolic cattle breeds and identification of threats for extinction in global challenges” project will be finished in September 2011.
- We need to ensure information for the ELBARN project.
- The building-up and filling of the in vitro frozen semen depot with preserved sperms is in process.
- The Research Institute of Small Animals and Gene Conservation Centre will launch a programme on in-vitro conservation of poultry gametes.
- Our further goal is to increase the registered poultry stocks of local breeds to reach a minimum of 1000, and to develop the number of pedigree (elite) breeding females in all local poultry breeds up to 2000, within five years.

Strategic Priority Area 4:

Policies, Institutions and Capacity-building

Actions undertaken during the past year

- In February 2011, Mangalica Festival was held in Budapest, where mangalica products were shown for the public. In April 2011, a Mangalica Festival was organized in Debrecen too.
- The Indigenous Farm Animal Genetic Resource Committee was established in 2007. It keeps the situation of indigenous breeds under control, and it can initiate specific measures at the minister of agriculture. Its membership was renewed.
- The breeding authority and the breeding organizations worked in the field of genetic conservation.
- The Ministry of Agriculture and Rural Development continued to revise and renew the Animal Breeding Act. The new act will deal with especially the protection of animal genetic resources.
- A new financial support (subsidy) was introduced for the in-situ genetic resources conservation in 2010. It is co-financed by the EU (European Agricultural Fund for Rural Development).
- The breeding authority was reorganized.
- Within the Animal Breeding Directorate of the breeding authority the Department of Animal Genetic Resources works.

- The Ministry of Rural Development started to elaborate a financial support (subsidy) for the ex-situ, in-vitro genetic resources conservation and dissemination of information, guidance in 2011. It will be co-financed by the EU (European Agricultural Fund for Rural Development).
- The Ministry of Rural Development started to renew the law on animal breeding. The future law will deal with the protection of the animal genetic resources on a much more detailed way.
- The new constitution of Hungary will enter into force 1st January, 2012, which especially protects the biological diversity.
- New courses on conservation of animal genetic resources, including the local poultry breeds were launched at two Hungarian universities, with the participation of the Research Institute of Animal Breeding and Nutrition (ÁTK) and MGE. The ÁTK Poultry Gene Bank in Gödöllő and the breeding stocks of three universities serve also as demonstration parks of local poultry breeds for students at different levels of education. There are several PhD activities in this field too.
- There was an exhibition of the native animals at the Hódmezővásárhely Animal Breeding Fair of May 6-8, 2011. The breeding authority issued an informative booklet on the breeding and gene preserving of native animals for the wide use of the breeders.
- Hungarian delegate participated on the first meeting of new ERFP working group, in Bonn, April 2011.
- The Hungarian translation of “The Global Plan of Action for Animal Genetic Resources and The Interlaken Declaration” was made. The printed version would be available in the second part of the year.
- The Ministry of Rural Development started to elaborate the national programme on the protection of animal genetic resources for food and agriculture.

Actions planned for the next year

- We are planning to survey the data of the Hungarian breeds in the FAO’s DAD-IS system, and to update these data, in the next year.
 - The breeding authority needs to establish a gene bank for semen, ova and embryos for the purpose of in-vitro preservation, according to the ministerial decree deals with the rules of the genetic maintenance of the protected indigenous animal breeds.
 - A new financial support (subsidy) will be introduced for the ex situ, in vitro genetic resources conservation and dissemination of information, guidance, next year. It will be co-financed by the EU (European Agricultural Fund for Rural Development). The preparation of its legal background will be in progress.
 - The development of educational and demonstrational activities is planned by ÁTK and MGE. These organizations intend to invite institutions of higher education and local breeders for cooperating in poultry gene conservation.
 - In 2011, DAGENE annual meeting will be in Serbia.
 - The theme of protection of genetic resources will be stressed on the National Agricultural and Food Industrial Fair (August-September 2011).
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